# SAVING LIVES. GIVING LIFE BACK.

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## Foreword

Trauma remains the fourth leading cause of death in western countries and the leading cause of death for people under 40. Each year in Scotland, around 5000 people are seriously injured, with around 1000-1100 cases being defined as 'major trauma'. It is estimated that each year, there are also 100 cases of major trauma in children under 16.

For each trauma fatality, there are two survivors with serious or permanent disability that will have significant impact on quality of life. Trauma is not only a leading cause of death, but also a large socio-economic burden. Although major trauma accounts for only a small percentage of the approximately 550,000 emergency admissions to hospitals across Scotland each year, these severely injured patients require highly specialised care, extended hospital stays and extensive rehabilitation.

I am therefore pleased to confirm that trauma care in Scotland is about to begin to change for the better. This report details the outputs from the National Trauma Network Implementation Group, who from September to November of this year, brought together colleagues from NHS Scotland, the Scottish Ambulance Service and the Scottish Government to develop a unique network model of trauma care; one that will deliver improved outcomes for injured patients.

The new Scottish Trauma Network is a bespoke, inclusive and equitable solution, which will involve the Scottish Ambulance Service and hospitals across Scotland - including 4 major trauma centres - working collaboratively to deliver high quality, integrated, multi-specialty care to severely injured patients. This new approach will save more lives and improve patient outcomes throughout the trauma pathway – from prevention to rehabilitation - '*Saving lives. Giving life back'*.

This new model of care is very much in line with the aims and ambitions of our National Clinical Strategy. It's been designed to meet the needs of our population by delivering enhanced, coordinated care across traditional speciality and geographical boundaries.

An undertaking of this scale and complexity will take time to fully implement. Over the next 3 to 5 years, the Scottish Government will therefore provide NHS Boards with significant additional investment to make this happen and deliver the improvements in outcomes we all wish to see.

I am grateful to all NHS Scotland, Scottish Ambulance Service, Scottish Government and other colleagues who have helped produce this unique model of trauma care for Scotland.

Catherine Calderwood

**Dr Catherine Calderwood, MA Cantab FRCOG FRCP Edin**

**Chief Medical Officer for Scotland**

## Scottish Trauma Network

### Executive Summary

1. The Cabinet Secretary for Health and Sport set out a clear commitment in May 2016, to implement a bespoke Scottish Trauma Network (STN) comprising of an inclusive network of hospitals, four major trauma centres (MTCs) and integrated network infrastructure. This commitment was subsequently included as a key outcome in the Programme for Government in 2016.

2. Following the announcement, the Cabinet Secretary for Health and Sport asked the Chief Medical Officer to develop a high level model for implementation of the STN. The CMO therefore established the National Trauma Network Implementation Group (NTNIG) to take this work forward. NTNIG met on three occasions in September, October and November 2016, to agree the proposed high level STN model and framework for implementation of the trauma network. NTNIG has now fulfilled its remit. It has:

- Worked collaboratively to develop a high level model for a bespoke Scottish Trauma Network with a clear scope and purpose - from prevention to rehabilitation - and a clear set of aims;

- Agreed the role, remit, and proposed membership for a new STN Steering Group which will work with the trauma regions and SAS and will provide strategic direction, leadership, assurance and audit across the network. Early priorities have been identified for the Steering Group together with a set of guiding principles to help identify priorities for investment and support phased implementation of enhanced trauma care;

- Reviewed the current regional and SAS trauma network plans collectively, improving dialogue and awareness between the regions of the full scope of the requirement in implementing the Scottish Trauma Network;

- Progressed development of the pre-hospital component of the network, including early investment in additional trauma equipment and training for all frontline ambulance crews and expansion of the trauma desk to improve co-ordination across the network;

- Worked with the Scottish Trauma Audit Group (STAG), to progress an agreed set of Key Performance Indicators (KPIs) to drive quality improvement across the network and improve access to data;

- Developed a brand and shared identity for the STN, supported by a website which will be both public-facing and provide a vehicle for professionals to engage and learn across the network.

**STN model**

3. The proposed model for a new STN has now been approved by the Cabinet Secretary.

4. The overall aim of the STN will be **‘saving lives, giving life back’.** Evidence from around the world shows that a co-ordinated and inclusive system of trauma care significantly reduces mortality (20-25%) and improves vocational outcomes for patients, bringing significant benefits:

Benefits

- The STN will be an inclusive and equitable trauma network for Scotland including a number of hospital sites and regional networks, which will deliver high quality, integrated, multi-speciality care to severely injured patients - saving more lives and improving the lives of patients throughout the trauma pathway – from prevention to rehabilitation.
- For Scotland, we estimate around 40 more lives will be saved each year, as well as improved care and outcomes for the potential 2,000 major trauma patients and 4,000 severely injured patients each year;
- Improvement in trauma rehabilitation as an integral component of the trauma network will benefit patients, returning them to independent living and employment far sooner and more effectively, helping reduce the estimated £300-£400 million lost economic output per year for Scotland as a result of trauma;
- Investment in enhancing trauma services and specialist workforce, including pre-hospital retrieval and transfer, diagnostic capacity and rehabilitation will benefit a far wider group of severely ill and injured patients across Scotland;
- The Scottish Trauma Network will provide a bespoke Scottish solution, operate across traditional specialty and geographical boundaries, epitomising the ethos of the National Clinical Strategy. It will ensure equitable access for patients to improved trauma services and outcomes.

5. The STN will be delivered through four regional networks, supported by an enhanced pre-hospital retrieval and transfer capacity, with clear strategic direction and assurance from the new national STN Steering Group. The STN Steering Group will work collaboratively to prioritise investment in trauma services on a national basis, to implement a unique model of trauma care for NHS Scotland.

6. The STN will comprise four major trauma centres (MTCs), which can be reached by 86% of the population within 45 minutes by road. These four centres will offer the highest level of trauma care with dedicated trauma ward and specialist workforce capacity.

7. As well as having 4 MTCs, a network of trauma units (TU) will continue to manage moderate trauma across Scotland. Additionally, where patients are outwith

the 45 minute access threshold to a MTC (i.e. 14% of the population), they will be taken to the nearest TU and if required, transferred to a MTC; 93% of the population of Scotland can reach a MTC or TU within 45 minutes by road.

8. The enhanced pre-hospital component of the STN will ensure patients reach definitive trauma care more rapidly. A single national triage tool will be used to help early identification of trauma patients and ensure the right level of care for patients is co-ordinated through a 24/7 trauma desk within ambulance control centre.

9. Investment in the trauma system will likely bring wider benefits across NHS Scotland, challenging traditional speciality boundaries, improving co-ordination and responsiveness, and fostering a regional and national network approach to service delivery. It is clear that regions and SAS have already begun to work more collaboratively with minimal investment.

STN website

10. The development of the STN brand and website will also facilitate public, partner and practitioner engagement in the network as it develops and will be a key tool in supporting ongoing involvement in the network.

**Conclusion**

11. In summary, the development of an inclusive trauma network for Scotland is in line with the aims and ambitions of the National Clinical Strategy, designed to meet the needs of the population of Scotland, working across traditional speciality and geographical boundaries to deliver better outcomes for patients.

12. To be effective, clinicians and service managers involved in the delivery of trauma care will need to work differently - more collaboratively - and the scale and complexity of implementation means it is likely to take several years for the STN to fully mature.

13. Once fully implemented, it is envisaged that the Network will improve care and outcomes for around 6,000 trauma patients each year, and the additional investment we will make in enhanced pre-hospital, diagnostic, acute and rehabilitation services is expected to benefit many more severely ill patients.

14. The STN's vision is '*Saving lives. Giving life back*' and aims to improve trauma patient care from prevention through to rehabilitation. This bespoke Network will involve hospitals across Scotland, including major trauma centres in Aberdeen, Dundee, Glasgow and Edinburgh, working together across traditional geographic boundaries to realise this vision.

15. It is important to recognise that it will take time to fully implement the STN. Investment decisions in trauma care will be led by a new STN Steering Group, which will work with the trauma regions and SAS and will provide strategic direction, leadership, assurance and audit across the network.

16. The STN Steering Group will be hosted by National Services Division (NSD). Scottish Government will provide NSD with £225,000 a year over the next 3 to 5 years to establish the Group and to recruit and retain dedicated network staff.

17. The Cabinet Secretary expects the STN steering group to be up and running by April 2017. Once established, the Steering Group will be expected to work collaboratively with the trauma regions and SAS to begin to develop and take forward the new model of trauma care from 2017/18 onwards.

18. In addition, Scottish Government will provide significant additional investment in order to enhance trauma services across Scotland. The level of investment NHS Boards receive and where investment will be made will be prioritised and agreed by the STN Steering Group.

19. In 2017/ 2018, the STN Steering Group will have up to £5 million to make available to NHS Boards, to begin implementation of the network across Scotland. Investment in future years will be agreed through discussion with SG Finance and the STN Steering Group.

20. The Cabinet Secretary expects to be able to provide an update on progress with implementation of the STN to Parliament in October 2017.

## Scottish Trauma Network

### Engagement

1. As the work to develop the STN model has progressed, there has been extensive engagement, nationally and regionally, with clinicians and service managers within NHS boards and regional planning structures.

2. Representatives from the four trauma regions and SAS were invited to the October NTNIG meeting to present their outline trauma network plans and their priorities for phased implementation. NTNIG members and regional/SAS representatives were then able to review these outline plans collectively and identify the next steps.

3. A follow up meeting with regional representatives and SAS to further clarify the proposed STN model was held on 27th October, offering the opportunity for further discussion and shared understanding around the planning and implementation of the STN and the critical role of the regions and SAS within it. This engagement and feedback has helped inform the next steps and early priorities for the proposed STN Steering Group which will work with the trauma regions and SAS and will provide strategic direction, leadership, assurance and audit across the network.

4. It is acknowledged that a clear engagement strategy will be an early priority for the STN, including appropriate engagement with patients, professionals and the public. The STN Steering Group will include lay representation, with input from trauma patients.

<u>Progress to date</u>

5. NTNIG has delivered its objectives in designing collaboratively a high level model and approach for implementation of a bespoke trauma network for Scotland. Specifically, NTNIG has:

- Agreed the scope and ambition of the STN in working collaboratively to reduce the impact of trauma in Scotland - **Saving lives. Giving life back**.
- Agreed a high level STN model setting out clear aims, ethos and structure for the network. The STN will include the 4 MTCs working together within a network of Trauma Units and local emergency hospitals across Scotland. The regional networks and SAS will drive forward operational delivery to meet the aims of the STN with strategic direction and investment prioritised by a STN Steering Group.
- Agreed that each of the four regional networks will determine the exact configuration of trauma units required to meet the needs of their region's population, as they complete their detailed planning work. The regional networks will continue to work collaboratively within their own regional structures and with SAS and the other regions to develop a truly inclusive national trauma network for Scotland. Discussions with the regions through NTNIG have brought greater clarity around regional configurations, moving the focus of this conversation beyond immediate consideration of MTCs

towards a common set of aims, an agreed delivery framework and recognition of the challenges and priorities regionally and nationally in establishing and building the STN.

- Agreed the role, remit and membership of the STN Steering Group that will provide strategic leadership, direction, audit and assurance for the STN - and prioritise investment in the trauma network in line with an agreed set of guiding principles.

- Agreed that a move away from strict adherence to the national trauma standards (which may not best service the needs of the local network population), towards a nationally agreed set of trauma KPIs will foster an outcome-focused network, that can work collaboratively to strengthen data collection and drive continuous improvement.

- Developed a shared identity and brand for the STN, including a network website which is public facing and can support professional engagement and learning across the network.

6. Following discussion on 14 December, the Cabinet Secretary approved the following STN model.

**Aims and Ethos**

7. The STN will be a bespoke, inclusive and equitable trauma network for Scotland including a number of hospital sites and regional networks, which deliver the highest quality of integrated, multi-specialty care to severely injured patients, saving more lives and improving the lives of patients throughout the trauma pathway – from prevention to rehabilitation.

8. Each of these five dimensions of the STN will be critical in improving trauma care in Scotland and ensuring the STN delivers its aim of saving lives and giving life back.

9. The STN will aim to:

- Enhance existing trauma services by coproducing and delivering an inclusive national trauma network, which will save more lives and improve outcomes for severely injured people across Scotland;

- Have a focus on trauma from prevention through to rehabilitation to help reduce the 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 across Scotland access the right level of trauma 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 speciality and geographical boundaries to ensure clinicians 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.

**Network configuration**

10. Currently trauma patients can be taken to any one of 30 emergency departments across Scotland and subsequently transferred, as necessary, for specialist treatment.

11. A demonstrable benefit of the STN will be high quality, multi-specialty care for patients co-ordinated within and across fewer hospitals. Clear patient pathways, supported by an enhanced retrieval and transfer capacity, will ensure patients reach definitive care as rapidly as possible and the need for secondary transfers will reduce.

12. The STN will comprise four major trauma centres (MTCs), which can be reached by 86% of the population within 45 minutes by road. These four centres will offer the highest level of trauma care with dedicated trauma ward and specialist workforce capacity.

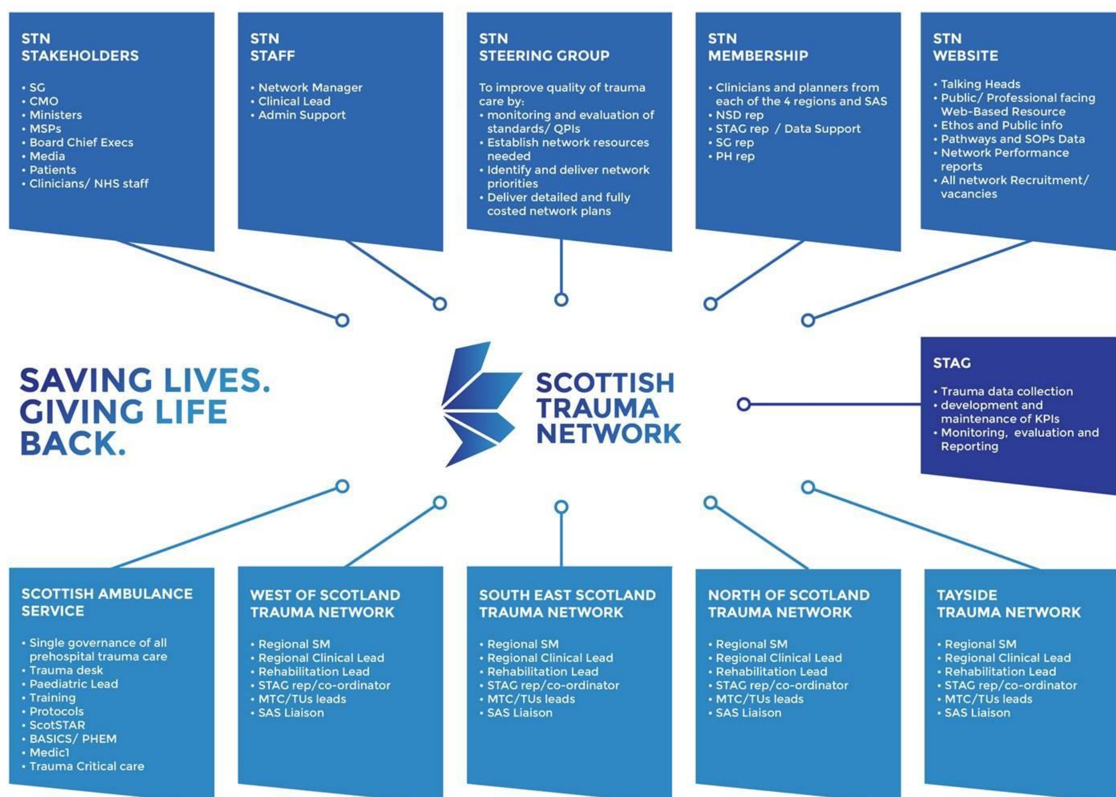
13. As well as having 4 MTCs, a network of trauma units (TU) will continue to manage moderate trauma across Scotland. Additionally, where patients are outwith the 45 minute access threshold to a MTC (i.e. 14% of the population), they will be taken to the nearest TU and if required, transferred to a MTC; 93% of the population of Scotland can reach a MTC or TU within 45 minutes by road.

14. The exact configuration of TUs will be determined by each of the four regional networks, however, it is anticipated that the each NHS Board area will have at least one trauma unit. Pathways will be agreed with the Scottish Ambulance Service (SAS) to ensure patients are taken to the most appropriate facility best able to manage their care.

15. Scotland's geography will mean that some patients in rural areas will still initially be taken to their local emergency hospital (LEH), including those covered by the three Island Boards (7% of population). However, the STN will be supported by a more effectively co-ordinated and enhanced pre-hospital retrieval and transfer capacity. SAS will operate a national triage tool ensuring consistency in early identification of trauma, and a 24/7 trauma desk based within the ambulance control centre will support crews in routing trauma patients to the most appropriate hospital, and more rapidly co-ordinating retrieval and transfer across the network.

16. NHS Boards and their regional trauma networks, working in partnership with SAS, will be responsible for the operational delivery and clinical governance. There will be a clear expectation that they develop services which deliver against the five core dimensions set out in the STN ethos from prevention to rehabilitation. Allocation of funding will be collectively determined across the wider STN.

17. The approved model for the STN is set out in the diagram below:



## Key Performance Indicators

18. It will be important to establish a baseline for improvement across the network. As part of its work, the Major Trauma Oversight Group (MTOG) approved a draft suite of Key Performance Indicators, which STAG has developed. It is envisaged that the STN Steering Group will own and continue to develop these KPIs as the drivers for improvement.

19. The proposed KPIs are split into three sections:

***Pre-hospital care*** includes the response from the call alerting the emergency services, to on-scene care, triage and primary transfer.

- Patients who have suffered significant trauma are assessed by the Scottish Ambulance Service (SAS) using the SAS Trauma Triage Tool (SASTTT).
- Patients who are triaged as requiring Major Trauma Centre (MTC) care are notified to the receiving hospital (pre-alert).
- Patients who are triaged as requiring MTC care are taken directly to a MTC if they are within 45 minutes' travel time.

***Early hospital care*** includes the initial reception of the patient in the ED and inter-hospital transfer (if required), through to the patient being discharged to a rehabilitation service or home.

- Patients who are triaged and taken to MTC care are received by a Consultant-led trauma team.
- Patients who are triaged to MTC care and are taken to a TU should be seen by a Consultant within 60 minutes of arrival.
- Major trauma patients who are not taken directly to a MTC and are later transferred to a MTC are transferred within 24 hours.
- Time to secondary transfer to a MTC for patients who have suffered major trauma (ISS > 15) is minimised to ≤ four hours from time of call to SAS to departure.
- Patients with a severe head injury have a CT scan within 60 minutes of arrival.
- Patients with a severe head injury have a CT scan written report sent within one hour of the CT scan.
- Patients who have suffered a severe head injury are managed in a MTC.
- Patients with a severe open long bone fracture will receive intravenous (IV) antibiotics within three hours of arrival.
- Trauma patients with severe haemorrhage should be given Tranexamic Acid (TXA) within three hours of first contact with emergency services.

- Patients who have suffered major trauma and are taken to a MTC are admitted under the care of a Major Trauma Service.

***Ongoing hospital care*** includes rehabilitation of the patient and Patient Reported Outcomes Measure (PROMS) at various timeframes following discharge from hospital.

- Major trauma patients admitted to a MTC have a rehabilitation plan written.
- Major trauma patients admitted to a MTC, who have a rehabilitation plan, have it written within three days of admission. .
- Patients who have survived major trauma have their functional outcomes assessed at specified timelines.

**STN Steering Group**

20. A key component of the STN will be the STN Steering Group. It will be essential to establish this group at the earliest opportunity to work with the regions to complete the detailed implementation, service and financial planning for the STN.

21. The remit of the Steering Group will be to:

- Provide strategic leadership, direction, audit and assurance for the STN, and commission investment in trauma care ensuring this meets the ethos of the network and demonstrates improved outcomes;
- Work collaboratively with NHS Boards, regional networks and the Scottish Ambulance Service to implement a bespoke, inclusive and equitable trauma network for Scotland – one that is suited to the country's needs and geography;
- Implement a trauma network within the context of the National Clinical Strategy – a network that is resourced appropriately, fit for purpose and which will ensure people receive excellent trauma care quickly, in the most appropriate setting;
- Deliver a unique Trauma Network solution that will be expected to deliver improvements in trauma patient outcomes across Scotland against a nationally agreed suite of Key Performance Indicators;
- Prioritise implementation and investment across the STN in line with agreed plans and performance outcomes;
- Support and encourage public and professional engagement to enhance care and inform service developments;
- Facilitate shared learning and development across the network for professionals;
- Operate as the over-arching assurance group for the STN, driving improvement through robust evaluation, and audit leadership.

22. The STN Steering Group will be hosted by NSD and as such will be accountable to the Board Chief Executives through NSSC.

23. An additional line of reporting to the CMO and therefore to Scottish Government Health and Social Care Directorates, will be in place during implementation to reflect the funding arrangements in that phase.

24. Membership of the Steering Group will reflect the core aims and ethos of the STN and ensure appropriate clinical and service membership from the four regions and SAS. The actual membership has yet to be finalised, but a suggested membership follows:

| Members | Role |
|---|---|
| Chair (Board Chief Exec) | Chair and liaison with BCEs |
| Network Clinical Leads | Provide national clinical leadership in development of trauma care, clinical standards, protocols and governance |
| Network Manager | Full time network management role facilitating the delivery of the STN ethos, plans and outcomes |
| Regional Clinical Leads | Nominated clinical lead for each of the 4 regional networks and SAS responsible for delivery |
| Regional Planning Leads | Nominated planning lead for each of the 4 regional networks and SAS responsible for delivery |
| ScotSTAR Lead | Nominated lead for the national retrieval service |
| NSS Representative | As network host and to ensure appropriate integration with other national services and networks |
| SG Finance: | To ensure consistency and robustness in co-production of plans and associated investment decisions |
| STAG/Data Lead | To provide regular information on the performance of the STN and identification of areas for improvement |
| Workforce / Education representative | To ensure strategic overview of recruitment and training linked to SG/NHS workforce planning and NES |
| Public Health representative | To ensure public health focus of STN is delivered and improved |
| IJB Lead representative | To ensure rehabilitation focus of STN is delivered and improved |
| Paediatric representative: | To ensure paediatric trauma focus of STN is delivered and improved |
| Resilience representative: | Ensure synergy with major incident / emergency preparedness planning and delivery |
| Unscheduled Care representative: | Ensure connectivity between trauma and unscheduled care initiatives |
| Trauma Expert Reference: | Trauma expertise to support network development and improvement and provide challenge and assurance on a continual basis |
| Lay Members (x2) | To provide a lay perspective on the development and improvement of the trauma network |
| Network Administrator | Administrative support for the STN and Steering Group |
| SG Policy representative(s) | To ensure Scottish Government policy is being implemented and to provide the STN Steering Group with advice and guidance as required |

25. The STN Steering Group will ensure links with existing clinical networks (such as burns and neurosurgery) and infrastructure is developed and members may be co-opted onto the group as required to facilitate these linkages.

26. There is a clear expectation that the STN Steering Group will agree priorities for **investment** in line with a nationally agreed implementation plan. To facilitate this, NTNIG has agreed a set of guiding principles for investment.

Guiding Principles for Prioritisation of Investment

27. The STN Steering Group will be responsible for commissioning the national trauma network's priorities for investment in local trauma services, which will be informed by the regions and SAS implementation plans. The STN steering group will agree and rank national implementation priorities and agree their costs and phasing. This approach will inform the national implementation plan.

28. Clinical buy-in will be crucial to the development and success of the STN and the Regions' assistance in fostering support is key. The STN steering group and the regions will be active and collaborative partners in delivery of the STN priorities.

29. The following points are intended to be a set of guiding principles that the STN Steering Group will apply when determining prioritisation for investment;

- The regions and SAS will produce detailed phased plans that will be subject to robust scrutiny by the STN steering group. It will be for the Steering Group to challenge the activities, outcomes and costs detailed within these plans to ensure consistency and ensure existing capacity and infrastructure is offset against any additional investment required;

- The regions and SAS should strive to develop a trauma network that delivers continuous improvement against nationally agreed key performance measures aimed at improving outcomes for patients. The primary driver for STN approval of any investment is whether it will support delivery of the trauma KPIs (KPIs already agreed by MTOG/ STAG).

- Any funding required to implement STN steering group priorities will also be ring-fenced by the regions and SAS for their intended purpose;

- The scale of investment in any regional network should be relative to the needs of the population within that area, recognising the need for flexibility around implementation based on activity levels and service gaps.

- As evidence from data and audit increases, the Steering Group will use them to inform and focus improvement activity and investment. This should reflect the national Key Performance Indicators and primarily be driven by delivery of improved outcomes for patients;

- The Steering Group will agree a phased national implementation plan based on the regional and SAS submissions, ensuring pragmatic phasing in delivering the key building blocks of the STN, namely:

- Stakeholder engagement linked to prevention, service development and improved outcomes;
- Pre-hospital capacity, including national co-ordination of retrieval and transfer through the SAS trauma desk;
- Acute hospital infrastructure with sufficient capacity to provide enhanced trauma care in line with the KPIs;
- Appropriate workforce capacity across regions and SAS, balancing population need with national performance outcomes;
- Integrated rehabilitation commissioned through NHS Boards;
- Robust governance and audit framework to drive improvement;
- Synergy with planning and capacity building for effective major incident / emergency preparedness.

30. The Steering Group will ensure plans reflect and acknowledge any existing NHS capacity already in place that could support the network, for example, in respect of workforce, education, governance and quality improvement.

31. In determining priorities for investment, the Steering Group will robustly explore the risks and benefits of any investment relative to evidence of improved outcomes for patients.

32. Any suggested investment in trauma services will need to demonstrate a return on investment and the positive contribution to improving patient outcomes that the investment will make.

**Scottish Trauma Audit Steering Group (STAG)**

33. The STN will look to develop a measurement framework that reflects the broader outcomes set out in the network aims. This will include trauma Key Performance Indicators (KPIs) developed by STAG and work is ongoing to make these available. NTNIG and the regions are in agreement that the focus of measurement for the STN should be based on these KPIs and further development of outcome measures. As such, initial planning focus at a regional/SAS level should be aligned with these - there is agreement that this would ensure regional networks are developed to more appropriately meet the needs of their population, as opposed to arbitrary adherence to the national trauma standards.

34. The Scottish Trauma Audit Steering Group (STAG) will prioritise the roll out of the e-STAG solution that will reduce the administrative burden of data collection on hospitals and support increased data collection; the aim remains for 100% trauma data collection across all hospitals in Scotland. e-STAG will also reduce the time to publication of data and help inform STN Steering Group prioritisation of improvement as the STN is implemented and matures.

## The role of the Integrated Joint Boards

35. The role of the Integrated Joint Boards, specifically in terms of providing improvements in trauma rehabilitation services, will also be essential. Rehabilitation services across the regions vary considerably and there may be a requirement to set out a clear Ministerial expectation to IJBs to work within the regional networks to prioritise planning for these services and support commissioning of these services through NHS Boards.

36. A clear aim of the STN is to ensure effective vocational outcomes for those affected by trauma. Priority will need to be given to determining the rehabilitation network and ensuring this is reflected within national implementation planning. At this stage, the costs associated with enhancing trauma rehabilitation services are not clear as the model for rehabilitation is not finalised regionally. This work must be prioritised.

## Early priorities

37. Early priorities for the STN Steering Group (STN SG) will include:

- Development of a single national phased implementation plan. This plan is to be informed by the detailed regional work to be completed by the regions and SAS. The regions' high level plans and associated costs have been presented to NTNIG, however, the group recognised the need for further work to ensure alignment and to help STN SG prioritise phased investment. Some additional regional planning support may be required to facilitate this, given the complexity and scale involved and resolution with the regional networks and SAS around capacity will be required. A specific project plan will be developed. SG Finance will also be involved to ensure costs and financial plans are robust. Engagement with the Capital Investment Group may also be required dependent upon robust review of detailed regional and SAS plans.

- Development of a clear communications and engagement strategy that reflects the range of stakeholders identified in the STN model. There is a clear need to ensure public and clinician buy-in and effective and consistent engagement will be critical. The STN brand has been developed together with a public facing STN website, which will develop and evolve as the network is implemented in conjunction with the regions and SAS.

- Identify and establish appropriate STN steering group sub-groups and membership to take forward detailed work. These may include, for example, a sub-group to complete the detailed planning work and a clinical sub-group to review and develop standards and data.

- Work collaboratively with the regional networks and SAS to develop complementary paediatric trauma pathways, which reflects the population need across Scotland and aligns appropriately with existing specialist infrastructure and capacity.

- Finalise the measurement framework for the STN, building on the work taken forward by STAG and establishing a clear baseline to inform regional and SAS planning. Audit and evaluation will be a key focus of the Steering Group and this dataset will be critical to that.

- On the basis of the regional and SAS plans, identification and prioritisation of workforce and training issues will be required. This will inform the national implementation plan and be aligned to the guiding principles for investment agreed by NTNIG. A national approach to training and recruitment of trauma network staff will require co-ordination across the regions, given funding constraints and current gaps in a number of key areas and the Steering Group will require a strategic overview.

**Key outputs 2017/18**

38. The key deliverables for the STN in 2017/ 2018 follow:

- Creation of the STN Steering Group as the key driver for implementation of a bespoke national trauma network for Scotland;

- Implement trauma triage tool, trauma kit, and training for all frontline ambulance crews to ensure early identification of trauma patients and consistency in pre-hospital care;

- Improve co-ordination through expansion of 24/7 trauma desk operational within ambulance control centre to liaise across the network, advise crews to access pathways, and ensure the right level of clinical response, including specialist retrieval teams and air ambulance;

- Finalised robust regional and national implementation and phased financial plans, inclusive of detailed pathways and agreed network configuration of MTCs and trauma units;

- We anticipate good progress can be made in establishing 4 MTCs within the regions, while recognising the scale of the challenge in West and South East Scotland. Subject to funding and workforce and in line with nationally agreed priorities, we anticipate both Aberdeen and Dundee having trauma wards operational in 2017;

- Finalised KPIs, implementation of e-STAG (electronic trauma audit) and baseline data for improvement.

**Next Steps**

39. The following timeline will now be taken forward:

| | |
|---|---|
| Jan-Mar 2017 | Recruitment of network staff |
| Apr 2017 | STN Steering Group in place |
| Apr – Oct 2017 | Complete analysis and planning phase with regions / SAS |
| Oct 2017 | Brief Cabinet Secretary inclusive of national implementation plan and finalised costs. |
| Oct 17 – Mar 18 | Begin implementation of Scottish Trauma Network. |

**Dr Catherine Calderwood**
Chief Medical Officer
Scottish Government
January 2017