HSIB

HEALTHCARE SAFETY INVESTIGATION BRANCH

WWW.HSIB.ORG.UK

Interim bulletin

Harm caused by delays in transferring patients to the right place of care

June 2022

Publication ref: NI-004133/IB

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.

HSIB

HEALTHCARE SAFETY INVESTIGATION BRANCH

Introduction

Delays in the handover of patient care from ambulance crews to emergency departments (EDs) are causing harm to patients. A patient's health may deteriorate while they are waiting to be seen by ED staff, or they may be harmed because they are not able to access timely and appropriate treatment.

This national investigation seeks to examine the systems that are in place to manage the flow of patients through and out of hospitals and considers the interactions between the health and social care systems (the 'whole system'). Issues relating to patient flow affect ambulance crews' ability to hand over patient care to ED staff. EDs are routinely at, or exceeding, their maximum capacity and this has an impact on their ability to provide safe care. The management of patient flow has further impacts across the healthcare system; these include delayed responses to 999 emergency calls and to NHS 111 calls that require an ambulance response, cancellation of elective (planned) surgery, and people staying in hospital longer than they need to.

The aim of this interim bulletin is to provide the investigation's initial findings. It seeks to highlight harm and existing and emerging risks across the healthcare system and to prompt early action from national bodies.

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

Reference event

To explore this issue, the investigation used a real patient safety incident (referred to as the reference event), which involved a patient who was found unconscious at home. The Patient was taken to hospital by emergency ambulance and then waited in the ambulance outside the ED for 3 hours and 20 minutes, under the care of the ambulance crew. The patient was assessed by medical staff in the back of the ambulance because the ED was full. The Patient was admitted directly to the intensive care unit where they remained for 9 days. The Patient was then transferred to a specialist centre for further treatment.

Focus of the investigation

This investigation is exploring:

- how delays in discharging patients from hospitals to social and community care settings impacts on the ability to move patients from an ambulance into an ED and on to the right place of care

- how patient safety is affected by healthcare and supporting staff seeing and hearing patient harm that has resulted from delays and patients not being discharged to the right place of care in a timely way.

HSIB

HEALTHCARE SAFETY INVESTIGATION BRANCH

Initial findings

The findings presented below have been identified from carrying out observational visits to ambulance services and to acute healthcare settings, speaking to national organisations, and engaging with senior operational staff across the NHS. As the investigation progresses and new evidence comes to light, the findings may be added to and refined.

The investigation engaged with a broad range of people regarding the patient safety impact:

- of patients remaining in hospital when that is no longer the most appropriate place of care for them, including the effect of this on patient flow through a hospital

- on patients and staff when ambulances queue outside EDs.

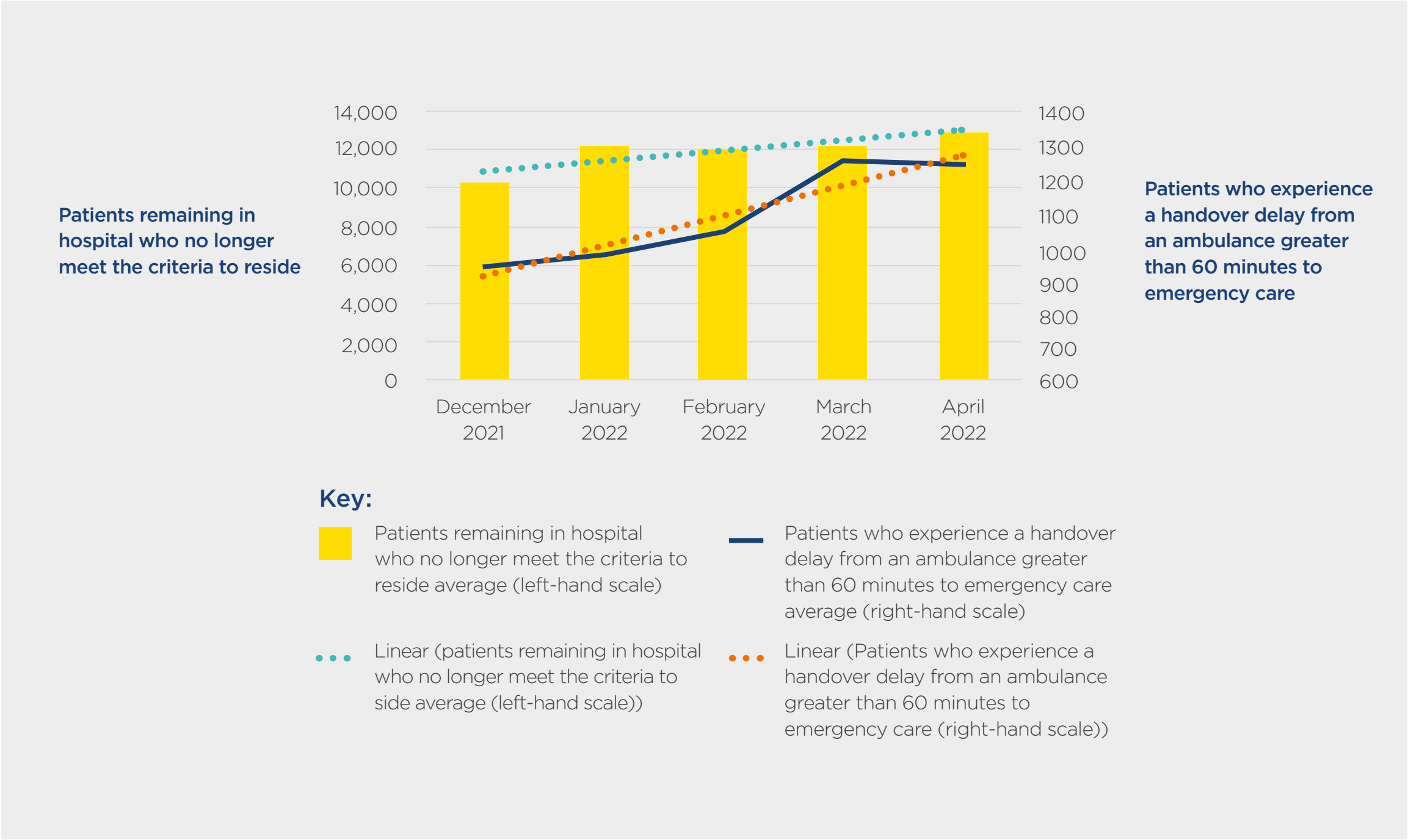
National data

- The investigation has spoken to the Department of Health and Social Care, hospital chief operating officers and national bodies representing ambulance services, emergency medicine and ambulance crews.

- The investigation found that demand on services, the availability of beds and patient flow through acute hospitals (including the discharge of patients to social and community care) have affected the ability of ambulances to hand over patients to emergency care. A study undertaken by the Nuffield Trust (2016) described many of the same themes identified by the initial stages of this investigation.

- Data from NHS England (NHS, 2022) demonstrates that the number of inpatients who no longer meet the criteria to stay in hospital is steadily increasing, along with a corresponding increase in ambulance handover waits of more than 30 minutes (see figure 1).

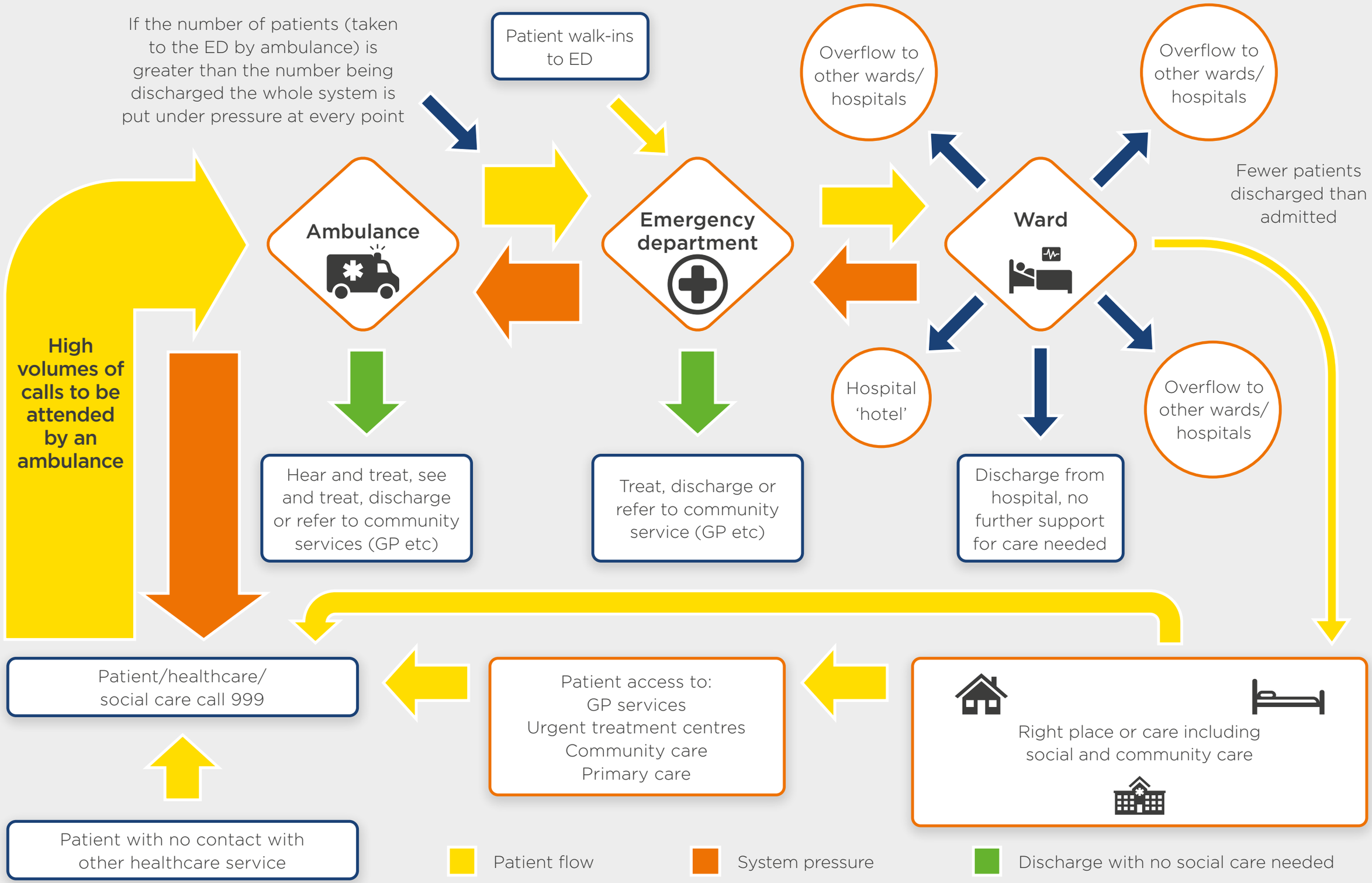
Figure 1 Analysis of NHS England Urgent and Emergency Care data



HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

- Hospitals experience pressure due to the number of patients already in hospital beds and people coming into hospital who require emergency admission (Care Quality Commission, 2018). This creates additional challenges when people who are already in hospital, and who are medically well enough to be discharged to a different place of care, experience delays in getting into community and social care. This builds pressure through the entire local healthcare system which is felt and seen by the ED and the ambulance services. The investigation analysed these patient flow challenges, which are shown in figure 2.

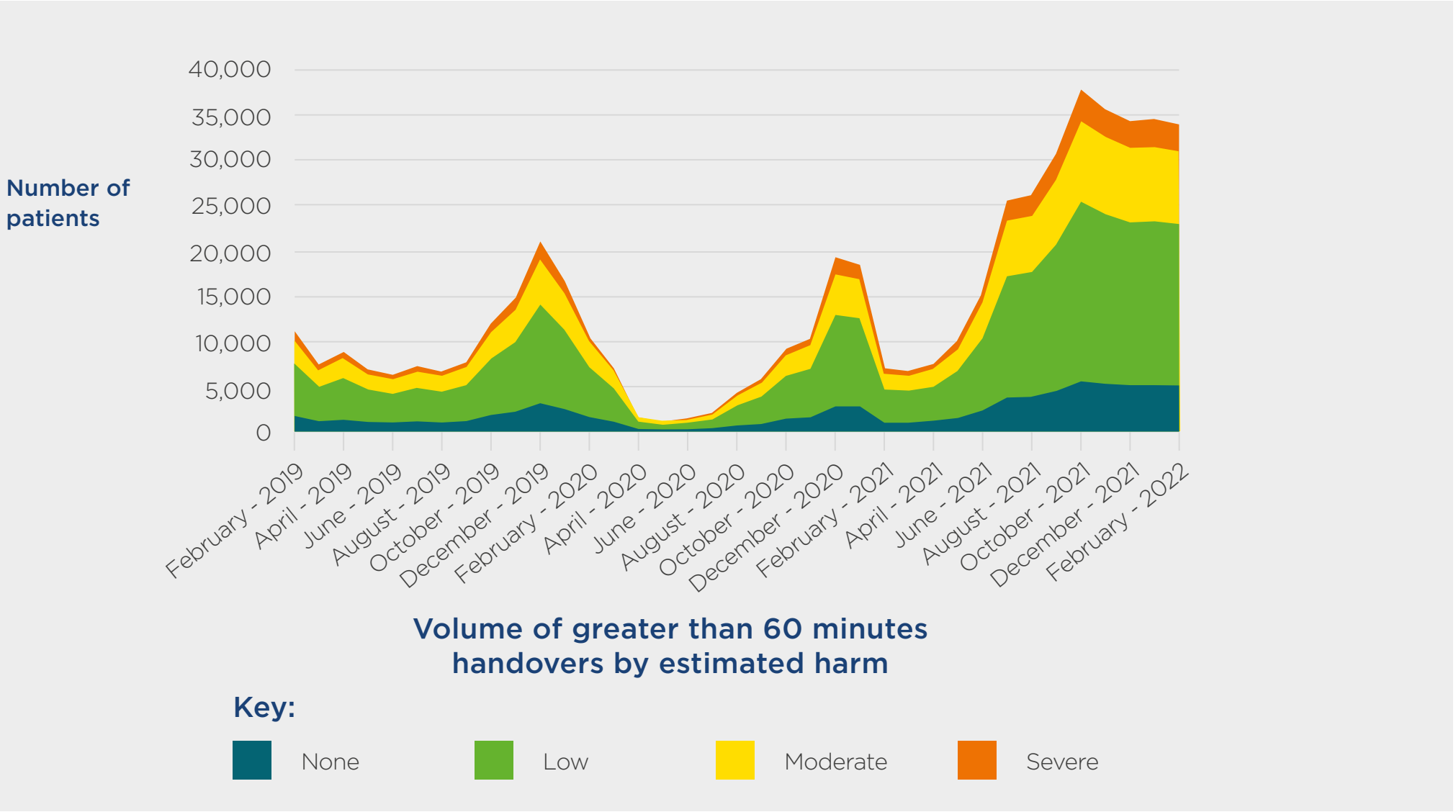
Figure 2 HSIB initial analysis of patient flow from 999 call through the healthcare system to social and community care



7

- The ambulance sector has gathered much data relating to harm to patients, as shown in figure 3 (Association of Ambulance Chief Executives, 2022).

Figure 3 Representation of volume of patients by potential harm: time series (Association of Ambulance Chief Executives, 2022)



HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

- The harm as reported by the Association of Ambulance Chief Executives (Association of Ambulance Chief Executives, 2021) and the harm occurring in hospital settings includes:
  - delayed responses by ambulances which, while frustrating for some callers, sadly has resulted in deaths for others
  - continued extended waits for people in ambulances at EDs resulting in harm (ranging from patients' health deteriorating through to the development of new clinical symptoms, for example pressure sores)
  - people having their elective surgery cancelled as there are no beds to admit them to
  - people who remain in hospital when they no longer need to may develop hospital acquired infections or becoming institutionalised due to unnecessary extended stays in hospital.
- The AACE told the investigation that there is a strong correlation between ambulance handover delays and increasing ambulance response times (**see figures 4 and 5** (Association of Ambulance Chief Executives, 2022)).

Figure 4 Mean Category 1 (C1) response time and volume of handover delays of greater than 60 minutes

Key:

Mean C1 Response Time (mm:ss)

Volume of handovers greater than 60 minutes

Category 1: For calls to people with immediately life-threatening and timecritical injuries and illnesses. These will be responded to in a mean average time of 7 minutes, with at least 90% of calls receiving a response within 15 minutes.

Figure 5 Mean Category 2 (C2) response time and volume of handover delays of greater than 60 minutes

Key:

Mean C2 Response Time (mm:ss)

Volume of handovers greater than 60 minutes

Category 2: For emergency calls, such as cases of stroke or chest pain, which may require rapid assessment and/or urgent transport. These will be responded to in a mean average time of 18 minutes, with at least 90% of calls receiving a response within 40 minutes.

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

The investigation's emerging findings

- All of the organisations the investigation has spoken with to date have been able to demonstrate how they are trying to tackle the patient safety issues relating to the handover of patients to emergency care. For example, the ambulance sector has worked on taking only those patients who need emergency care to an ED, and hospitals have tried to increase beds and capacity in EDs to cope with growing demand.

- These organisations are only able to influence the part of the healthcare system that they have direct control over, and therefore can only make small efficiencies and changes. The overall effectiveness and impact of these changes on patient flow and, in turn, patient safety, is limited.

- Acute hospitals and ambulance trusts have limited influence over how social and community care is organised. They are unable to resolve the challenges relating to the discharge of patients to the right place of care.

- The investigation found that health and social care staff did not have a shared understanding or description of the 'whole system' (Institute for Systemic Leadership, 2018); however, in discussion with stakeholders the investigation understood that the 'whole system' included healthcare and social care.

- Several trusts have told the investigation that their local community partners have stated that COVID-19 rules pose significant challenges. For example, a social care setting may not be

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

in a position to accept a patient from hospital who has recently been in contact with another patient who has, or is suspected of having, COVID-19. In addition, national organisations told the investigation that social care had challenges with staff recruitment and retention.

- A wider appreciation of patient flow through the entire health and social care system (a 'whole system' approach) may have a greater impact on the visible pressures on ambulance handovers and within EDs.

- The UK's national response to the COVID-19 pandemic was rapid and involved health and social care systems working in a collaborative way. The investigation heard from health system flow experts that a nationally led strategic and structured approach may be beneficial to improve patient safety issues and reduce the daily harm relating to the flow of patients through and out of hospitals to the right place of care.

- The impact on staff of delays in patient handover to emergency care and the wider patient flow issues in the healthcare system is not currently being formally explored or captured. However, healthcare organisations expect it will have a significant impact on staff's resilience and their ability to maintain continuity of service. The investigation plans to arrange focus groups to discuss the potential impact on staff. The staff groups identified to take part in focus groups range from 999 call handlers to hospital chief operating officers.

- Working at or beyond personal capacity, and long-term exposure to a very challenging work environment, may affect the ability of healthcare

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

staff to make safe decisions. The investigation has been told of the psychological trauma (either from a single event and/or a combination of many events) being caused to staff who witness harm caused to patients and their families. This has wider implications on decision making at an individual level, how staff make decisions as a team, and their ability to perceive what is happening and what actions are needed.

- The investigation acknowledges that a number of organisations and departments are currently carrying out reviews on patient flow. HSIB's initial observations and findings identify that patient harm could be mitigated by ensuring patients are in the most appropriate place of care, for appropriate treatment, by the appropriate health and social care professionals. This requires effective patient flow throughout the health and social/community care system.

Next steps

- There are several areas that the investigation believes would benefit from immediate focus. These include:

  - hospital discharge processes (planning and execution)

  - interconnectivity and a 'whole system' approach across health and social care

  - demand, capacity and flow modelling across the health and social care system to understand where best to focus resource to achieve greatest impact.

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

Safety recommendations

The investigation acknowledges that there is already significant work taking place in the area of improving patient flow through hospitals and reducing ambulance handover delays. However, the investigation understands that this work is predominantly focused on efficiency and delivery of services rather than a specific focus on improving patient safety.

The investigation's first safety recommendation is made to support an urgent 'whole system' response to reduce patient harm; the second is aimed at generating longer-term benefits by gaining a better understanding of the 'whole system' interaction.

HSIB makes the following safety recommendations

Safety recommendation R/2022/196:
HSIB recommends that the Department of Health and Social Care leads an immediate strategic national response to address patient safety issues across health and social care arising from flow through and out of hospitals to the right place of care.

Safety recommendation R/2022/197:
HSIB recommends that the Department of Health and Social Care conduct an integrated review of the health and social care system to identify risks to patient safety spanning the system arising from challenges in constraints, demand, capacity and flow of patients in and out of hospital and implement any changes as necessary.

HSIB

HEALTHCARE SAFETY INVESTIGATION BRANCH

References

Association of Ambulance Chief Executives. (2021) Delayed hospital handovers: impact assessment of patient harm [Online]. Available at **https://aace.org.uk/wp-content/uploads/2021/11/AACE-Delayed-hospital-handovers-Impact-assessment-of-patient-harm-FINAL-Nov-2021.pdf** (Accessed 14 April 2022).

Association of Ambulance Chief Executives. (2022) National ambulance handover delays – data period to end of February 2022 [Online]. Available at **https://aace.org.uk/wp-content/uploads/2022/03/National-Ambulance-Handover-Delays-February-2022-FINAL.pdf** (Accessed 14 April 2022).

Care Quality Commission. (2018) Under pressure: safely managing increased demand in emergency departments [Online]. Available at **https://www.cqc.org.uk/publications/themed-work/under-pressure-safely-managing-increased-demand-emergency-departments?msclkid=434075ffcf7e11ec80f9c793473b310a** (Accessed 9 May 2022).

Institute for Systemic Leadership. (2018) Principles of systems thinking as applied to management and leadership [Online]. Available at **https://www.systemicleadershipinstitute.org/basic-principles-of-systems-thinking-as-applied-to-management-and-leadership/** (Accessed 14 April 2022).

NHS. (2022) Urgent and emergency care daily situation reports 2021-22 [Online]. Available at **https://www.england.nhs.uk/statistics/statistical-work-areas/uec-sitrep/urgent-and-emergency-care-daily-situation-reports-2021-22/?msclkid=31010936b69a11ec80f28b9e7cf24781** (Accessed 14 April 2022).

HSIB

HEALTHCARE SAFETY INVESTIGATION BRANCH

Nuffield Trust. (2016) Understanding patient flow in hospitals [Online]. Available at **https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2016/12/patient_flow.pdf** (Accessed 14 April 2022).

Royal College of Emergency Medicine. (2021) RCEM Acute Insight series: crowding and its consequences [Online]. Available at **https://rcem.ac.uk/wp-content/uploads/2021/11/RCEM_Why_Emergency_Department_Crowding_Matters.pdf** (Accessed 14 April 2022).