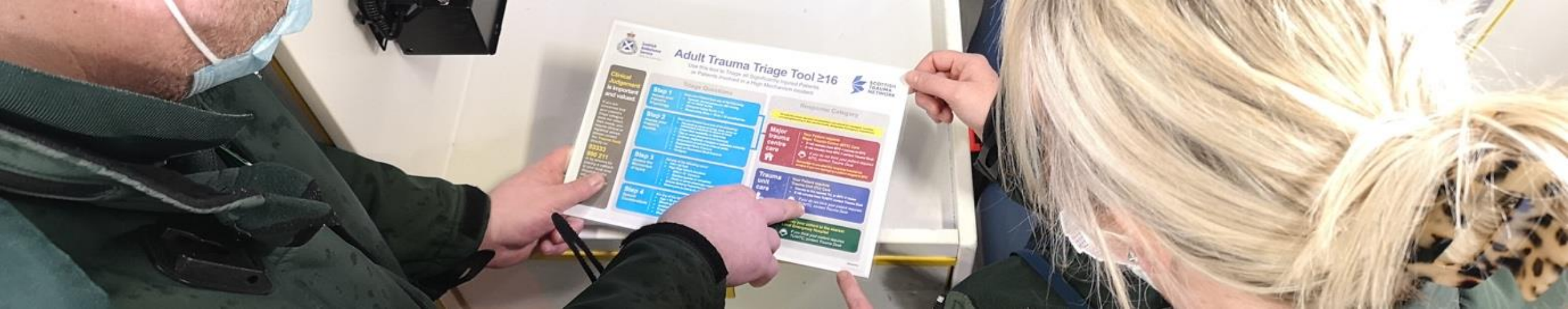


# Annual Report 2021/22



Martin McKechnie, National Clinical Lead  
Kate Burley, Associate Director (left February 2022)  
Alison Gilhooly, Senior Programme Manager  
Scarlett Curtis, Programme Support Officer (left April 2022)  
Mark McKeirnan, Programme Support Officer (joined May 2022)



# Contents



1.0	<a href="#">Introduction from National Clinical Lead</a>	3
2.0	<a href="#">Network Governance</a>	4
3.0	<a href="#">Progress against Network Deliverables</a>	6
4.0	<a href="#">Finance</a>	12
5.0	<a href="#">Social Engagement</a>	13
6.0	<a href="#">Regional Updates</a>	14
6.1	<a href="#">West of Scotland (WoS) Trauma Network</a>	14
6.2	<a href="#">South East of Scotland (SEoS) Trauma Network</a>	15
6.3	<a href="#">East of Scotland (EoS) Trauma Network</a>	16
6.4	<a href="#">North of Scotland (NoS) Trauma Network</a>	17
6.5	<a href="#">Scottish Ambulance Service (SAS)</a>	18
6.6	<a href="#">Scottish Trauma Audit Group (STAG)</a>	19
7.0	<a href="#">Workplan 2022-2023</a>	20
8.0	<a href="#">Stakeholder Feedback</a>	25





## Introduction by National Clinical Lead

Annual report time arrives once again, and in this new style of presentation my superlatives for the work of all who support the continued work, development and improvements of the Scottish Trauma Network will be brief. This is just as well, as the resources of my thesaurus begin to abate.

It is now 5 years since we convened and commenced our program of work to build and implement an entirely new clinical network of acute care and long-term rehabilitation for Scotland's most seriously injured. August 30<sup>th</sup> 2021 witnessed the completion of Phase I with delivery of the fully operational end product. At time of writing, we run smoothly and successfully in the best traditions of "National Collaborative Pragmatism".

All of this achieved of course, against the backdrop of complications presented to us by the pandemic. A remarkable achievement now recognised and acclaimed at the highest levels of the NHS, the Scottish Government, and national and international media.

This hard-earned and well-deserved reputation requires stiffening of the sinews and strengthening of resolve to be maintained, for us to progress further as we contribute well beyond our remit to the Remobilisation of the NHS in Scotland.

Thus, now begins Phase II, where we plan to tell the story using data, to raise standards for the future, and to demonstrate the sustained improved outcomes for patients, their families, their communities and the nation as a return on the visionary investment of these past 5 years.

*Martin McKechnie  
National Clinical Lead*



## Governance

STN Governance is conducted through the Core Group, which consists of clinical and planning leads from each of the regional networks and SAS. The Core Group reports to the STN Steering Group. A number of working ('facet') groups are in place, which produce recommendations and guidance which are subsequently ratified through the Core and Steering Groups.

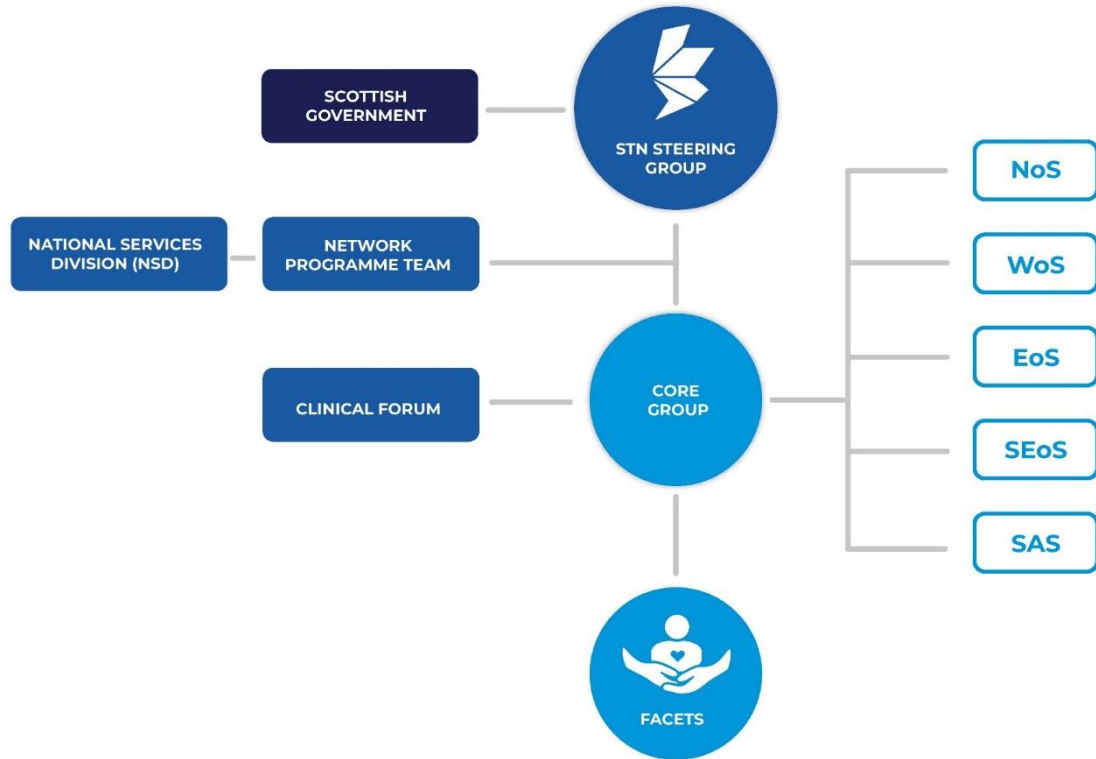
Mary Morgan, Chief Executive of NHS NSS has taken over as chair of the STN Steering Group and Martin McKechnie continues to chair the STN Core Group.

Two National Clinical Governance sessions had been scheduled for 21/22 however, due covid-19 pressures these have been rescheduled to May 2022. Clinical Governance within the regions had continued. Regions are expected to present two cases, one adult and one paediatric. Patient stories have been reintroduced at the STN Steering Group.

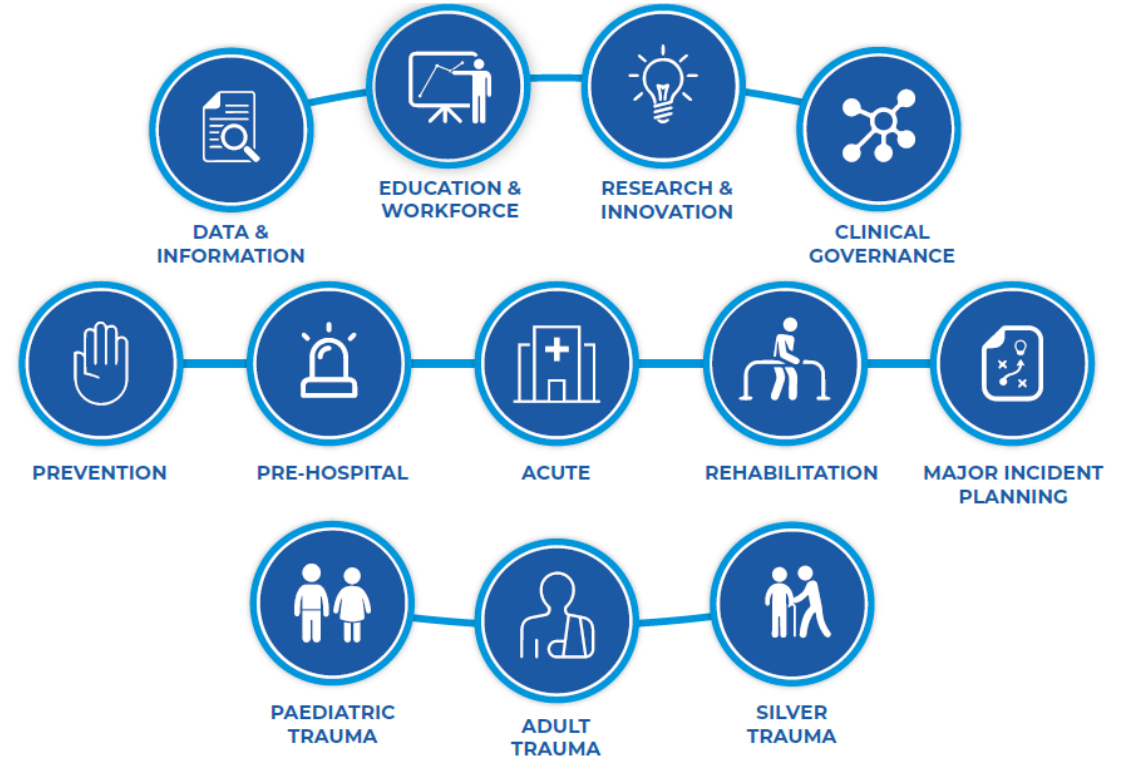
Data from the Scottish Trauma Audit Group (STAG) is published in the STAG Annual Report each year, and can be found on their website: [The Scottish Trauma Audit Group, STAG](#)

# Scottish Trauma Network Network

## Governance Diagram



## Facet Diagram








# Report against network deliverables



## Pre-Hospital





## Major Incident Planning

Deliverable 	Progress/Next Steps 	Benefits 
Support the work on a feasibility study of the establishment of a single 'red' team in the East of Scotland.	Work is ongoing – Dr Chris Moultrie has been working with regional clinical leads and service associate directors.  Mapping of potential locations took place in March/April 2022  Report expected at the end of May 2022	The network and Scottish Ambulance Service will be clear on the feasibility of establishing a single red pre-hospital team in the East of Scotland.
Review of Major Incident with Mass Casualty Plan	This review was carried out as requested by Scottish Government Emergency Preparedness Resilience and Response (EPRR) team to ensure that NHS Scotland was prepared for any potential incidents during COP26.	NHS Scotland has an up-to-date Major Incident with Mass Casualty plan to support the management of any incident.

# Report against network deliverables



Paediatrics

Deliverable	Progress/Next Steps 	Benefits 
Develop and publish national paediatric guidelines.	<p>Guidelines approved by the STN Core and STN Steering Group.</p> <p>Documents have been branded and added to the network website.</p> <p>The group will continue to review PERUKI and NICE guidelines for future requirements.</p> <p>Work underway to review Spinal Injuries pathway with specialist service.</p>	<p>Standardised national approach to care and guidelines.</p> <p>Staff have clear reference point for standard guidelines for trauma care in children.</p> <p>Better links to pathways such as Spinal Injuries and understanding when to consult with specialist services.</p>




# Report against network deliverables



## Research and innovation



## Communications




<b>Deliverable</b> 	<b>Progress/Next Steps</b> 	<b>Benefits</b> 
<p>Develop a Trauma Data Platform, and progress data linkages for telling the story.</p>	<p>Scoping document agreed with the STN Research and Innovation Group. NSS Digital and Security looking to progress platform delivery 2022-23.</p> <p>Pilot project underway using NHS GG&amp;C Prescribing data to look at questions</p>	<p>Allow data to be accessed in one place.</p> <p>The network can start to show value for money and assessment against the network aims and objectives.</p> <p>Telling the Story using data.</p>
<p>Support Health Boards and Firecrest Productions in the development of the 'Trauma' Documentary, Rescue: Extreme Medics</p>	<p>Episodes broadcast on Channel 4 at 9pm for 5 weeks starting on the 28<sup>th</sup> March 2022.</p> <p>There have been several press events including a press panel, Good Morning Scotland and Steph's packed lunch.</p> <p>The documentary brought in 1.3 million views on the first episode.</p>	<p>Increased awareness of the network and shows integrated services that make up the trauma network.</p>



# Report against network deliverables






## Education

Deliverable 	Progress/Next Steps 	Benefits 
Publication of Development and Education Framework for Nursing and AHP Staff working across the in-hospital trauma system.	<p>The Senior Educator has completed the consultation phase and focus groups to develop the NMAHP Development Framework. The draft framework has been proof read and is being branded by NHS NSS Comms.</p> <p>The framework is due to go through STN Governance in first quarter 2022-23.</p>	<p>Development and education frameworks will be available to support staff development across in-hospital teams.</p> <p>National approach to education for NMAHPs.</p>
Gather and develop education resources to support staff development linked with the development and education frameworks.	<p>The Senior Educator has reviewed and approved some resources. The approved resources now appear on the website.</p> <p>A self-assessment form for resources being added to the website has been produced.</p>	<p>Relevant and up-to-date education resources appear in one place and are easy to find.</p> <p>Well-trained trauma workforce with opportunities for staff to retain and improve skills.</p>

# Report against network deliverables






## Rehabilitation

Deliverable 	Progress/Next Steps 	Benefits 
Finalise the minimum dataset for rehabilitation data held on eSTAG to allow the system to be updated to collate data in 2021	<p>Minimum dataset has been agreed by the Rehabilitation Group and will be collected as part one in the Rehabilitation Plan.</p> <p>e-STAG is scheduled to be updated in the Spring 2022.</p>	Accurate and relevant data will be available regarding the rehabilitation assessment of patients to inform STAG reporting.
Develop KPI around rehabilitation and repatriation of patients to support best practice for patient care.	<p>Terminology and collection criteria has been agreed by the STN Rehabilitation Group in February 2022.</p> <p>The Repatriation KPI has to go through STAG Governance.</p> <p>Data is expected to be collected by the end of 2022.</p>	<p>By having a stretch goal KPI for Repatriation and Transfer, will allow any issues to be highlighted where appropriate, backed by relevant data.</p> <p>The regions will be able to monitor the 48hr minimum requirements to repatriate and/or transfer once a patient is medically fit.</p>

# Report against network deliverables



Core Group

Deliverable 	Progress/Next Steps 	Benefits 
Develop sustainability strategy for the network to support ongoing delivery of care for seriously injured people across Scotland.	<p>A sustainability workshop took place in December 2021. Presentations from these discussions have been escalated through STN Governance.</p> <p>Discussions on future planning had taken place in every facet working group.</p> <p>Sustainability strategy expected in quarter one 2022-23.</p>	<p>Engagement from stakeholders on the future of the network.</p> <p>Clarity on the national approach to trauma will be understood.</p>
Launch of the full network. SEoS/WoS MTCs and the adult and paediatric Major Trauma Triage Tool to go live.	<p>The launch of the full network took place on 30<sup>th</sup> August 2021.</p> <p>Services in the WoS and SEoS went live on 30<sup>th</sup> August 2021. Due to covid-19 there were no official ministerial openings.</p>	<p>Equitable services available across Scotland.</p>

# Finance



All network funding spent on projects agreed through network governance. In addition to regular agreed staffing and expense spends, this included:

- NSS Digital and Security review of Trauma App project and support for procurement scoping
- NSS Digital and Security initial scoping for Data Platform



# Social Engagement (April 21 – March 22)

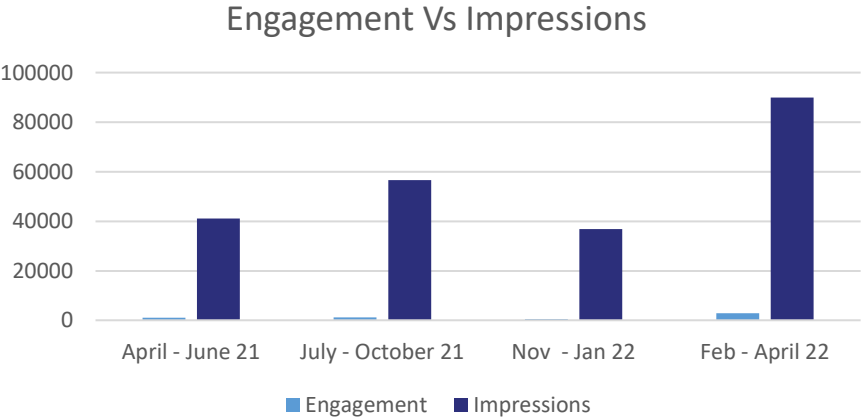


3,639 Twitter followers (1,434 increase since 2020)

1.7% Average Engagement per Tweet

Increased Engagement and Impressions in March due to Rescue: Extreme Medics trailer release.

10.4k people visited the STN twitter profile in March 2022 (Increase of 587.% from February 2022).



2,018 Returning Users (11.9%) 1488 New Users (88.1%)

00:01:42 Average Session Duration




56.5% of users are from Organic Searches, 31.3% Direct Searches, 7.9% Referral and 4.3% Social Media

63.36% Bounce Rate (view one page and leave the website)



# WoS Network Deliverables



Deliverable 	Progress/Next Steps 	Benefits 
Improved access to adult multispecialty trauma care.	Creation of Point of Contact (POC) for adult MTC National coverage of sub speciality paediatric MT. Building on existing SPOC via ScotSTAR system.	Patient centred care and clinician support. National improvement in access to paediatric sub specialities.
MT ward established and maintained uninterrupted in QUEH.	MDT delivered care. Staffing models and function of ward likely to evolve after initial implementation phase.	Beneficial outcomes observed by staff, families and patients.
Governance of Trauma Care	MTC Governance structure established within both sites.  Governance template for WoS TN  Creation of network wide M+M	Visibility of trauma care within individual HB structures and clinical leads network.  Network access and engagement with safety issues.
Education and shared learning	Success of MT forum. Accessibility of adult MT educational program.  Development of SOPs	Professional development and sharing of best practice.
SAS triage of trauma patients	Transparent review of cases. Revision of the WoS Orthopaedic Triage Tool (OTT)	Recognition and support of the SAS success in adopting new triage tools.
MTC Developments	Paediatrics - further engagement and support to referring sites.  Pathway development for children transitioning from paediatric to adult services.  Development of adult rehabilitation services  Discussion with regional/national services neurosurgery, cardiothoracic and spinal injuries	Assurances for quality of care.  Continuity of care and improved specialty communication.  Improved patient outcomes  Improved management of complex patients.

# SEoS Network Deliverables



## Deliverable



Develop a mobile app which contains comprehensive clinical guidelines on the management of major trauma injuries and access to SEoS Protocols.

Establishment of diverse multispeciality and multidisciplinary major trauma service established.

Implement a network education programme to ensure staff working in the network are suitably trained and have access to ongoing development and training opportunities.

## Progress/Next Steps



A mobile app was launched in September 2021.

The region recently updated its guidance for trauma units requesting MTC transfers for polytrauma and head injury patients.

FVRH successfully developed a protocol for management of chest injuries in TUs.

Multidisciplinary teams established on all sites to support delivery of care – including medical, nursing, rehab and mental health teams.

Rehab coordinators appointed at each site to ensure patients have access to appropriate services and support both hospital and at discharge.

Pre-hospital teams supporting successful triage of patients helping to ensure patients receive early access to definitive care.

Delivery of advanced nurse practitioner service at MTC RIE

All sites in the network and continue to deliver in-house training, simulation and trauma case reviews.

Education matrix to be developed with information on externally run training opportunities for staff.

Network to establish regular education forum and network event to support delivery of ongoing training to staff across the regions.

## Benefits



Staff and clinicians working in the network can easily access up-to-date accurate clinical information.

Establishment of multidisciplinary teams mean the network is able to take a holistic approach to improving patient health, this supports the networks key aims of 'giving life back' to individuals who have experienced major trauma injuries.

Patients are able to access the right specialities and expertise for their injuries and access appropriate mental health support.




Coordinators help to co-ordinate input from the multidisciplinary team to ensure patients receive the right care at the right time.

Well-trained trauma workforce with opportunities for staff to retain and improve skills.

Improves staff confidence and wellbeing.

# EoS Network Deliverables



<b>Deliverable</b> 	<b>Progress/Next Steps</b> 	<b>Benefits</b> 
<p>Rehabilitation services mapping exercise initiated for adult and paediatric major trauma patients.</p>	<p>Initial meeting attended by representatives from all Allied Healthcare Professionals groups and Service Managers involved in delivering care to Major Trauma patients to ascertain if any perceived gaps in workforce/service delivery as service moves from implementation phase to service delivery phase that may detract from EoS' ability to satisfy the Network rehabilitation KPIs.</p> <p>The next meeting will examine community pathways in EoS for Major Trauma Patients.</p>	<p>Gaps in service provision identified in paediatric service. Internal re-allocation of funding supported by Major Trauma Finance lead enabled appointment of paediatric Physiotherapist and Occupational Therapist and additional support to Neuropsychology service for additional time.</p> <p>To ensure that rehab clinicians delivering the service have a platform to influence service delivery that is as patient-centred as possible.</p>
<p>Initiation of an Isolated chest injury in Frailty pathway (see appendix 1).</p>	<p>Pathway agreed with Key stakeholders including physicians for Frailty Service, General Surgery, Orthopaedics and Anaesthesia.</p>	<p>Initiation of this pathway will ensure that frail patients benefits from input from Major Trauma Service independent of where they are admitted with an overall reduction in mortality and morbidity.</p>
<p>Remobilisation of Major Trauma Ward.</p>	<p>NHST prioritising Major Trauma Ward with protected staffing as some infection and prevention measures are de-escalated which will improve bed capacity and allow the Major Trauma ward to re-open.</p>	<p>Cohorting of Major Trauma patients allows for specialist multidisciplinary care to be delivered in a concentrated geographical area with more rapid access to emergency treatments such as regional anaesthesia and delivery of specialist multidisciplinary rehabilitation care.</p>






# NoS Network Deliverables



Deliverable	Progress/Next Steps	Benefits
Provide a geographical focus in the MTC for polytrauma patients to receive multidisciplinary care following the deployment of the Polytrauma Ward for Covid-19 purposes.	<p>Established beds within HDU for polytrauma patients as a pilot and engaging with critical care colleagues to care for polytrauma patients whilst in the HDU to supplement the existing consultants on call rota .</p> <p>Further testing of model for trauma nursing and specialist AHPs in the HDU</p>	Multidisciplinary care for polytrauma patients in a specified ward area results in lower rates of mortality and reduced overall hospital lengths of stay. It prevents patients ‘falling through the cracks’ and enables highly specialised expertise in all aspects of care.
Comprehensive education programme	<p>Monthly adult and paediatric Teams education sessions.</p> <p>Paediatric training programme for remote and rural sites developed and implementation begun across the north.</p> <p>Skills training for trauma surgery, nursing, and AHPs delivered alongside TRiM and secondary transfer . To continue into 22/23.</p>	Increased trauma skills, and confidence to apply them, will lower mortality and increase better outcomes for patients who have experienced trauma.
MTC MDT out patient follow up clinic	Clinic established using QI methodology. Hybrid with mixture of in person, telephone and NearMe. Patients requiring further physical assessment are then brought to clinic. Patient feedback has been consistently positive.	The clinic helps to ensure discharged patients into the community are receiving the care that is required to maximise their outcomes.




# SAS Network Deliverables



Deliverable 	Progress/Next Steps 	Benefits 
<p>Advanced Practitioner in Critical Care (APCC) Programme. All 3 SAS APCCs teams based in Glasgow, Edinburgh and Inverness are now fully operational.</p>	<p>Assets: Additional response vehicle for APPC North Team.</p> <p>Clinical developments: Independent prescribing, pre-hospital point of care ultrasound (POCUS) training, new therapies for acute behavioural disturbance and drug overdose.</p> <p>QI: APCC clinical handbook hand-book extensively revised, competency framework for critical care advanced practice in development</p> <p>Staffing: A pilot of a rotational model with ScotSTAR West Advanced Retrieval Practitioner in progress.</p>	<p>Increased provision of enhanced pre-hospital response to major trauma in North with APCCs now responding independently in addition to supporting PICT team.</p> <p>Improved care provided to critically ill patients (both trauma and non-trauma) through extension of APCC skills and continuous professional development.</p> <p>APCC teams provide direct clinical care, support and develop skills of SAS colleagues and work collaboratively with "red" critical care teams.</p>
<p>Central Co-ordination including Major Trauma Triage Tool and move to Critical Care Desk (CCD).</p>	<p>Appointment of a Clinical Effectiveness Lead for Major Trauma Triage. Ongoing Major Trauma Triage Tool (MTTT) training and CPD sessions for ambulance clinicians.</p> <p>A framework for reviewing the performance of the MTTT has been developed to incorporate both SAS MTTT data and feedback from STN regional partners.</p> <p>Trauma Desk to be replaced by Advanced Practice Critical Care Desk (CCD) staffed by APCCs and Advanced Retrieval Practitioners supported by specialist Ambulance Control Centre staff.</p>	<p>The MTTTs act as evidence-based guides to select patients most likely to benefit from care in a Major Trauma Centre or Trauma Unit. Supporting and evaluating their use will allow feedback to SAS clinicians and the STN regional partners facilitating education and evolution of the MTTTs.</p> <p>The CCD will support clinical care on scene and complex triage decisions in addition to the key role of identifying calls requiring an APCC or critical care team response.</p>
<p>Participate in review of Major Incident/Mass Casualty Plan in advance of COP26.</p>	<p>The national plan was reviewed in 2021 in the run-up to the COP26 Summit. A sophisticated network of medical cover for the event included Special Operation Response Teams, Pre-hospital Critical Care Teams, tactical support in the Ambulance Control Centre and medical care in the Blue Zone in conjunction with BASICS Scotland.</p>	<p>Central coordination and interoperability of the various pre-hospital assets has enhanced the response to several significant incidents including a house explosion in Ayr, civil disturbance in Glasgow and several large road traffic incidents.</p>

# STAG Network Deliverables



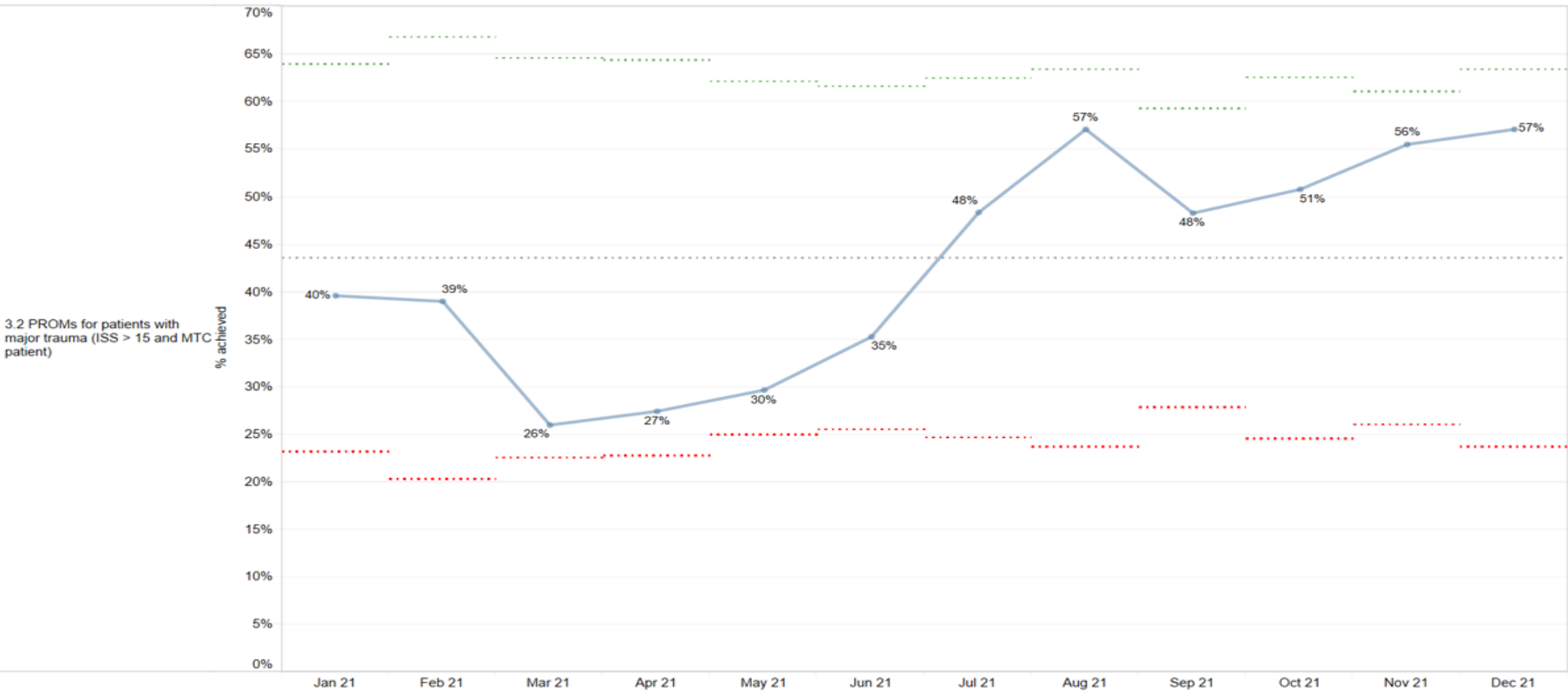
Deliverable 	Progress/Next Steps 	Benefits 
Widening the remit of the STAG Steering Group to include representation from the wider trauma community	All networks recommended staff who were interested in audit and improvement and working within the STN. One person from each regional network was invited to join the Steering Group plus representation from paediatrics. Members come from both AHP and Nursing backgrounds, which ensures better representation from staff involved in the full patient journey	Our first Steering Group with new members showed benefit with relevant advice when discussing the new KPI regarding Specialist Care. Most of the Steering Group were Emergency Medicine based so provides the opportunity to ensure the giving life back aim of the STN is an ongoing objective with input from experienced colleagues across Scotland
Increasing the number of patients approached about participating in the PROMs programme	PROMs participation is increasing due to staff allocation following the opening of the South East and West of Scotland networks. We have also re-sought permission to collect mobile phone numbers and collect PROMs in the community to ensure every opportunity for patients to participate is exploited	PROMs gives us valuable data on patients health related quality of life, return to work and patient experience which can guide services, demonstrate 'giving life back' improvement and target person-centred care. The more information gathered, the richer the data is. See chart in next slide for achievement.
Collection of frailty data	In the last few years hospitals have identified a larger cohort of frail patients with significant trauma who often have a poor outcome. STAG liaised with geriatricians, other colleagues studying frailty, the STN and HIS to ensure collaborative working. Data collection methods were agreed after a pilot in Lanarkshire and this has now been rolled out nationally	The collection of frailty data will demonstrate the incidence of frailty in the trauma population and its effect on outcome, but more importantly it is beginning to highlight these patients early to the appropriate specialties and encourage joint working and input from a very early stage. Some hospitals who have never assessed patients for frailty are now doing this in ED for all older patients and have started or improved links with geriatricians

# STAG Network Deliverables

Increasing the number of patients approached about participating in the PROMs programme



KPI Achieved Report Table








# Workplan 2022-23



# Work Plan 2022-23

Deliverable 	Progress/Next Steps 	Benefits 
<p>Review of the Major Incident with Mass Casualty Plan</p>		<p>NHS Scotland has a relevant, up-to-date Major Incident with Mass Casualties plan to support management of a MI/MC should one occur in Scotland</p>
<p>Audit of Major Trauma Triage Tools</p>		<p>The Major Trauma Triage Tool lies at the heart of the STN as it acts as an evidence-based guide to selecting patients likely to benefit from care in one of the Major Trauma Centres.</p>
<p>Develop a Trauma Data Platform, and progress data linkages for telling the story.</p>	<p>Scoping document agreed with the STN Research and Innovation Group in 2021-23. NSS Digital and Security looking to progress platform delivery 2022-23.</p>	<p>Allow data to be accessed in one place.</p> <p>The network can start to show value for money and assessment against the network aims and objectives.</p> <p>Telling the Story using data.</p>

# Work Plan 2022-23

## Deliverable



Publication of Development and Education Framework for Nursing and AHP Staff working across the in-hospital trauma system.

Develop sustainability strategy for the network to support ongoing delivery of care for seriously injured people across Scotland.

Support the work on a feasibility study of the establishment of a single 'red' team in the East of Scotland.

## Progress/Next Steps



The Senior Educator has completed the consultation phase and focus groups to develop the NMAHP Development Framework. NSS Comms have provided proof-reading and design support.

The framework is due to go through STN Governance in first quarter 2022-23.

Discussions on future planning had taken place in every facet working group, along with a workshop held with the STN Core Group.

Sustainability strategy to be produced in 2022.

Work is ongoing – Dr Chris Moultrie has been working with regional clinical leads and service associate directors.

Mapping of potential locations took place in March/April 2022

Report expected at the end of May 2022

## Benefits



Development and education frameworks will be available to support staff development across in-hospital teams.

National approach to education for NMAHPs.

Engagement from stakeholders on the future of the network.

Clarity on the national approach to trauma will be understood.

The network and Scottish Ambulance Service will be clear on the feasibility of establishing a single red pre-hospital team in the East of Scotland.

# Work Plan 2022-23

## Deliverable



Review of Rehabilitation Plans to ensure they are fit for purpose, with an aim of developing a single plan template for Scotland.

Develop peer review/ongoing audit process

Develop clear processes for ongoing monitoring and management of education resources and guidelines published by the network

## Progress/Next Steps



## Benefits



A “once for Scotland” approach is taken when developing rehabilitation plans for patients.

Clinicians in “boundary Boards” will not have to use different templates depending on where the patient was treated.

The trauma care system in NHS Scotland will have a clear process for auditing and supporting best practice, ensuring the best outcomes for injured people in Scotland.

Staff delivering trauma care will be supported by clear guidelines and education resources to help them deliver the right care for injured people in Scotland.

These will be monitored and kept up-to-date and relevant.



# Stakeholder Feedback

*'Part of the strength of feeling for me is the efficacy of the network and the value of working collaboratively. While the governance may remain local to the boards clinically, the strength of a prominent national process to drive improvement (for a group of patients who may otherwise be lost) is critical'.*

*'The best outcomes after serious injury happen when a coordinated national system is activated to provide seamless expert care from roadside to rehab. This carefully made series gives a glimpse of a few of the people and processes that make up the Scottish Trauma Network.'*