SAFETY LEARNING SYSTEM INCIDENT REVIEW

AMBULANCE DELAYS

July 2020 to November 2020

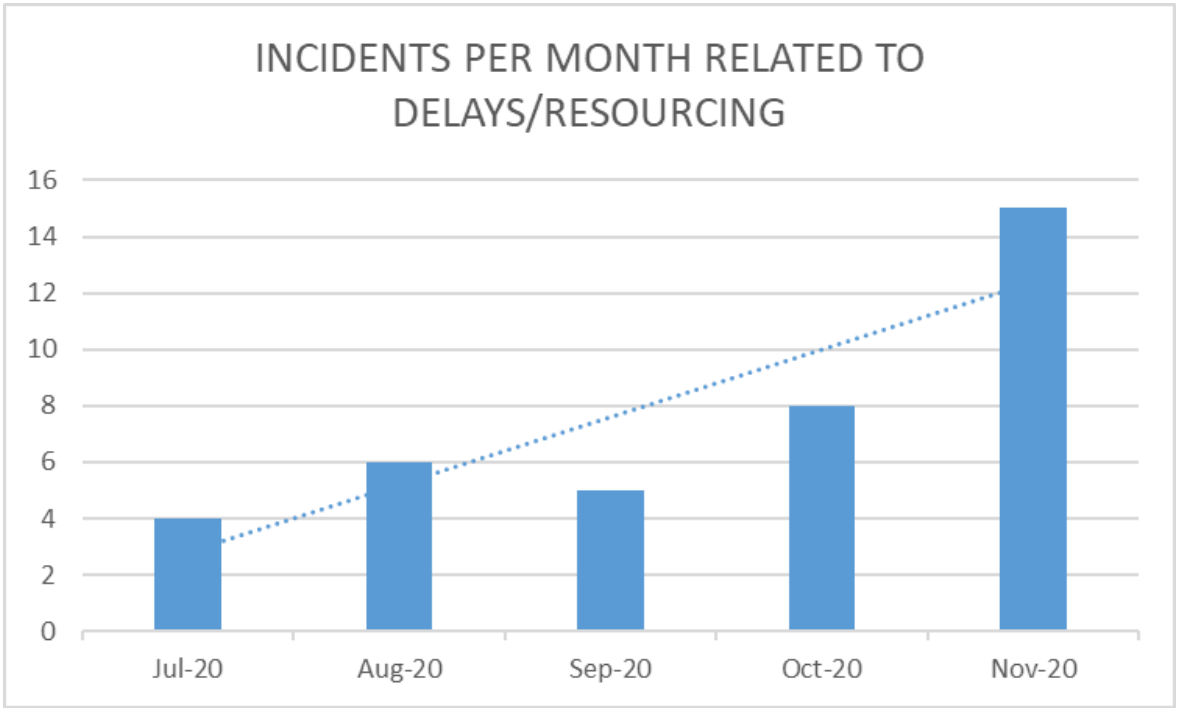
Introduction

SA Ambulance Service (SAAS), Patient Safety & Quality (PS&Q) through the Safety Learning System (SLS) Incident and Consumer reporting modules, have identified an increasing number of cases which relate to delays in ambulance response. The cases identified are predominately Priority 3 and Priority 5 cases. In addition to delays in responding the primary ambulance resource, there have also been a number of cases where ambulance carrying capacity for emergency cases has been delayed, causing a significant delay to definitive treatment for the patients.

A Priority 3 case is still considered an 'Emergency' based on the International Model of Priority Ambulance Dispatch SAAS use, however "light and/or sirens" are not required. It does however, indicate a response should be within 30 minutes as it is still deemed an 'Emergency Ambulance Call', although this is not a formal KPI. Priority 5 cases have been internally targeted as 60 minutes as whilst lower acuity, they have a number of clinical determinants that require an ambulance attend in a suitable timeframe.

From July 2020 through November 2020, SAAS PS&Q have identified 38 cases where a delayed response has or had the potential of an Adverse Event. 10 cases were presented to the SAAS Safety Learning System Quality Assurance Group (SLSQAG), with 1 case also being presented to SAAS Adverse Events Committee (AEC) for review.

Since July 2020 a greater focus has been placed on identifying such delays or limitations to resource availability, with a concerning trend emerging, with an increase in incident reports.



Since commencing this review in early November, we continue to see a growth in the number of cases lodged into the SLS relating to delayed ambulance response. Since running the report as at 6 November 2020, 9 additional cases have been entered into the SLS in relation to delays or resourcing concerns. This report has been updated to include these cases.

Review

The 38 cases have been reviewed to identify common themes and possible contributing factors in relation to delays or ambulance response.

Scope

- To review and formulate an understanding of the severity and the contributing factors of the cases.
- To provide information and recommendations for system improvement to mitigate risk to patient safety

Data

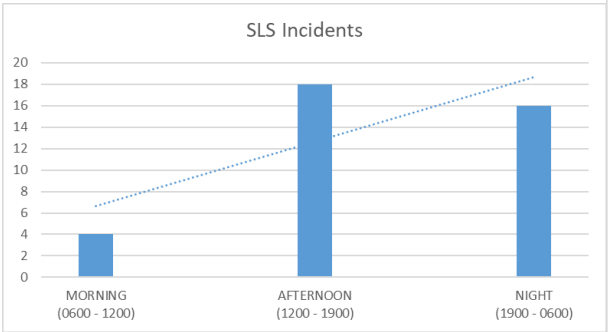
Information for this review has been collated using the following sources;

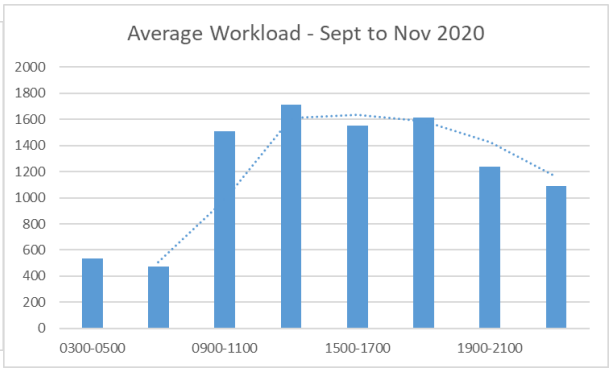
- SLS Incident Record
- Patient Care Record
- State Duty Manager Shift Logs
- Emergency Medical Dispatcher (EMD) Team Leader Shift Logs
- Emergency Medical Dispatch Support Officer (EMSDO) Team Leader Shift Logs
- SACAD Chronologies

Further information has been provided by the SAAS Business Intelligence Unit (BIU).

Analysis

Time of Day

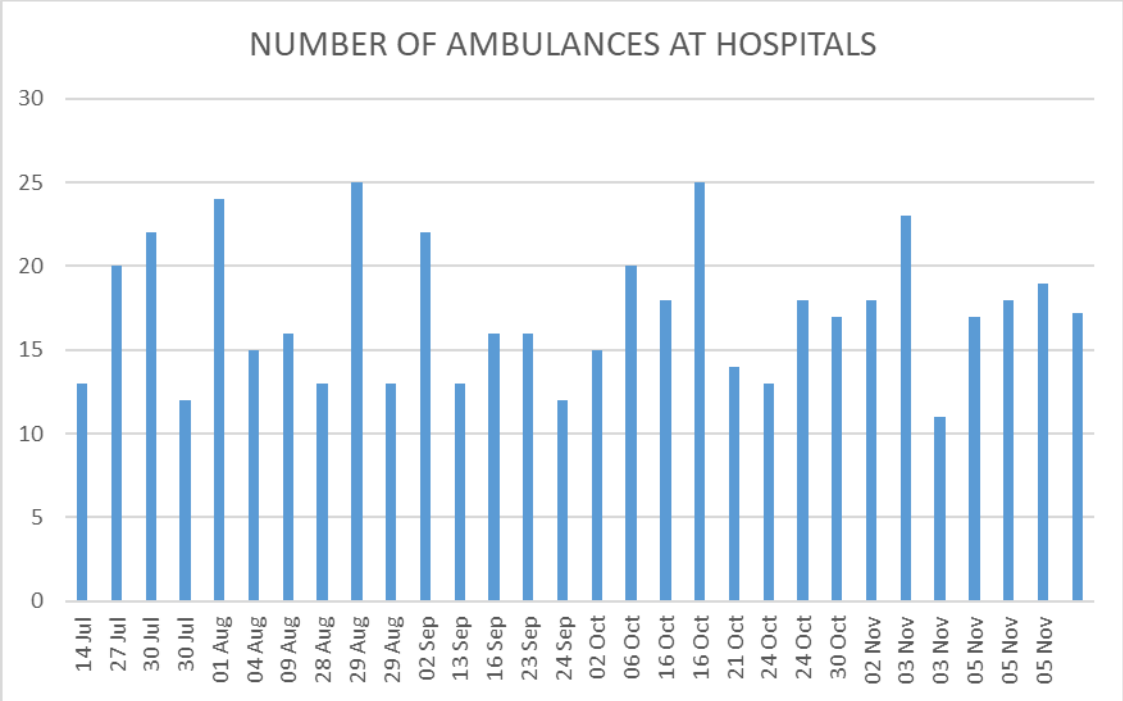




Analysis

An increasing number of cases relate to afternoon or night shifts in and around peak workload times consistent with current workload data.

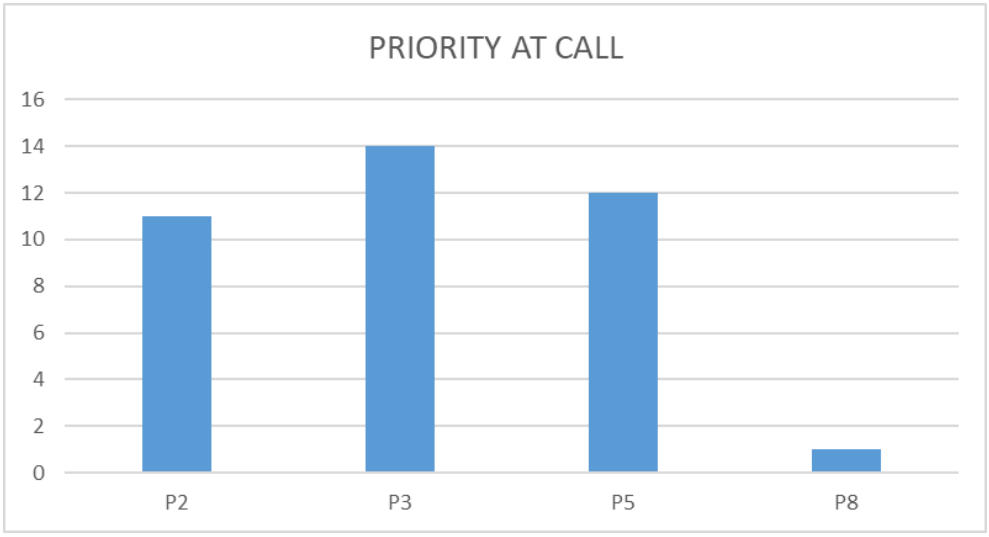
Hospital Capacity and Transfer of Care Delays

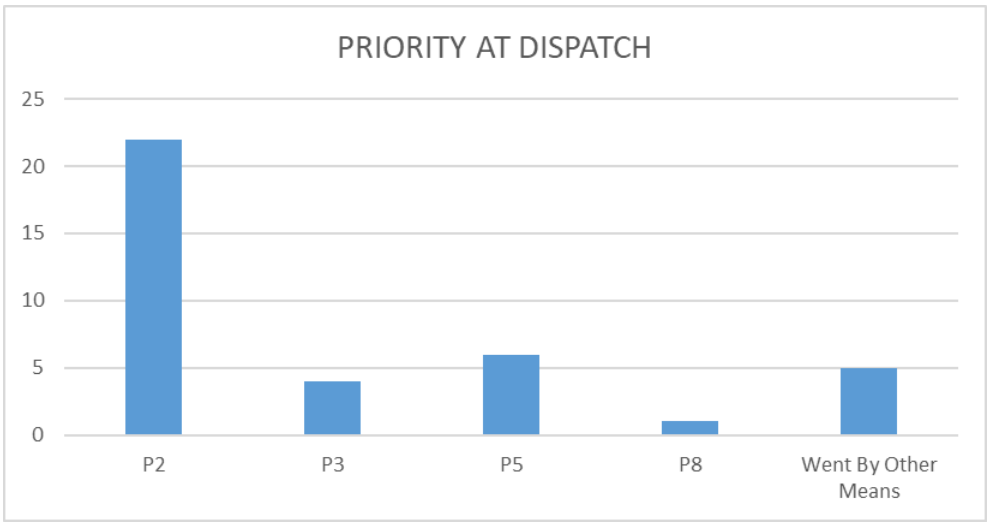


Analysis

This chart of analysis is of the original 29 cases and does not include the cases identified post 6 November 2020. The predominant status of FMC, RAH and LMHS ED's were White or Red during these cases (QEH more evenly spread). During this time, the number of ambulances waiting for transfer of care at destination was on average 17, with the lowest number 11 and the highest 25 on multiple occasions.

MPDS Priority Determinant





Analysis

Of the cases identified as having been upgraded, due to either clinical concerns/deteriorating patient or timeframe, 50% were upgraded by the EMD, with the other 50% by the Emergency Operations Centre (EOC) Clinician. This appears to be a reflection of the dispatcher (non-clinician) having to re-triage responses due to insufficient resources.

Case Analysis

The 38 cases were subsequently reviewed and categorised into severity.

The following was determined;

- Poor Patient outcome (including death) or significant risk to patient - **10 cases**
- Potential High Risk to patient – **12 cases**
- Potential risk to patient – **16 cases**

A further analysis of 8 of the cases determined to have a poor outcome (including death) or significant risk to the patient was conducted. A summary of cases of concern follows.

CASE 1

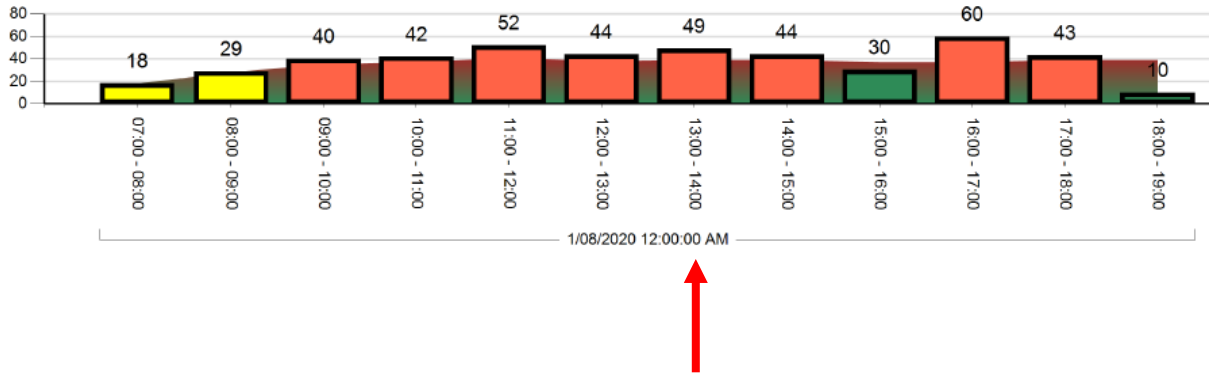
MPDS – 31A01 (Unconscious / Fainting (near))

Caller indicated patient PALE and LIGHTHEADED

Priority 3

Ambulance cancelled by caller at 1534 (125 minutes post initial 000 call), transported in private car. Patient triaged at QEH at 1549

Incidents



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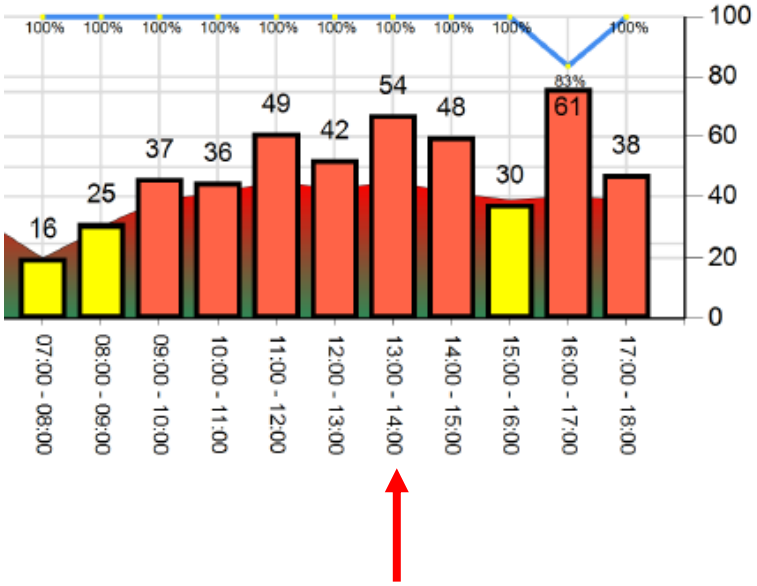


Patient Outcome

Diagnosed with Oesophageal Varices and acute Post Haemorrhagic Anaemia

In-patient 10 days

Case 2

MPDS – 10C01 (CHEST PAIN)

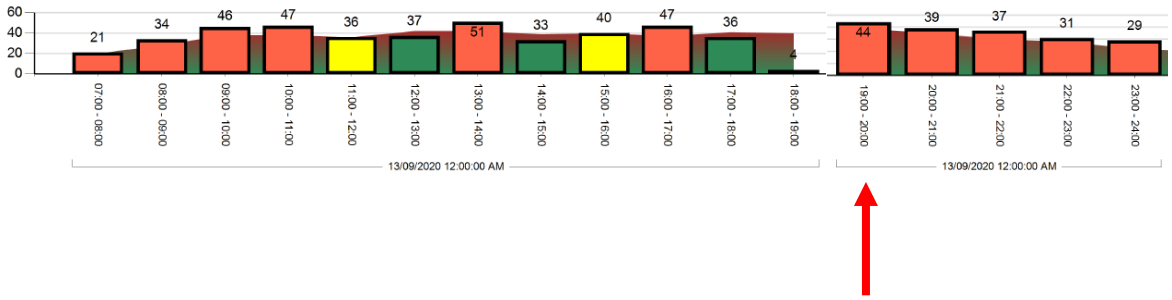
Priority 2

SPRINT on scene 14 minutes post 000 call received

Confirmed STEMI

Stretcher capacity ambulance on scene at 2014 (48 minutes post call received)

Incidents



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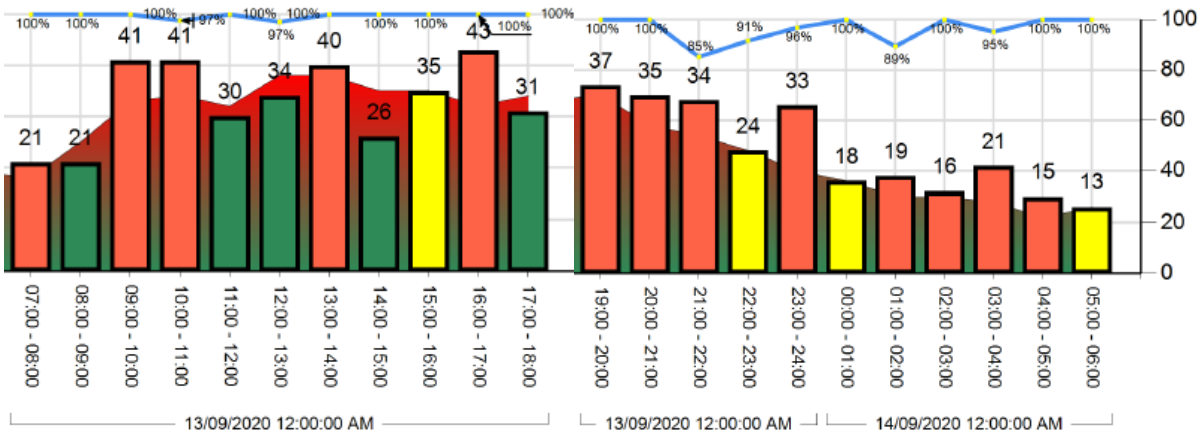


Patient Outcome

Percutaneous Coronary Intervention (Occluded Proximal Right Coronary Artery)

Admitted for 3 days post procedure

CASE 3

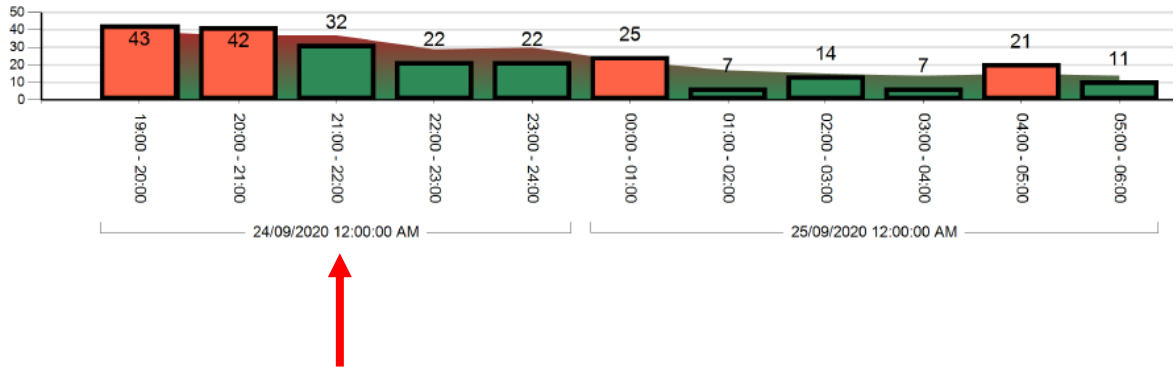
MPDS – 01C03 (Abdominal Pain / Problems - Fainting or near fainting)

Priority 3

Crew dispatched 37 minutes after call received, arriving on scene 59 minutes post call received.

Patient - Hypotensive, Hypothermic, Tachycardic, Abdominal Pain

Incidents



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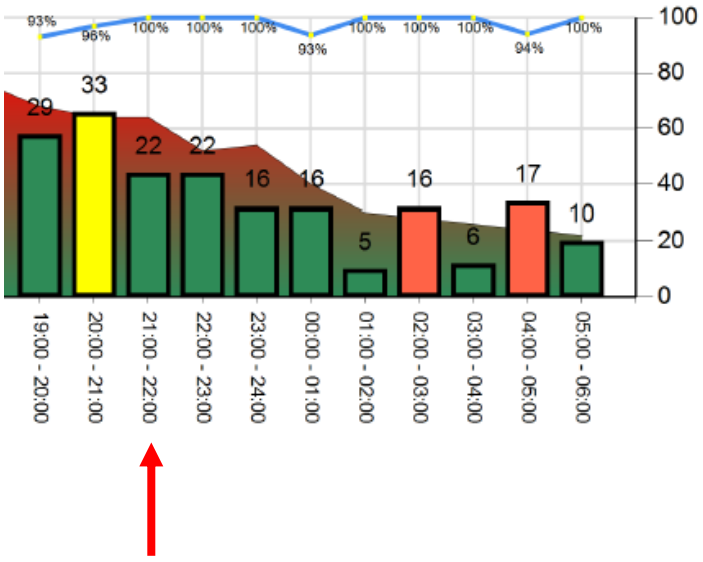


Patient Outcome

Treated on scene and transported to LHMS priority 2 (lights and sirens)

Patient passed away 60 minutes after arrival in ED

CASE 4

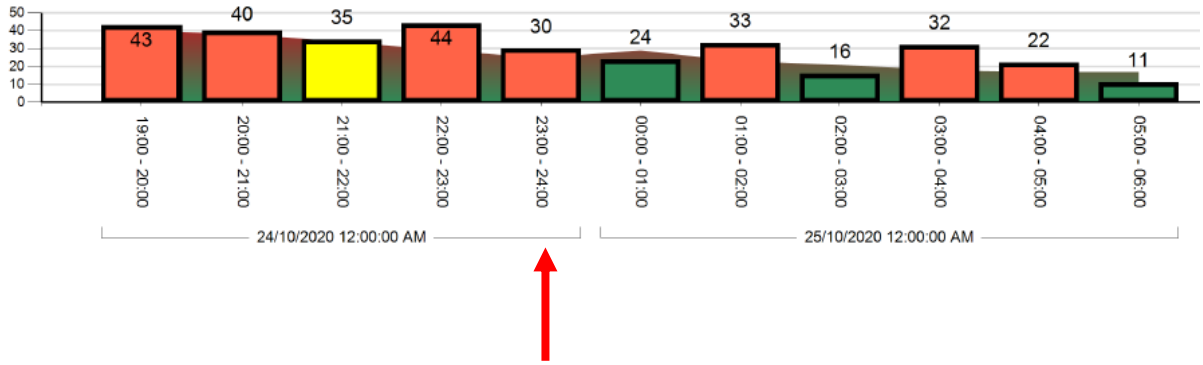
MPDS – 17A02 (FALL - CTA-D2 NOT DANGEROUS BODY AREA)

Priority 3

Emergency Crew arrived on scene 7 hours after call received

Treatment for a fractured neck of femur

Incidents



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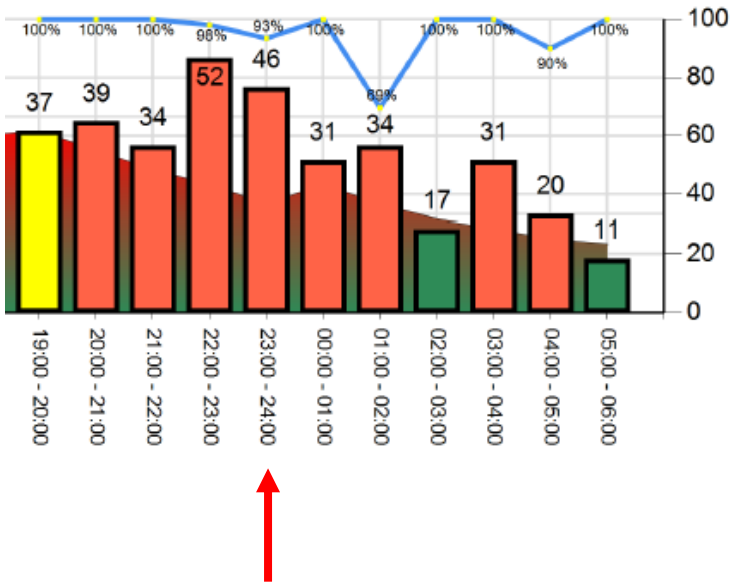


Patient Outcome

Hospital admission for 5 days post-surgical repair of fractured neck of femur

CASE 5

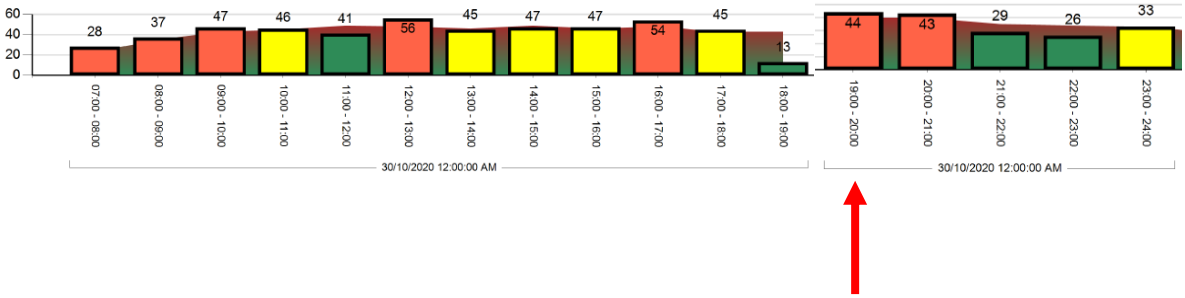
MPDS – 17B02G (SERIOUS Haemorrhage)

Priority 3

1729 Call received, Upgraded to P2 (1821) due to call back and application on scene of arterial tourniquet to control haemorrhage.

Crew arrived scene 1840 (101 minutes post call received)

Incidents



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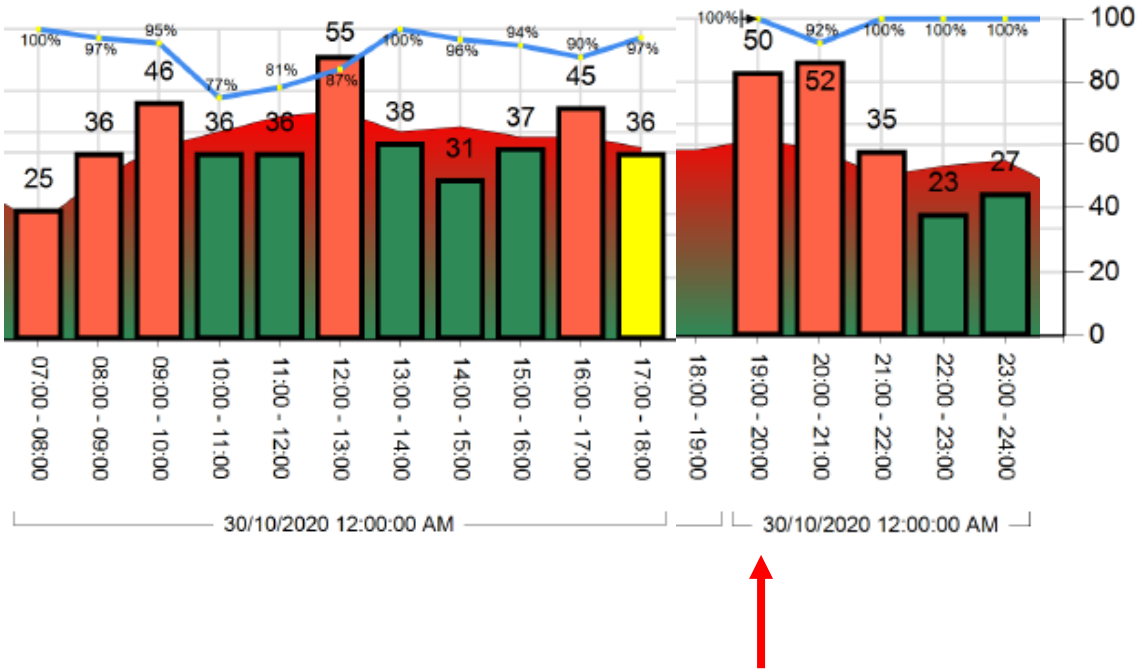


Patient Outcome

100% laceration to Ulnar Artery and Ulnar Nerve, plus other injuries to limb requiring surgery

Patient admitted for 4 days

CASE 6

MPDS – 31A01 (Fainting Episode)

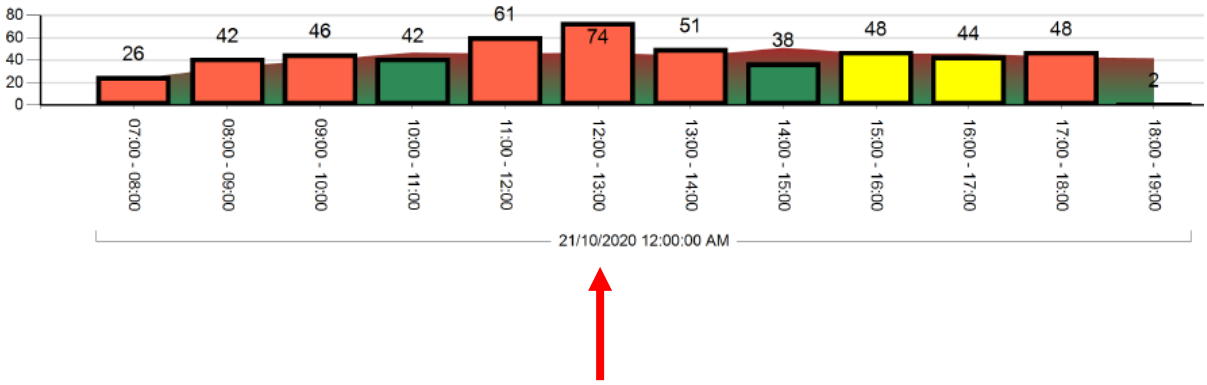
Priority 3

Case cancelled by caller – No SAAS resource available

Call received at 1223, call back at 1248 (25 minutes post 000 call received) requesting ETA for Ambulance, advised by SAAS EMDSO - no ETA.

Caller cancelled Ambulance and self-presented to Emergency Department for treatment.

Incidents



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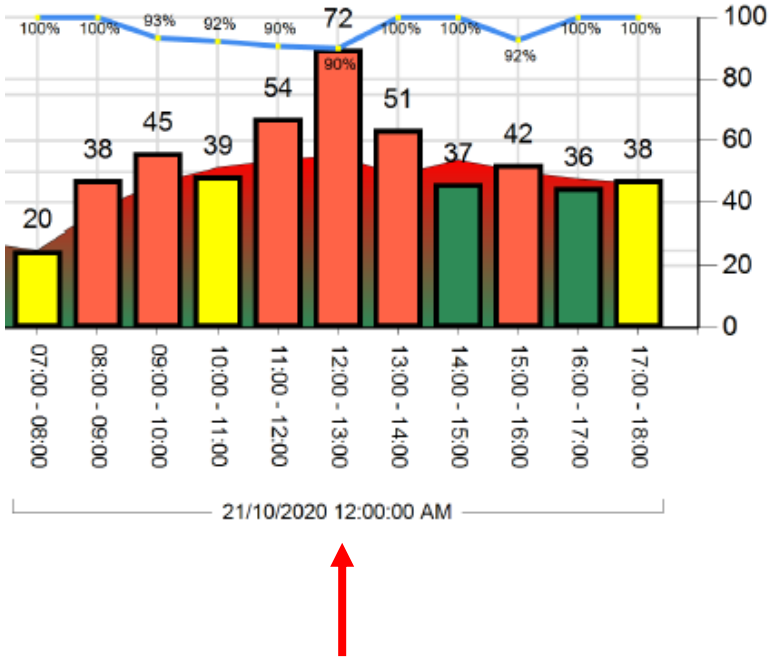


Patient Outcome

Cerebral Vascular Accident (CVA) – No ongoing deficits

CASE 7

MPDS – 17A02P (FALLS - Public Assistance (No Injuries + No priority symptoms) - Public place)

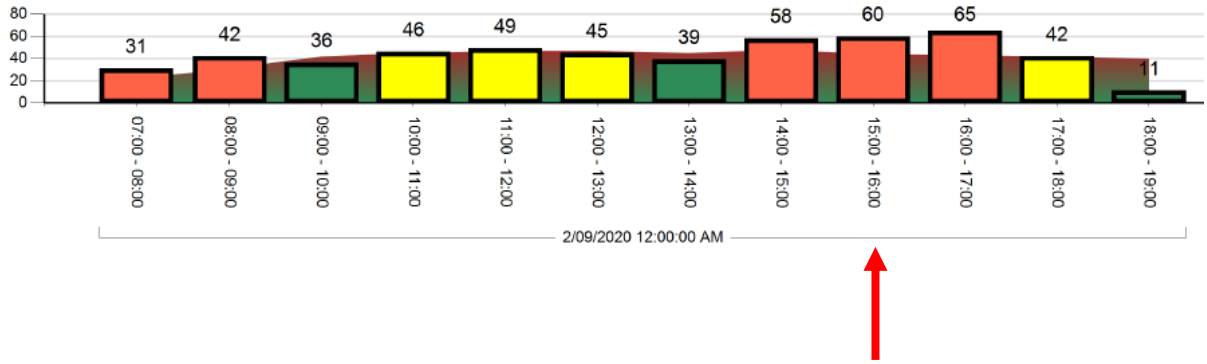
Priority 5

ESS (Ambulance Officer) Crew arrived on scene 70 minutes post call received

ESS Crew requested paramedic back up – Nil available, Nil responded

ESS transported – arrived at destination 139 minutes after call

Incidents



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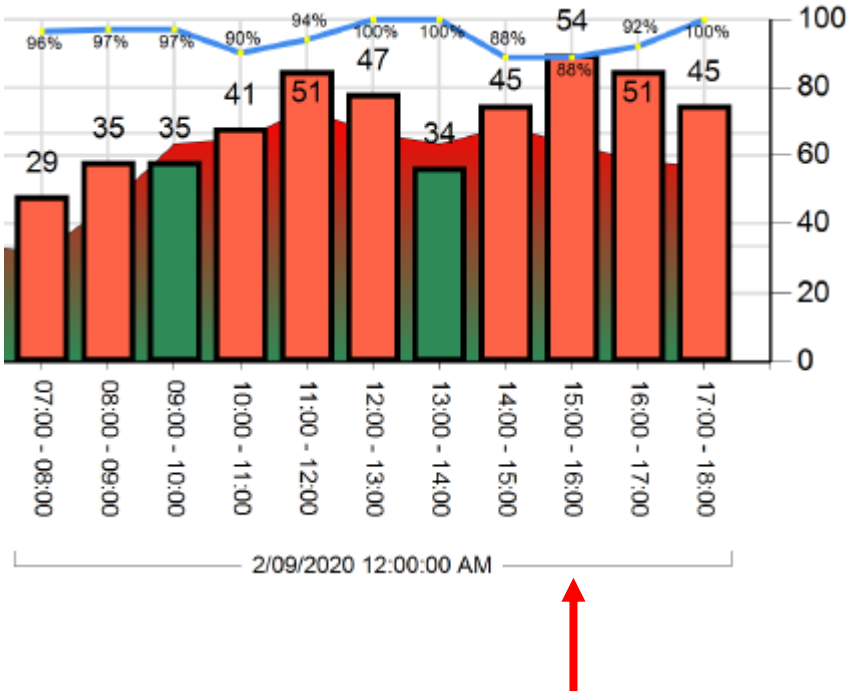


Patient Outcome

Pontine Haemorrhage (Brain Injury, Increased Intracranial Pressure (ICP) non trauma related)

Hospital Admission – 42 days

CASE 8

MPDS – 31C01

Priority 2

1406 Call received

SPRINT (Single responder) dispatched at 1414, call back by caller stated ‘LIPS PURPLE’, SPRINT arrived scene at 1424, 18 Minutes post call received.

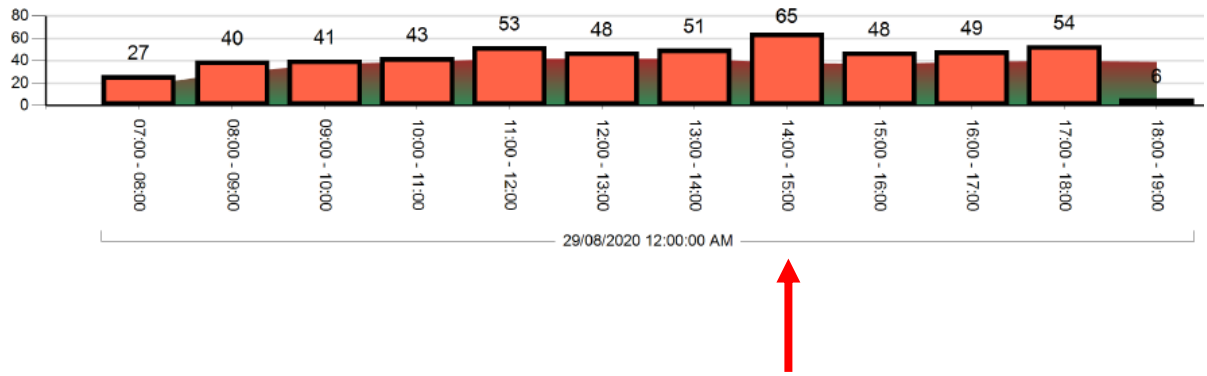
Patient in Cardiac Arrest on arrival.

1423 Case upgraded to Priority 1

1429 Additional resources dispatched (1433 Arrived Scene)

Single operator CPR for 9 minutes prior to second crew arrival

Incidents



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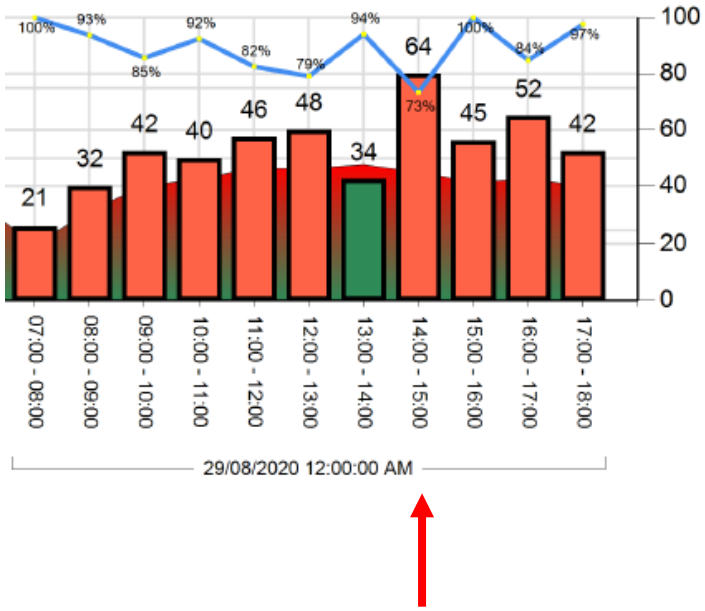

Patient Outcome

Resuscitation attempted

Patient ‘Declared Life Extinct’ on scene by SAAS

ADDITIONAL CASES REVIEWED

Inter-hospital transfer (NHS to WCH)

Priority 5

8 year old with Occipital fracture

1749 Call received

2140 Crew dispatched (On Scene 2142) – 3 hour 53 Minutes post call received

Patient Outcome

In-patient 2 days, neurosurgery review

Inter-hospital Transfer (Requested within the hour)

Priority 5

2057 Call received – patient accepted at FMC by Vascular

2310 Event upgraded from Priority 5 to Priority 2 (Blood pressure dropped, query septic)

2334 Crew dispatched (24 minutes after upgrade),

Arrived on scene at 2355 (2 hours 58 minutes post initial call received, 45 minutes post upgrade)

Patient Outcome

Cellulitis/Venous Ulcers,

In-patient 19 days

MPDS – 17B01 – 4 year old male, FALL, pain to left thigh

Priority 2 (upgrade due to age)

1225 Call received

1227 SPRINT (single responder) dispatched arriving on scene 1230

1339 Patient carrying ambulance dispatched

1349 Ambulance arrived scene – 1 hour 24 minutes post call received

Patient Outcome

Fractured femur

In-patient 11 days

MPDS – 06C01E – Patient struggling for air

Priority 2

2102 Call received

2142 Crew dispatched

2152 Crew arrived on scene (50 minutes after initial 000 call)

Patient Outcome

Assessed in ED, discharge diagnosis Pneumonia (Discharged at 0929 following day)

MPDS – 28C04L (No movement in left arm) Query CVA

Priority 2

0022 Call received

Initial crew dispatched 0025 (diverted for alternative Priority 2)

0044 Crew dispatched, arriving on scene at 0103 (41 minutes post call received)

Patient Outcome

In-patient 2 days

Left Radial Mono neuropathy (motor dominant most likely due to neuropraxia)

MPDS – 25B03V – Threatening Suicide

Priority 4

15 year old female threatening to strangle herself – has clothing around her neck

Call received 1924 (9 November 2020)

Multiple call backs, multiple upgrades (P4-P3, then P3 to P2 at 0749 on 10 November 2020)

EOC Clinician review notes - patient had bra around neck tied to door handle threatening suicide, patient was out of control last night, having trouble MH CAMS who is not taking the situation seriously. Patient is in her bedroom, parents very exhausted. Parents waited all night for someone to come and assess pt. parents not feeling safe

Initial crew dispatched at 0116 – Diverted

0640 crew dispatched – Diverted

0751 crew dispatched

0811 crew arrived scene (12 hours 47 minutes post call received)

ESO – Request from SAPOL for female patient post assault

Priority 3

22 year old female punched to the stomach, 4 weeks pregnant

1436 Call received

1510 SAPOL cancelled SAAS – Patrol going Priority 1 with female to RAH

No SAAS resource dispatched to event

Patient Outcome

Unknown – patient name not able to be identified

MPDS – 01A03 Query Prolapsed Bowel and Abdominal Pain, 19 year old female

Priority 3

2107 Call received

Call Back 2209 – ETA 2330

2240 EOC Clinician review – Upgraded Priority 2

2243 Crew dispatched

2258 Crew arrived on scene (1 hour 51 minutes post call received)

Patient Outcome

Patient treated for prolapsed rectum, discharged following day.

For outpatient review due to atypical presentation due to age.

Inter-hospital Transfer (Requested within the hour)

Priority 5

1700 (16/10) Call received for Appendicitis vs Ovarian Accident

0054 (17/10) (7 hours 54 minutes post call received) NHS cancelled ambulance as patient transferred to FMC via taxi due to delays with SAAS transport.

Patient Outcome

Patient seen in FMC (Triage Category 2). Discharged to home post assessment

(Unspecified Abdominal Pain)

Causation Statement

Requests for SAAS exceed the available ambulance resources that are able to be responded to provide emergency clinical care.

Summary

The review highlights that the Ambulance Services' capacity to provide an adequate response to a specific cohort of patients is suboptimal at times. These patients based on an international triage and dispatch system, require a level of response that is still deemed to be an emergency, or require timely transport to the most appropriate Emergency Department. Due to an increase in demand for SAAS's services and a lack of response capacity at those times, a delay occurs, putting at risk this cohort of patients.

Based on resource availability concerns, it would appear, the EMD and EOC Clinician are often overwhelmed and unable to complete required tasks such as call backs or continue to monitor cases. EMD's are also seemingly being required to make clinical decisions regarding which case will receive a response over other cases. This means many decisions are based on locality or entitlements and not on clinical need.

Of the cases that were more comprehensively reviewed, 30% relate to determinant descriptor 17 (Falls) and 40% related to determinant descriptor 31 (Unconscious / Fainting (Near)). When comparing this to the other cases of this cluster, there was an additional case identified as determinant descriptor 17, however an additional 4 cases of determinant descriptor 31 were identified.

10 different determinant descriptors aside from 17 and 31 were identified with the next most frequent being 10 (Chest Pain / Chest Discomfort (Non-Traumatic)) and calls from HCP (Health Care Professional), both with 3 cases respectively. The other determinant descriptors were, 01 (Abdominal Pain / Problems), 05 (Back Pain (Non-Traumatic or Non-Recent Trauma)), 06 (Breathing Problems), ESO (Emergency Services Other), 25 (Psychiatric / Abnormal Behaviour / Suicide Attempt), 26 (Sick Person (Specific Diagnosis)), 28 (Stroke (CVA) / Transient Ischaemic Attack (TIA)).

Recommendations

Recommendation 1

Increase stretcher carrying ambulance capacity.

Recommendation 2

Support EMD decision making with a senior clinician when multiple cases require response with minimal resources being available.

Recommendation 3

Review Determinant 31 (Unconscious / Fainting (near)) for priority suitability and response.