Interim Bulletin

Recognising and responding to critically unwell patients

27 November 2017

This interim bulletin contains facts which have been determined up to the time of issue. It is published to inform the NHS and the public of the general circumstances of events and incidents and should be regarded as tentative and subject to alteration and correction if additional evidence becomes available.
Notification of Event and Decision to Investigate

The Healthcare Safety Investigation Branch (HSIB) was made aware of a patient who deteriorated and died within 24 hours of presenting at hospital. The patient had undergone abdominal surgery two weeks earlier. An initial investigation of this case found that there were difficulties in recognising and responding to the severity of the patient’s condition from the time she arrived in the Emergency Department and once she was admitted to the ward. Following the initial investigation, the Chief Investigator authorised a full investigation as it met the following criteria:

**Outcome Impact – What impact has a safety issue had, or is having, on people and services across the healthcare system?**

Determining the severity of a patient’s condition is fundamental to ensuring that optimal and timely treatment decisions are made.

**Systemic Risk - How widespread and how common a safety issue is this across the healthcare system?**

Evidence gathered from research suggested that difficulties in appreciating the severity of a patient’s condition are not isolated to this case and reflects not only a national, but international systemic issue.

**Learning Potential – What is the potential for an HSIB investigation to lead to positive changes and improvements to patient safety across the healthcare system?**

Understanding the contextual, organisational and human factors that are influential in determining the severity of a patient’s condition, may identify strategies and opportunities that facilitate improved clinical decision making.
**History of the Event**

A 58-year-old woman was brought to the Emergency Department (ED) by ambulance with severe abdominal pain 13 days after she had emergency surgery for a perforated duodenal ulcer.

During her stay in the ED, her physiological observations (temperature, blood pressure, pulse, respiration rate, oxygen saturation and levels of response) were recorded regularly. The patient’s initial observations showed a rapid heart rate and low blood pressure.

Whilst in the ED, the patient’s blood pressure decreased further. She received intravenous fluid and physiological observations continued to be monitored. The patient’s blood pressure showed some sign of improvement whilst in the ED but remained low. Following a review by the Surgical Registrar, the patient was admitted to a surgical ward and a Computerised Tomography (CT) scan was requested to help establish a diagnosis.

Approximately two and half hours after the patient was admitted to the surgical ward, she deteriorated substantially and the Critical Care Outreach Team was called. She was assessed by the outreach team and other senior medical staff before being transferred to the Intensive Care Unit (ICU). Despite treatment the patient continued to deteriorate and died a few hours later.

**National Context**

A significant number of patient safety incidents are reported each year relating to the clinical recognition and response to very unwell or deteriorating patients. There are various strategies in place to help reduce risk such as the National Early Warning Score (NEWS). Despite this, the problem persists suggesting that there are opportunities for further improvement.
Identified Safety Issues

During the HSIB’s initial review, the following safety issues were identified and will form the basis of the ongoing investigation:

- The difficulties in appreciating the severity and changes in a patient’s condition.
- The implementation and efficacy of current strategies.
- The contextual, organisational and human factors involved in determining the severity of a patient’s condition and the treatment decisions that follow.

Next steps

The HSIB investigation will continue to explore the identified safety issues and welcomes further information that may be relevant, regardless of source. The HSIB will report any significant developments as the investigation progresses.