

**Standard Operating Procedure  
for the Implementation & Application  
of the Silver Safety Net  
in West Midlands Ambulance Service & linked MTC & TU's**

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<b>Revisions</b>				
Version Number	Date	Changes	Author, job title	Authorisation, Job title

## 1.1 BACKGROUND

Following the publication of the Trauma Audit and Research Network (TARN) Report “Major Trauma in Older People” (2017)<sup>1</sup>, the single most important finding was the difficulty that current systems have in the early identification of older patients with major trauma.

By failing to identify major trauma in older people, there is a lower rate of bypass to Major Trauma Centres (MTC); low levels of pre-alert; low levels of trauma team activation and initial management by relatively junior clinicians or even by temporary staff who may be unfamiliar with local imaging protocols and patient pathways.

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For all Major Trauma Centres (MTC) and Trauma Units (TU), there is a need to address this issue for *patients*. Delayed identification of injury, suboptimal pain management or hydration strategies can all contribute to the onset of delirium. It is therefore vital that care is optimised as early as possible in a patient's journey and we work towards early identification of major trauma for older people.

In 2018 a "Silver Safety Net" proposal<sup>2</sup> written by the Midlands' Silver Trauma Group to the Midlands Performance & Quality Group was submitted and approved, this was also had the full backing of both West Midlands Ambulance Service (WMAS) and later the East Midlands Ambulance Service (EMAS) albeit not as formally, and in December 2018 the Silver Safety Net Tool was launched.

The project ran well for the first 6 months, but from then on it started to falter and lost momentum. A relaunch was discussed at the beginning of 2020, then COVID 19 hit the country so the decision was made to put any further discussions on hold, then in June 2020 the Midlands Trauma Network and WMAS personnel and managerial representatives met to discuss the Silver Safety Net, review the pre-hospital triage tool, advise on potential amendments, write up clear governance arrangements, discuss training options and pursue a relaunch.

## **1.2 PURPOSE**

The Silver Safety Net is designed to improve pre-alerts for older people with traumatic injuries and has been designed to assist pre-hospital crews and its Regional Trauma Desk (RTD) in deciding the most appropriate method of conveyance to an MTC or TU. It aims to identify older patients with injuries that would benefit from more appropriate pre-alerts being issued to Emergency Departments and to improve conveyance to MTCs for older patients with high energy mechanisms of injury, without over-burdening MTCs with patients that could otherwise be managed in a TU. The standard is a TU as a minimum.

This SOP is designed to ensure the correct application of the “Silver Safety Net” from a Pre-hospital and Emergency Department perspective.

### 1.3 SCOPE

The SOP applies to:

- WMAS Pre-hospital personnel
- WMAS RTD
- All MTCs and TUs served by the Midlands Major Trauma Operational Delivery Network & WMAS

### 1.4 RESPONSIBILITIES

It is the responsibility of Pre-hospital personnel, RTD, MTCs, TUs & their Emergency Department staff to clearly understand and apply this SOP.

The Midlands Major Trauma Operational Delivery Network and the constituent members of the Silver Trauma Group will be responsible for ensuring this SOP is kept up to date and adhered to.

### 1.5 PROCEDURE

The Silver Safety Net shown below aids patient identification; it is also important to understand that it ***is NOT a replacement for existing major trauma triage tools, but works alongside them.***

1. Elderly patients will be assessed initially, as per the major trauma triage tool and if found negative they **must** be assessed against the Silver Safety Net.
2. If they trigger any of the components in the Tool, the Pre-hospital crew will contact the RTD

## Silver Trauma Safety Net Aged 65 years and over?

V4 May 2023

With any of the following:

PHYSIOLOGY	ANATOMY	MECHANISM
<ul style="list-style-type: none"> <li>Systolic BP &lt;110mmHg following an accident</li> </ul>	<ul style="list-style-type: none"> <li>Injury to 2 or more body regions (excluding injuries distal to wrist/ankle joints)</li> <li>Suspected shaft of femur fractures</li> <li>Open fracture proximal to wrist / ankle</li> </ul>	<ul style="list-style-type: none"> <li>Fall downstairs</li> <li>From an RTC:               <ul style="list-style-type: none"> <li>Entrapment &gt;30mins</li> <li>Ejection</li> <li>Death in same incident</li> <li>Pedestrian vs Car– direct to MTC</li> <li>Cyclist vs Car– direct to MTC</li> </ul> </li> </ul>

### Discuss with the RTD:

who will 'SILVER TRAUMA PRE -ALERT' the approp. Emergency Department (TU as a minimum)

***Be aware of patients on anticoagulants as the destination may need upgrading from TU to MTC.***

The TU should then

1. Allocate a cubicle to receive the patient
2. Allocate a senior clinician(ST3+)
3. Activate the Trauma Team at their discretion



Associated documents: via <https://www.mcctn.org.uk/silver-trauma.html>

3. The RTD will then issue a “SILVER TRAUMA ALERT” call to the receiving Emergency Department (TU as a minimum)

4. The Emergency Department can then activate a Trauma Team at their own discretion, but for most cases, the allocation of a senior clinician (ST3 or above) and a cubicle space in which to assess the patient on arrival will suffice.

### 1.5.1 What we learnt from the first wave introduction in 2018

We used TARN data from Jan-Jun 2017, retro-mapped to the silver trauma alert triggers, and found 572 submissions. We then extracted the same data but a year later, as this would have been the first six months the silver trauma alert had been active. Numbers by trigger were:

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Trigger	Sub Group	Pre STA	Post STA
Physiology	SBP<110	99	143
Anatomy	2+ Body Regions	166	275
	Femoral Shaft #	204	146
	Open #	29	32
Mechanism	Fall Down Stairs	68	69
	RTC - Ped / Cycle	2	5
	RTC - Vehicle	4	1
Grand Total		572	671

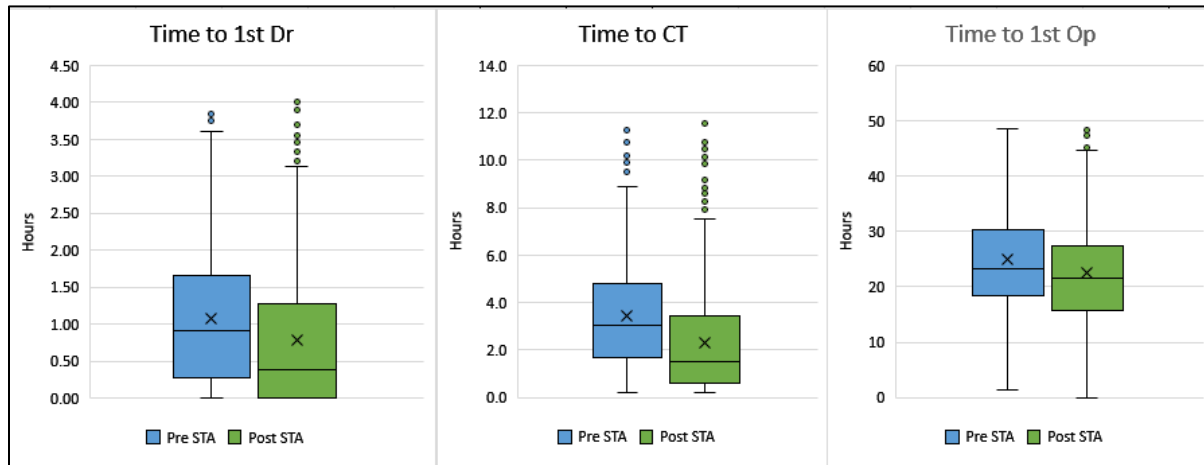
The main things we hoped the silver trauma alert would improve on were:

- Grade of 1<sup>st</sup> doctor
- Time to see 1<sup>st</sup> doctor
- Time to CT
- Time to 1<sup>st</sup> operation
- Outcome

The initial Dr was meant to be a middle grade or above, and we did see an improvement from 40% to 55%, although the biggest jump was actually within the Consultant band:

Grade of 1st Dr	Pre	Post
Consultant	92	207
ST 3+	123	159
Associate Specialist	10	8
ST year unknown	114	143
FY / ST 1-2	189	113
Other	36	30
Not recorded	8	11
Grand Total	572	671

The next 3 areas for improvement are charted below, and all show improvement post the Tool launch:



With the baseline established, further work was undertaken to try and compare against the *actual* number of silver trauma alerts between Jan and Jun 2018, to see if there had been any overall improvements in the above figures. By extracting TARN data for this period, we knew the rough estimate of how many silver trauma alerts *should* have been raised, but disappointingly, only around a quarter of positive alert cases were being discussed with the RTD, and if we factor in the cases that were TARN-ve, it will be even less, circa 15%

We can now prove that when the Silver Safety Net is used properly by ambulance personnel and Emergency Department staff that improvements are in-deed made, but we need to continue to make headway to ensure that vulnerable patients are identified and opportunities for timely care and investigation are not missed in the future.

### 1.5.2 Data Collection

Data will be captured by the Ambulance Trust and on a monthly basis will be shared with the Midlands Major Trauma Network who will analyse the findings and generate a report providing details similar to that shown above.

The report will be shared with all Pre-hospital personnel and with Emergency Department staff but can be used by each Network as they deem appropriate.

### **1.5.3 Promotion and Feedback**

The Network and Ambulance Trust aims to circulate regular promotional information and feedback reports including updates via internal communications systems as well as using social media platforms e.g. twitter to keep staff aware of quality improvements, amendments to the tool and process and progress reports.

### **1.5.4 Reporting Issues/Incidents**

Issues and Incidents will be reported using internally recognised systems at ambulance and network level. It is important for staff to feel supported to inform of any incidents as this will be a way of ensuring improvements are made. Silver Trauma related incidents will be logged by the ambulance service who then inform the network and together will investigate them in a timely manner.

### **1.5.5 Training**

Silver Safety Net Training will become part of the Ambulance Service curriculum and be supported by the Midlands Silver Trauma Group. Training and education will also be provided to our Emergency Departments.

## **1.6 ABBREVIATIONS**

SOP: Standard Operating Procedure

TARN: Trauma Audit Research Network

MTC: Major Trauma Centre

TU: Trauma Unit

WMAS: West Midlands Ambulance Service

EMAS: East Midlands Ambulance Service

RTD: Regional Trauma Desk

EOC: Emergency Operations Centre

## 1.7 REFERENCES

1. Trauma Audit Research Network Report, Major Trauma in Older People; 2017
2. Midlands Silver Trauma Group. The Silver Safety Net – A Proposal for a Regional Trauma Desk Response to Triage Older People with Injuries. Raven D, Hall R, Chamberlain H, Roberts S, Littleson S, Graham S