

Outpatient appointments intended but not booked after inpatient stays

Independent report by the Healthcare Safety Investigation Branch 12019/011

Providing feedback and comment on HSIB reports

At the Healthcare Safety Investigation Branch (HSIB) we welcome feedback on our investigation reports. The best way to share your views and comments is to email us at enquiries@hsib.org.uk or complete our online feedback form at www.hsib.org.uk/tell-us-what-you-think.

We aim to provide a response to all correspondence within five working days.

This document, or parts of it, can be copied without specific permission providing that the source is duly acknowledged, the material is reproduced accurately, and it is not used in a derogatory manner or in a misleading context.



About HSIB

We conduct independent investigations of patient safety concerns in NHS-funded care across England. Most harm in healthcare results from problems within the systems and processes that determine how care is delivered. Our investigations identify the contributory factors that have led to harm or the potential for harm to

patients. The safety recommendations we make aim to improve healthcare systems and processes, to reduce risk and improve safety.

We work closely with patients, families and healthcare staff affected by patient safety incidents, and we never attribute blame or liability.

Considerations in light of coronavirus (COVID-19)

We have adapted some of our national investigations, reports and processes to reflect the impact that COVID-19 has had on our organisation as well as the

healthcare system across England. For this report, the way we engaged with staff and families was revised.

A note of acknowledgement

The patient whose experience is central to this investigation is referred to by her name, Pauline, in accordance with her family's wishes. We are grateful to Pauline's family for their ongoing support and involvement throughout this investigation.

We would also like to thank the NHS staff, stakeholder organisations and professional bodies who gave their time to provide information and expertise which contributed towards this report.

Our investigations

Our investigators and analysts have diverse experience of healthcare and other safety-critical industries and are trained in human factors and safety science. We consult widely in England and internationally to ensure that our work is informed by appropriate clinical and other relevant expertise.

We undertake patient safety investigations through two programmes:

National investigations

Concerns about patient safety in any area of NHS-funded healthcare in England can be referred to us by any person, group or organisation. We review these concerns against our investigation criteria to decide whether to conduct a national investigation. National investigation reports are published on our website and include safety recommendations for specific organisations. These organisations are requested to respond to our safety recommendations within 90 days, and we publish their responses on our website.

Maternity investigations

We investigate all incidents in NHS maternity services that meet:

- the criteria of the Royal College of Obstetricians and Gynaecologists' Each Baby Counts programme, or
- our HSIB defined criteria for maternal deaths.

Incidents are referred to us by the NHS trust where the incident took place, and, where an incident meets the criteria, our investigation replaces the trust's own local investigation. Our investigation report is shared with the family and trust, and the trust is responsible for carrying out any safety recommendations made in the report. In addition, we identify and examine recurring themes that arise from trust-level investigations in order to make safety recommendations to local and national organisations for system-level improvements in maternity services.

For full information on our national and maternity investigations please **visit our website**.

Executive Summary

Background

This investigation explores the patient safety risk of outpatient appointments which are intended but not booked following an inpatient stay. People attend hospital for a variety of reasons including diagnostic tests and treatments. People who are admitted to hospital are referred to as 'inpatients'. Commonly, after an inpatient hospital stay, people may be seen at a future date in an outpatient clinic to review the progress of their recovery or agree next steps for their treatment. This investigation uses a real patient safety incident, referred to as 'the reference event', to examine the issue of such follow-up appointments not being booked.

There is limited research literature and a gap in national data on the prevalence of follow-up outpatient appointments which are intended but not booked. However, evidence from national reporting systems, discussions with a clinical commissioning group, a focus group with GP surgery staff, and discussions with staff within several different trusts suggest that incidents are common. Examples of incidents where outpatient appointments are intended but not booked have also been seen in other HSIB investigations.

Outpatients tend to be grouped under three categories depending on the type of referral:

- Patients with suspected cancer are referred to a healthcare specialist using a process known as 'fast-track' referral or the 'two-week wait' pathway. These patients should have their first appointment with a specialist within two weeks of their referral.
- Patients who need to see a healthcare specialist but do not require urgent emergency specialist treatment are referred by their GP under the '18-week referral to treatment' (RTT) pathway. This means they should receive consultant-led treatment for their condition within 18 weeks of their referral.
- The remaining group of patients are those who are receiving ongoing treatment and are not, or are no longer, on a two-week wait or 18-week RTT pathway. These patients may be receiving follow-up appointments to review and evaluate their ongoing care.

The NHS Constitution, which states the principles and values expected of the NHS, outlines standards for patients who are referred to a healthcare specialist by their GP on the two-week wait or 18-week RTT pathway. Trusts are required to put in place systems and dedicated teams to ensure patients are tracked and monitored along their two-week wait or 18-week RTT pathway, with audit processes in place to ensure appointments have been made.

The reference event

In mid-April 2018, Pauline, a woman aged 54, was referred by her GP to a hospital gynaecology department (the department that specialises in conditions relating to the female reproductive system). She was referred under the two-week wait pathway for suspected cancer of the womb. She was known to have a fibroid uterus (growths made up of muscle and fibrous tissue in or around the womb). She had been offered a hysterectomy (an operation to remove her womb) in 2006, but this was not something she wanted to pursue at that time.

Pauline had an outpatient hysteroscopy (a procedure to examine the inside of the womb) at the end of April 2018 and a plan was made to discuss her results and ongoing care in the rapid access clinic (RAC) two weeks later. The RAC is a clinic where patients can have a range of diagnostic tests and access to a variety of clinicians within one clinic. Pauline's RAC appointment was scheduled later than intended. at the end of May 2018. Pauline did not attend the appointment. She was discharged from the cancer pathway by the gynaecology registrar and her care was transferred back to her GP.

In mid-June, Pauline attended the emergency department (ED) with a three-week history of lower back pain. She was diagnosed with post-procedure endometritis, an infection of the lining of the uterus which was thought likely to be linked to

her outpatient hysteroscopy in April. Pauline was admitted onto a ward and discharged one week later with a plan to be followed up as an outpatient at the first available appointment in consultant 1's clinic. The clinic appointment was not made.

In early August, Pauline was admitted to hospital via the ED with lower abdominal pain and abnormal vaginal discharge. During her stay, the consultant discussed with Pauline the option of having a hysterectomy given her ongoing symptoms; Pauline declined this. Pauline was treated with antibiotics and discharged three days later with a plan to be followed up in consultant 2's clinic in six to eight weeks' time. The clinic appointment was not made.

Pauline attended the ED again in October. She was admitted to hospital in December 2018 where she remained an inpatient until she died in early February 2019 due to complex health problems. These included pyomyoma (infection of uterine fibroid), pulmonary emboli (blockage of the blood vessels in the lungs by a blood clot), deep vein thrombosis (blood clot in a vein) and organ failure.

National investigation

The HSIB investigation gathered information about the reference event and assessed the incident against its investigation criteria. The scope of the investigation into the reference event did not include the clinical aspects of Pauline's

care. Although the reference event focused on follow-up appointments in gynaecology, the findings were relevant to other specialties.

The information gathered about the reference event was used to inform the scope of the national investigation, which included:

- identifying gaps in the process for arranging outpatient appointments following discharge from hospital
- reviewing the national context surrounding outpatient appointment booking
- considering opportunities for building resilience into the process for booking timely appointments after an inpatient stay
- developing safety recommendations to reduce the chance of losing patients to follow-up after an inpatient stay.

Findings

The investigation identified the following gaps in current booking processes for outpatient appointments:

- There is limited assurance that intended follow-up appointments are booked for patients who are not on a two-week wait or 18-week RTT pathway.
- Assurance is built into some outpatient appointment booking processes, such as the two-week wait

- and 18-week RTT pathways. However, this assurance is resource intensive and often relies on the vigilance and diligence of staff.
- Some trusts do not know that an intended appointment has not been booked unless the patient informs them. As such, these events are often not reported.
- between IT systems (that is, different systems are not always able to communicate and share data with one another) which adds complexity and increases the likelihood of error in the outpatient appointment booking process.
- There is a national drive by the NHS
 to redesign outpatient services to
 reduce face-to-face appointments
 by a third. The national initiatives to
 transform outpatient services are not
 focused on building in assurance that
 intended appointments are booked,
 except for specific groups of patients.
- Digital transformation is placing more emphasis on patients having greater autonomy in their healthcare. While this may reduce unnecessary appointments, improve efficiency, reduce the number of patients not attending their appointments and may prevent some patients not being followed up, it does not provide assurance to trusts that intended appointments are made. The investigation recognises that providing greater patient autonomy in healthcare will not be appropriate for all patients.

The investigation found there were opportunities for improving and building in assurance processes into the outpatient booking process:

- There is an opportunity to integrate IT with appointment booking processes.
- Some trusts were undertaking work to reduce the chance of losing patients to follow-up. Their systems embraced technology and reduced the reliance on the vigilance of staff. One trust had fully integrated its outpatient appointment process with its IT system which meant all patients were automatically tracked and could be accounted for without relying on the vigilance of staff.
- The NHSX What Good Looks Like programme has the potential to share improvements in practice which integrate IT with appointment booking processes to provide assurance that intended appointments are booked.
- There is a national drive to improve interoperability between IT systems. This will help to reduce error and improve patient safety, including the outpatient booking process.

HSIB makes the following safety recommendations

Safety recommendation R/2021/122:

HSIB recommends that NHS England and NHS Improvement develops standards and an operating framework that describes the assurance required for all outpatient appointment booking processes, including after an inpatient stay. The assurance should include feedback mechanisms which provide safeguards that intended outpatient appointments are booked. Ideally, solutions will use technology and automation to create resilience and efficiency so that there is less reliance on staff vigilance.

Safety recommendation R/2021/123:

HSIB recommends that NHSX's What Good Looks Like programme includes a requirement for organisations to be responsive to HSIB reports and recommendations within the 'Safe Practice' section of its guidance.

Contents

- 1 Background and context 10
- 2 The reference event 14
- Involvement of HealthcareSafety Investigation Branch 17
- 4 Analysis and findings in relation to the reference event **22**
- 5 Analysis and findings from the wider investigation **33**
 - Summary, conclusion and safety recommendations **46**
- 6 References 49
- 7 Appendix 53

1 Background and context

1.1 Outpatient services

- 1.1.1 People attend hospital for a variety of reasons including diagnostic tests and treatments.

 People who are admitted to hospital are referred to as 'inpatients'. Commonly, after an inpatient hospital stay, people may be seen at a future date in an outpatient clinic to review the progress of their recovery or agree next steps for their treatment.
- 1.1.2 According to NHS Digital (2018), there were 119.4 million outpatient appointments in 2018, of which 93.5 million were attended by patients. The number of attended outpatient appointments has since risen to 94 million (NHS Benchmarking Network (2019a). The appointments that were not attended were due to hospital cancellations. patient cancellations or where the patient did not attend their appointment (NHS Digital, 2018). Outpatient appointments and attended appointments have both nearly doubled over the last 10 years. However, the investigation acknowledges that these numbers are likely to have changed during the COVID-19 pandemic in 2020/21.
- 1.1.3 The NHS Long Term Plan states that:

- "... outpatients [services] traditionally serve at least three purposes, and in each case, there are opportunities for redesign. An outpatient appointment can provide: advice and diagnosis for a patient and their GP; follow-up review after a hospital procedure: and ongoing specialist input into a long-term condition. Technology means an outpatient appointment is often no longer the fastest or most accurate way of providing specialist advice on diagnosis or ongoing patient care.' (NHS England, 2019)
- The Royal College of Physicians (2018) has stated that the model of outpatient care needs a radical overhaul with technology being a key element of the design process.
- 1.1.4 The NHS Long Term Plan states that the NHS 'will therefore redesign services so that over the next five years patients will be able to avoid up to a third of face-to-face outpatient visits, removing the need for up to 30 million outpatient visits a year' (NHS England, 2019).
- 1.1.5 It should be noted that many of the policies related to outpatients were in existence, and the investigation was commenced, prior to the COVID-19 pandemic. The investigation recognises that the outpatient landscape has changed throughout the course of the investigation. For example, the number of face-to-

face outpatient appointments has vastly reduced. Likewise, some outpatient services have been paused to help NHS trusts cope with the surge in COVID-19 patients. The investigation found that, although there have been changes in the way patients are seen and reviewed, the way their outpatient appointments are booked has not changed significantly.

1.2 Referrals and national standards for outpatients

- 1.2.1 Outpatients tend to be grouped under three categories depending on the type of referral:
- Patients with suspected cancer are referred to a healthcare specialist using a process known as 'fasttrack' referral or the 'two-week wait' pathway. These patients should have their first appointment with a specialist within two weeks of their referral. This report will refer to this pathway as the twoweek wait pathway.
- Patients who need to see a
 healthcare specialist but do
 not require urgent emergency
 specialist treatment are referred
 by their GP under the '18-week
 referral to treatment' (RTT)
 pathway. This means they should
 receive consultant-led treatment
 for their condition within 18 weeks
 of their referral.

- The remaining group of patients are those who are receiving ongoing treatment and are not, or are no longer, on a two-week wait or 18-week RTT pathway. These patients may be receiving follow-up appointments to review and evaluate their ongoing care. This planned activity is also sometimes called 'surveillance' or 're-do'.
- 1.2.2 The NHS Constitution (Department of Health and Social Care, 2021), which states the principles and values expected of the NHS, outlines standards for patients who are referred to a healthcare specialist by their GP on the two-week wait or 18-week RTT pathway. Trusts are required to put in place systems and dedicated teams to ensure patients are tracked and monitored along their two-week wait or 18-week RTT pathway, with audit processes in place to ensure appointments have been made.

1.3 Lost to follow-up

1.3.1 'Lost to follow-up' (LTFU)
describes a patient who has
not returned for their intended
continued care or evaluation
or is no longer being tracked
in the healthcare system when
they should be. This can result
in missed or delayed follow-up
appointments to review and/or
receive clinical care required.

1.4 Evidence of the issue (outpatient appointments intended but not booked) at national level

- 1.4.1 There is limited research literature and a gap in national data on the prevalence of follow-up outpatient appointments which are intended but not booked. However, evidence from national reporting systems, discussions with a clinical commissioning group, a focus group with GP surgery staff, and discussions with booking co-ordinators and staff within several different trusts suggest that incidents are common. Examples of incidents where outpatient appointments which are intended but not booked have been seen in other HSIB investigations, including 'Unplanned delayed removal of ureteric stents' (Healthcare Safety Investigation Branch, 2020a) and 'Lack of timely monitoring of patients with glaucoma' (Healthcare Safety Investigation Branch, 2020b).
- 1.4.2 A review of 145,234 ophthalmic patient episodes (patients with clinical conditions related to the eye) lost to follow-up found that just over half (54.8%) were due to administrative processes (Davis et al, 2017). The review stated that 'The detailed investigations from our patients who came to serious harm from being LTFU found that 75% of patients had no appointment booked although

- follow-up was clearly planned by a clinician'. It was noted that many cases of patients being LTFU were due to appointments being changed by the hospital, lost notes, failure to book a procedure or transferring of care from one sub-specialty to another.
- 1.4.3 Wimble (2012) published a paper about a small-scale audit which had been conducted at an NHS trust in England to highlight and quantify its issues with follow-up arrangements after an inpatient stay. The author recognised that follow-up is a vital part of ongoing patient safety and that the issues in follow-up arrangements could lead to 'missed investigations, undiagnosed illness, investigations not being followed-up or lack of appropriate specialist input for chronic diseases' (Wimble, 2012). The audit identified that appointments listed on the discharge summary (a clinical report prepared at the end of a hospital stay or series of treatments) were not always requested or booked. Factors which contributed to appointments not being made were:
- there was a period with no ward clerk which led to no follow-up appointments being booked for any discharged patient from the unit for approximately six weeks
- problems often occurred outside of normal working hours when secretaries were unavailable

 there was no formal guidance about arranging follow-up interventions for incoming foundation doctors (postgraduate doctors in training).

The study concluded that an online system would be most appropriate to allow access to appointments 24-hours a day.

This was deemed vital owing to the 24-hour environment staff worked in, with many patients being discharged outside of normal working hours. The study also suggested using the junior doctors, who were doing the discharge, to book appointments when ward clerks/secretaries were not available.





2 The reference event

The investigation used the following patient safety incident, referred to as 'the reference event', to examine the issue of outpatient follow-up appointments which are intended but not booked after a hospital stay. The hospital trust at which this incident took place is referred to as 'the Trust'.

2.1 Local context

2.1.1 The reference event occurred at an acute hospital which provided a range of services including an emergency department (ED) and gynaecology department.

Gynaecology is a branch of medicine concerned with the female reproductive system.

2.2 Details of the event

- 2.2.1 Pauline, a woman aged 54, was referred to gynaecology under the two-week wait pathway for suspected endometrial cancer (cancer of the womb) by her GP in mid-April 2018. She was known to have a fibroid uterus (growths made up of muscle and fibrous tissue in or around the womb) and had been offered a hysterectomy (an operation to remove the womb) in 2006, but this was not something she wanted to pursue at that time.
- 2.2.2 Pauline had an outpatient hysteroscopy (a procedure to examine the inside of the womb and take a sample of body tissue

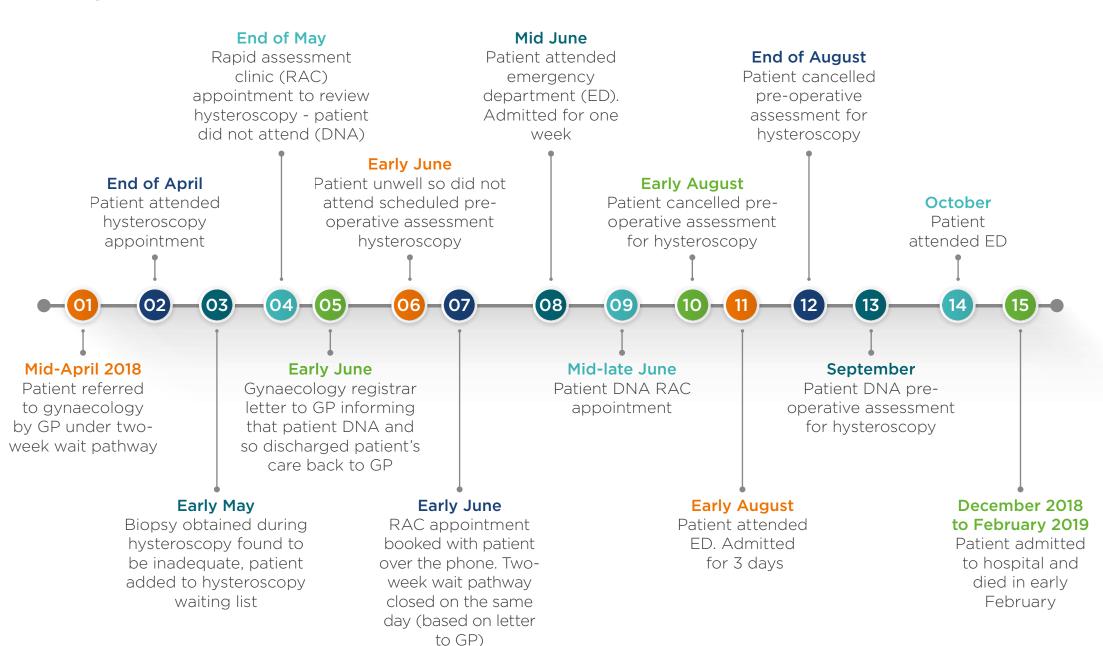
- for diagnostic purposes) at the end of April 2018 and a plan was made to discuss her results and on-going care the rapid access clinic (RAC) two-weeks later. The RAC is a clinic where patients can have a range of diagnostic tests and access to a variety of clinicians within one clinic. Pauline's RAC appointment was scheduled later than intended, at the end of May 2018.
- 2.2.3 Prior to her RAC appointment, the sample of body tissue obtained during the hysteroscopy in April 2018 was reported to be inadequate and so Pauline was added to the waiting list to receive another hysteroscopy.
- 2.2.4 Pauline did not attend the RAC appointment at the end of May 2018. Pauline was discharged from the cancer pathway by the gynaecology registrar and her care was transferred back to her GP. However, she remained on the waiting list for the repeat hysteroscopy.
- 2.2.5 According to the Trust's investigation of the incident, Pauline did not attend her preoperative assessment for a repeat hysteroscopy in early June because she was feeling unwell. Another pre-operative assessment appointment was scheduled for August 2018.
- 2.2.6 In mid-June, Pauline attended the ED with a three-week history of lower back pain and was diagnosed with post-procedure

endometritis – an infection of the lining of the uterus which was thought likely to be linked to her outpatient hysteroscopy in April. Pauline was admitted to a ward and discharged one week later with a plan for followed-up as an outpatient at the first available appointment in consultant 1's clinic. The clinic appointment was not made.

- 2.2.7 Three days after discharge,
 Pauline did not attend another
 outpatient appointment in the
 RAC that had been arranged
 prior to her admission.
- 2.2.8 Pauline cancelled two hysteroscopy appointments that were scheduled in August but remained on the outpatient hysteroscopy waiting list. She was issued another appointment for September, which she also cancelled.
- 2.2.9 In early August, Pauline was admitted to hospital via the ED with lower abdominal pain and abnormal vaginal discharge.
 During her stay, the consultant

- discussed with Pauline the option of having a hysterectomy given her ongoing symptoms; Pauline declined this. Pauline was treated with antibiotics and discharged three days later with a plan for follow-up in consultant 2's clinic in six to eight weeks' time. The clinic appointment was not made.
- 2.2.10 Pauline attended the ED in October. She was admitted to hospital in December 2018 where she remained an inpatient until she died in early February 2019 due to complex health problems. These included pyomyoma (infection of uterine fibroid), pulmonary emboli (blockage of the blood vessels in the lungs by a blood clot), deep vein thrombosis (blood clot in a vein) and organ failure.
- 2.2.11 A timeline of the reference event can be seen in figure 1.

Fig 1 Reference event timeline



3 Involvement of the Healthcare Safety Investigation Branch

This section of the report outlines how HSIB identified the issue of outpatient follow-up appointments intended but not booked after an inpatient stay. It also describes the criteria HSIB used to decide whether to go ahead with the investigation, and the methods and evidence used in the investigation process.

3.1 Notification of reference event

- 7.1.1 HSIB identified a safety risk of outpatient follow-up appointments intended but not booked after an inpatient stay. The event which triggered the investigation involved a patient who was discharged from hospital on two separate occasions with a plan for follow-up in specific consultant's outpatient clinics. Neither of the outpatient clinic appointments were made.
- 3.1.2 If a patient does not receive their intended outpatient appointment, it could lead to patient harm due to delayed or absent clinical care and treatment.

3.2 Decision to investigate

3.2.1 HSIB conducted an initial scoping investigation and assessed the findings against its investigation criteria. A decision was made to conduct a national investigation.

The assessment against HSIB's criteria was as follows:

Outcome impact - what was, or is, the impact of the safety issue on people and services across the healthcare system?

Outpatient appointments which are intended but not booked following an inpatient stay can lead to missed clinical care. This may cause patient harm because of delayed or absent clinical treatment.

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

There is limited research literature and national data on the prevalence of follow-up outpatient appointments which are intended but not booked. However, evidence from national reporting systems, discussions with a clinical commissioning group, a focus group with GP surgery staff, discussions with booking co-ordinators and staff from different trusts. and evidence from other HSIB investigations suggests that such incidents are not uncommon. Evidence indicates the issue may not be widely reported.

There is no national guidance or standardised process for booking and tracking intended outpatient appointments following an inpatient stay; this leads to locallevel variation. There appears to be a difference in the priority and governance arrangements for follow-up appointments after an inpatient stay compared to new referrals on an '18-week referral to treatment' pathway or 'two-week wait' pathway for suspected cancer.

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

There is an opportunity for the HSIB investigation to explore gaps in current booking processes, to make recommendations to build resilience into the process for booking follow-up appointments after an inpatient stay, and to influence the design of future processes.

3.3 Scope of the investigation

- 3.3.1 After a preliminary investigation, it was agreed that the national investigation would:
- identify gaps in the process for arranging outpatient appointments following discharge from hospital
- review the national context surrounding outpatient appointment booking
- consider opportunities for building resilience into the process for booking timely appointments after an inpatient stay

- develop safety recommendations to reduce the chance of losing patients to follow-up after an inpatient stay.
- 3.3.2 The scope of the investigation does not include the clinical aspects of Pauline's care. The investigation of the reference event focused on follow-up appointments in gynaecology; however, the findings are relevant to other specialties.

3.4 Evidence gathering and verification of findings

- 3.4.1 The evidence that was gathered and verified in this investigation included:
- a review of Pauline's medical records
- a review of policies, procedures and practice relevant to outpatient appointments which were in place at the Trust where Pauline's care occurred
- an interview with a member of Pauline's family
- interviews with staff at the reference event Trust, Pauline's GP surgery, and the clinical commissioning group for the reference event Trust
- gathering information and speaking with key stakeholders about national work regarding outpatients, including the outpatients transformation

programme (NHS England and NHS Improvement), the outpatients workstream for the national Getting It Right First Time programme, NHSX, Care Quality Commission and the Elective Care Improvement Support Team (NHS England and NHS Improvement)

- engaging with trusts to learn about the processes and systems in place to manage the outpatient appointment booking process.
- 3.4.2 Interviews were conducted with staff over a year after events had occurred. Staff members' memory of events is useful for understanding perceptions and exploring other contextual factors. However, recall of events is prone to error; details of events can be forgotten, altered, or falsely added into memory (British Psychological Society, 2010). Therefore, where possible, the evidence gained through interview was corroborated with independent and objective evidence. In some instances, only interview evidence was available
- 3.4.3 This investigation was in progress when the COVID-19 pandemic significantly affected the UK. Much of HSIB's work associated with developing reports necessarily ceased as HSIB's response was redirected to supporting frontline services and focusing on issues specifically related to COVID-19. For this investigation, planned

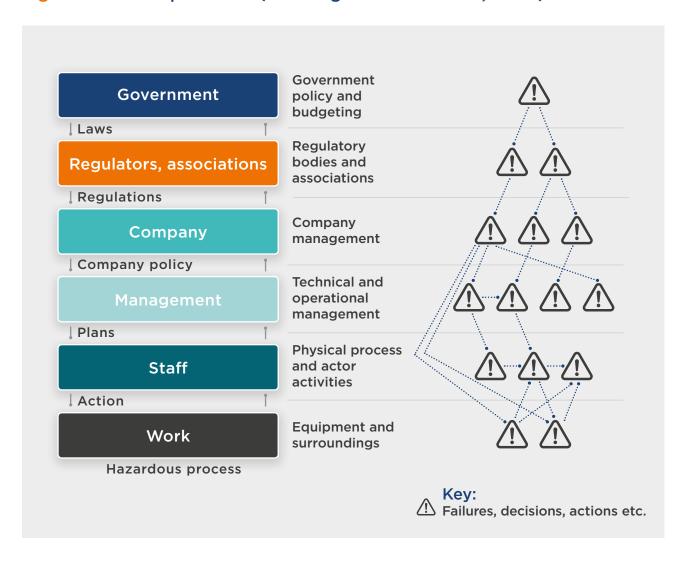
observations and visits to trusts were cancelled and work was conducted virtually where possible.

3.5 Analysis

- 3.5.1 The investigation used three analysis methods to examine the safety factors which led to Pauline's intended outpatient appointment not being booked.
- 3.5.2 Sequential Timed Event Plotting (STEP) (Hendrick and Benner, 1987) was used to understand the reference event. A STEP analysis shows the task process. the tasks performed and the interaction between patients and elements of the healthcare system (for example, documentation, equipment, IT systems) over time. STEP is particularly useful for analysing and representing distributed teamwork (where there are multiple team members or teams that may not be co-located or work at the same time) or collaborated activity (the mechanisms through which distributed teams work with each other).
- 3.5.3 The AcciMap model was also used to analyse the reference event information and support the direction of the national investigation. AcciMap (Svedung and Rasmussen, 2002) is an incident analysis method that identifies factors within a system that influence the occurrence of an incident. The analysis focuses on identifying relationships

between the different levels of the system (see figure 2), which include government policy and budgeting; regulatory bodies and associations; local area management; physical processes and actor activities (linked with staff, people, organisations and systems); equipment and surroundings (Stanton et al, 2013). 3.5.4 AcciMap is useful for visually representing contributory factors across the entire organisational system and their interrelationships. It removes the apportioning of blame to individuals and promotes the development of systematic countermeasures as opposed to countermeasures which focus on an individual (Salmon et al, 2011).

Fig 2 The AcciMap Method (Svedung and Rasmussen, 2002)



3.5.5 A process map (see figure 3, in section 4) was created to describe and graphically represent each step in the Trust's process for requesting and booking an outpatient appointment after an inpatient stay. As part of

this analysis, the investigation identified and described the potential points of failure within this process, which are detailed in **section 4** of this report.





4 Analysis and findings from the reference event

The outpatient booking process after inpatient stay at the reference event Trust and the factors that contribute to intended outpatient appointments not being made after an inpatient stay are described in this section. This section also describes the assurance process that intended outpatient appointments are booked and the management of patients who do not attend their scheduled appointments.

4.1 Outpatient booking process after an inpatient stay

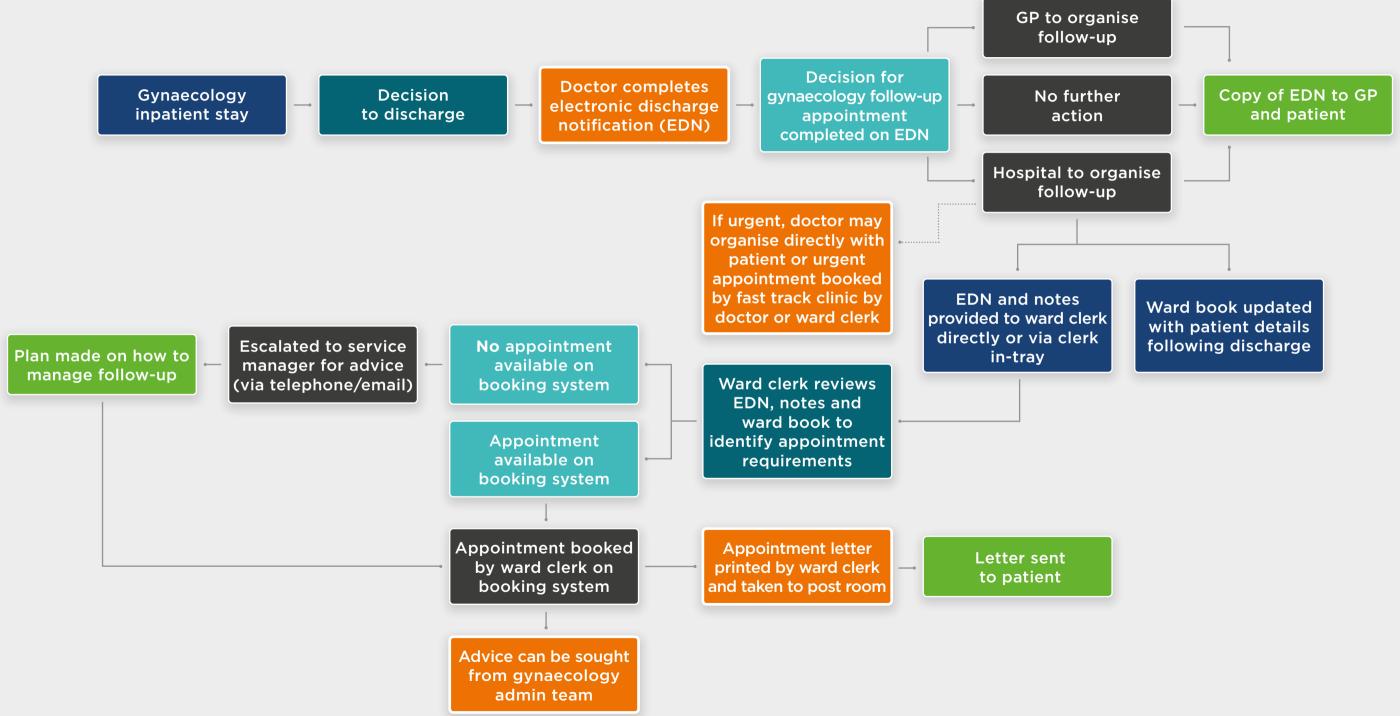
- 4.1.1 The process for booking an outpatient appointment after an inpatient stay at the trust where the reference event took place is shown in figure 3.
- 4.1.2 At the Trust, the booking of outpatient appointments after an inpatient stay was predominantly conducted by the ward clerk upon the patient's discharge from hospital. The discharging doctor would complete an electronic discharge notification (EDN) where 'free text' information about follow-up actions was entered. The EDN at the Trust was four pages long and consisted of various headings where key information could be documented. These included headings such as, 'Outstanding

- actions, investigation and blood tests', 'Clinical narrative', 'Investigation results, Allergies', 'New medications', 'Stopped medications' and 'Hospital and community follow-up details'.
- 4.1.3 The patient's medical notes were placed in the ward clerk's tray for processing and a 'ward book' was updated with details of the discharge and patient sticker which contained patient identifiers such as name, date of birth and hospital number.
- 4.1.4 The ward clerk would access and review the EDN, patient notes and ward book to identify the follow-up actions including outpatient appointment requirements. They would then access the electronic appointment booking system to find a suitable appointment. The appointment would be booked, and an appointment letter printed and sent to the post room to be forwarded to the patient.
- 4.1.5 If the ward clerk experienced issues in the appointment booking process, these could be escalated to the service manager for advice.

4.2 Appointment booking responsibilities

4.2.1 Following Pauline's inpatient stay in August 2018, it was possible that her intended outpatient appointment was not booked because there had been confusion over who was responsible for arranging the appointment.

Fig 3 Outpatient appointment booking process after an inpatient stay at the Trust



Click here for contents page

23

- 4.2.2 The EDN issued following
 Pauline's stay in hospital in
 August 2018 instructed both
 the hospital and the GP to
 arrange a follow-up appointment
 with a specific consultant.
 The instructions were noted
 in the 'Outstanding actions,
 investigation and blood tests'
 section of the EDN (see figure
 4). As such, it was unclear who
 was responsible for arranging the
 outpatient appointment.
- 4.2.3 The investigation did not have evidence of why the same follow-up action was allocated to both the hospital and the GP in this instance. However, the investigation found at the time of the investigation interviews, one year after the reference event, that some staff were confused about whether the GP should be making all follow-up appointments or the hospital.
- 4.2.4 This confusion was reported to have stemmed from a perceived pressure from the clinical

- commissioning group and NHS
 England and NHS Improvement
 to reduce outpatient
 appointments. It was reported
 that this had led to a move away
 from bringing all patients back
 for follow-up to bringing no
 patients back unless they had
 been referred via their GP or were
 on the two-week wait pathway.
- 4.2.5 The perceived pressure to reduce outpatient appointments was likely driven by a national initiative, which was underway at the time of investigation interviews, to reduce outpatient appointments as many had been deemed not to provide added value or quality (Royal College of Physicians, 2018). The NHS Long Term Plan (NHS England, 2019) states that it aims to reduce outpatient hospital appointments by up to a third over the next five years. The COVID-19 pandemic has since significantly changed the outpatients landscape: this is discussed in section 5 of this report.

Fig 4 Extract from EDN issued in August 2018

Hospital to arrange:	GP / Community to arrange:
follow up Mr GOPD clinic in 6-8 weeks (as per Mr request)	follow up GOPD clinic in 6-8 weeks (as per Mr
OPA booking required: Yes	
Team/service/clini code: follow up Mr GOPD	
Clinic in 6-8 weeks (as per Mr green request)	

- 4.2.6 The Trust's 'Patient access policy for elective [planned] treatment' gave guidance on referrals. It stated that consultantto-consultant referrals could occur for conditions for which the patient had been originally referred. However, for a new, non-urgent condition, which was unrelated to the original condition, the patient needed to request a new referral from their GP. The access policy did not specifically outline follow-up appointment booking responsibilities after an unplanned inpatient stay. In Pauline's case there was also the added complication that she had been removed from the Trust's two-week wait pathway but had other gynaecology outpatient appointments booked in its booking system. Therefore, it was unclear where the responsibility for booking Pauline's appointment lay, which may have added to the confusion.
- 4.2.7 The staff at the GP surgery's understanding of the process for booking outpatient appointments after an inpatient stay was that it would be the hospital's responsibility. It was pointed out that the GP surgery was unable to access the hospital appointment booking systems. As such, staff at the GP surgery reported that they would not have taken any action to book an appointment.

4.3 Outpatient appointment booking requirements

- 4.3.1 During interview, a ward clerk reported to the investigation that the way in which the EDN was completed meant that information about the type and timing of a required appointment could be missing or overlooked.
- 4.3.2 The ward clerk said that they used to focus on the 'Outstanding actions, investigation and blood tests' section on the first page of the EDN to establish appointment requirements. However, they later discovered that appointment information and required actions may not always be in this section and could be located elsewhere in the EDN. As such, information could be missed.
- 4.3.3 Pauline's EDN for June 2018
 had outpatient follow-up
 requirements under four different
 headings in the discharge
 summary, on three different
 pages. The 'Outstanding
 actions, investigation and blood
 tests' section on the first page
 only stated that a follow-up
 appointment in consultant 1's
 clinic was required. Later, on page
 2, the clinical narrative section
 stated that the first available
 follow-up appointment should
 be made. As such, Pauline's

- appointment may not have been given appropriate priority if the ward clerk had missed this piece of information.
- 4.3.4 A clinical safety report into transfers of care (Professional Record Standards Body. 2019) highlighted potential hazards relating to discharge summaries (referred to as EDNs in the reference event). These included a lack of clarity around responsibility for ongoing care and that information can be documented under the incorrect heading. Issues associated with electronic discharge summaries were also found and explored as part of the HSIB investigation Electronic prescribing and medicines administration systems and safe discharge' (Healthcare Safety Investigation Branch, 2019). As such, the issues associated with the EDN were not unique to the reference event Trust and, while outside the scope of this report, may usefully inform a future investigation.

4.4 Other factors affecting outpatient appointment booking

4.4.1 The investigation was unable to interview the staff directly involved in Pauline's discharge and requirement for a follow-up outpatient appointment.

However, the investigation spoke with staff at the Trust and the following factors were identified that could lead to a follow-up appointment not being made.

Ward clerk availability

4.4.2 Not all wards had a ward clerk, or wards did not always have ward clerk cover. In circumstances when a ward clerk was not available, the EDN and patient notes were left in the clerk's in-tray. However, if this did not occur or the EDN and notes were later removed from the in-tray, the appointment requirement could be missed and therefore not booked.

Booking process training

4.4.3 There was limited training on how to book appointments. Training was 'on the job', so the quality of the training depended on the experience of the staff the clerk was shadowing, allowing for variation in practice. In addition, not all ward clerks would make appointments as they had limited knowledge of the process and/or had not received training to do so. In these situations, it was reported that the ward clerk may approach another ward clerk to book the appointment instead, but that this did not always happen.

Multiple sources and locations to review and identify follow-up appointment requirements

4.4.4 One ward clerk described having to review the admissions/ discharge ward book, the medical notes and the EDN to identify what appointments were required, increasing the likelihood of information being missed.

Documentation clarity

4.4.5 Documentation could be unclear or missed. The ward clerk described that there was potential for missing discharge stickers in the ward book and that sometimes it was unclear which clinic the appointment was required in - for example, whether it should be with a specific consultant or a clinic sub-specialty such as urogynaecology. Gynaecology was reported to be "a bit complex" in terms of the various different clinics patients could be booked into.

Clinic availability

4.4.6 One ward clerk reported that "gynae [gynaecology] follow-ups can be an absolute nightmare" because of the difficulties they had experienced in arranging gynaecology appointments. The ward clerk stated that clinic appointments could be put on hold to prevent overbooking, with only a limited number of staff authorised to arrange an appointment. As they did not have the required authority, the ward clerk would manage this by emailing the service manager to resolve the issue. However, the investigation was told that some ward clerks may not know how to handle this situation and may "just leave it" - that is, they would not escalate the issue to the service manager.

Issues in escalation when there were no available appointments

4.4.7 When an outpatient appointment was not available on the electronic booking system on which appointments were made, the ward clerk could escalate the issue to the service manager, who would give advice on how to manage the follow-up. It was reported that it could take time to receive guidance from the service manager and there was no tracking system in place to monitor whether guidance had been received and acted upon. Escalation was reported to be common in services with limited clinic availability, of which gynaecology was one.

Ward clerk and/or service manager may forget to make appointment, escalate or ensure booking issues are resolved

4.4.8 A ward clerk may intend to book a follow-up outpatient appointment but may forget to book it. Or, where escalation to the service manager is required, the ward clerk may forget to escalate it and/or act upon the service manager's guidance. Likewise, the service manager may not act upon the escalation and/or report back to the ward clerk.

Confusion over who books the appointment

4.4.9 One ward clerk reported that there could be "a lack of clarity" over who books follow-up appointments after an inpatient stay. They stated that sometimes the ward clerk would do it, but on other occasions the doctor may have arranged for someone else, such as the nurse practitioner, to book the appointment.

Assumption or confusion over whether an appointment was required

- 4.4.10 In the reference event. Pauline already had appointments booked in other gynaecology clinics. It is possible these appointments created confusion about whether an appointment had already been made or whether an additional appointment was required. The type of appointment booked is displayed on the Trust's electronic booking system with a clinic code. However, the EDN does not document the specific clinic code (and therefore clinic) required. As such, it requires the ward clerk to have knowledge of the clinic codes to know whether the booked appointments match the ones requested.
- 4.4.11 During the investigation, the Trust were given the opportunity to comment on the factual accuracy of this report. The Trust stated that because Pauline already

- had gynaecology appointments arranged associated with the same clinical condition as her inpatient stay, further outpatient appointments would not be made. This was because there was already a plan for Pauline to be seen; from a clinical perspective she was being followed up by the Trust. The Trust stated that Pauline required a hysteroscopy and needed to attend her pre-operative assessments, which she did not attend or cancelled.
- 4.4.12 The investigation considered the new information presented by the Trust and analysed this with other evidence, such as the booking information in the Trust's patient administration system and Pauline's discharge summaries. Pauline did not have appointments booked in the consultants' clinics that were stated in the discharge summaries. However, three preoperative assessments were booked between August and September 2018 which Pauline did not attend or cancelled (see figure 1).
- 4.4.13 The investigation noted that the pre-operative assessments were associated with the repeat hysteroscopy and were nurse-led, rather than consultant-led, clinics. The discharge summary following Pauline's inpatient stay in June 2018 stated, 'we will review her in GOPD [gynaecology outpatient department] at first available appointment regarding further

management'. The August 2018 discharge requested a follow-up in a particular consultant's clinic. The pre-operative, nurse-led assessments would not discuss her 'further management' with a consultant as was intended when Pauline was discharged from her inpatient stays.

4.5 Assurance process that intended follow-up appointments were made

- 4.5.1 The investigation found that the appointment booking process relied on the vigilance and diligence of staff and patients to ensure required follow-up appointments were made. There was no assurance mechanism to identify when intended follow-up appointments had not been made.
- 4.5.2 According to the Royal College of Physicians (2018), successful systems for the handover of care management typically include a route for feedback for the sender and receiver of the information. There was no feedback loop in the Trust's process to ensure that a followup appointment had been made. There was also no audit process in place to capture missed appointment bookings. One ward clerk stated: "... the only way I would know if a patient hadn't got their appointment is if they called up to say they hadn't received one. So the 'safety net' is the patient." Staff reported that when they were

- made aware that an intended appointment had not been booked, they would organise an appointment. However, they would not record or report that an incident had occurred and that a patient had been 'lostto-follow-up' (LTFU). A ward clerk also reported: "I've had a lot of patients from other wards calling up to say they haven't received an appointment." As a result, it is likely that incidents where patients do not have their intended follow-up appointments booked are underreported.
- 4.5.3 The investigation conducted a focus group discussion with staff at Pauline's GP surgery. It was reported that if a patient had been admitted to hospital and subsequently discharged, and follow-up was with the same specialty (as in Pauline's case), it was expected that the hospital would take responsibility for organising the appointment. GPs do not have oversight of the follow-up outpatient appointment. The only way they would know if a follow-up appointment was booked was if they rang the hospital to check. They reported that they would not know if an intended appointment had not been made unless the patient notified them that they had not received an appointment.
- 4.5.4 The GP also reported that owing to the large volume of patients who were going through different care pathways, it was

- challenging to track them. They therefore only tracked patients on the two-week wait pathway for suspected cancer or if they had safeguarding or vulnerability concerns about a patient.
- 4.5.5 The investigation spoke with the Trust's clinical commissioning group which commented that, in general, there are few mitigations in place to prevent patients being LTFU after an inpatient stay. It stated that, in reality, the onus is placed on the patient to be the safety net if an intended appointment is not made. It noted that not all patients are able or feel empowered to chase or follow up a healthcare provider for an appointment.
- 4.5.6 The investigation found that staff were creating their own individual workarounds to reduce the likelihood of not booking required follow-up appointments. For example, the investigation spoke with a ward clerk who kept their own book to note appointments that needed to be arranged and would then tick these off as they completed them. Another reported making sure patients had their appointment booked prior to leaving the ward.
- 4.5.7 Assurance processes for intended follow-up appointments are explored further in **section 5**.

4.6 Management of 'did not attend' (DNA)

- 4.6.1 Patients may not attend a medical appointment for various reasons. Trusts have various policies in place to ensure that patients who 'did not attend' (DNA) their appointment are managed appropriately.
- 4.6.2 Following Pauline's hysteroscopy at the end of April 2018, she did not attend her rapid access clinic appointment which was scheduled for the end of May. The senior registrar in gynaecology wrote to Pauline's GP stating that she had not attended her scheduled appointment and that. as per Trust policy, they were discharging her back to the GP. Pauline was on the two-week wait pathway when she was discharged but remained on the Trust's waiting list to receive a repeat hysteroscopy.
- 4.6.3 Interviews with two-week wait cancer pathway booking co-ordinators at the Trust revealed that patients on the two-week wait pathway should not be discharged after one DNA and should be granted two DNAs before care is transferred back to their GP.
- 4.6.4 The investigation reviewed the Trust's 'Patient access policy for elective treatment'. The policy set out two processes for staff to follow after a DNA: one for

patients on the 18-week referral to treatment (RTT) pathway and another for those on the twoweek wait pathway.

4.6.5 The 'Did not Attend' section of the Trust's access policy stated that:

'Where a patient Does Not Attend (DNA) an appointment on their RTT pathway and have not at any point made contact with the organisation to advise that they will not be attending, the patient's record will be reviewed by their consultant. The patient will be discharged back to their GP provided that:

- The trust can demonstrate that the appointment was clearly communicated to the patient
- Discharging the patient is not contrary to their best clinical interests, which may only be determined by a clinician
- Consideration has been given to protect the clinical interests of patients who are children, cancer patients or patients who are considered to be vulnerable.'

4.6.6 However, the policy later states:

'Patients referred under the cancer 'two-week wait' that are given an appointment but who DNA, must be contacted and offered another appointment within two weeks of the date contact is made with the patient.'

4.6.7 Because Pauline was on the two-week wait pathway, she should have been offered another appointment according to Trust policy. The investigation was unable to confirm why Pauline was discharged and removed from the two-week wait pathway after one DNA. However, having two slightly different policies for DNA may be confusing and adds risk that the incorrect policy could be applied. Therefore, it was possible the clinician who discharged Pauline applied the 18-week RTT policy instead of the two-week wait pathway DNA policy. The report of the Trust's investigation into Pauline's care states that since this incident. work has been undertaken to review the gynaecology cancer care pathway. If a two-week wait pathway patient does not attend their appointment, they will be offered a second appointment before their pathway is closed.

4.7 Influence of national targets and incentives

4.7.1 The Trust's 'Patient access policy for elective treatment' outlined the process for the 18-week RTT and two-week wait pathways.

However, the policy contained very limited information about non-urgent follow-up appointments.

The process for making a follow-up appointment after an inpatient stay was not formalised or documented at the Trust.

4.7.2 The investigation found there are various pathways and national priorities for outpatient appointments depending on which pathway a patient is on (that is, whether patients are on the two-week wait pathway, 18-week RTT pathway, or require planned follow-up for ongoing care and evaluation). The impact of this was demonstrated in

HSIB's investigation 'Lack of timely monitoring of patients with glaucoma', which found that newly referred 18-week RTT patients were prioritised over follow-up patients (Healthcare Safety Investigation Branch, 2020b). The various pathways and priorities are analysed further in section 5.





5 Analysis and findings from the wider investigation

The national investigation explored the outpatient services landscape in relation to the outpatient booking process. This included:

- national guidance for outpatient appointment booking processes and priorities
- national work related to outpatient appointments such as outpatient and digital transformation
- changes relating to the COVID-19 pandemic
- assurance processes that are currently in place nationally for outpatient appointments
- what some trusts are doing to improve assurance that intended outpatient appointments are made.

This section outlines all the relevant analysis and findings from the wider investigation before bringing these together to form an overall safety recommendation.

As noted in **section 1**, many of the policies related to outpatients were in existence prior to the COVID-19 pandemic. The investigation recognises that the outpatient landscape has changed throughout the course of this investigation due

to the pandemic. For example, the number of face-to-face outpatient appointments has vastly reduced, and some outpatient services have been paused to help NHS trusts cope with the surge in COVID-19 patients. The investigation found that, although there have been changes in the way patients are seen and reviewed, the way their outpatient appointments are booked has not changed significantly.

5.1 Appointment priorities

5.1.1

There are national standards associated with the two-week wait and the 18-week referral to treatment (RTT) pathways that do not exist for planned 'followup' patients who are not on either of these pathways. According to the NHS Constitution (Department of Health and Social Care, 2021), patients with suspected cancer referred on the two-week wait pathway have a 'right to be seen by a cancer specialist within a maximum of 2 weeks from GP referral for urgent referrals where cancer is suspected'. The NHS Constitution (Department of Health and Social Care. 2021) also states that when a new referral is made there is a 'right to start your consultant-led treatment within a maximum of 18 weeks from referral for nonurgent conditions'. Therefore, trusts are required to put in place systems and dedicated teams to ensure patients are tracked and monitored along their 18-week

RTT or two-week wait pathway, with audit processes to ensure appointments have been made. There is no similar requirement in the NHS Constitution regarding follow-up appointments which are not on these pathways.

- 5.1.2 NHS England (2015) states that patients on planned waiting lists are outside the scope of the 18-week RTT measurement. Planned care means an appointment/procedure or series of appointments/procedures as part of an agreed programme of care which is required for clinical reasons to be carried out at a specific time or repeated at a specific frequency. Planned activity is also sometimes called 'surveillance', 're-do' or 'follow-up'.
- 5.1.3 According to NHS England (2015), trusts should have systems in place to review any planned lists regularly to ensure intended appointments are booked for the right time and that patient safety, and standards of care, are not compromised to the detriment of outcomes for patients. However, the investigation has not found national guidance associated with non-urgent follow-up appointments following an inpatient stay in hospital. As such, processes for booking followup appointments following an inpatient stay in hospital are designed locally.

5.1.4 The investigation found that while setting standards can drive improvements, such as reducing unacceptable delays to treatment (Cooke, 2014), they can influence trust and staff behaviour resulting in a sole focus on achieving these targets. An interim report into the review of NHS access standards (NHS, 2019) stated that:

'It is well documented that the current performance measures can have unintended consequences, pushing hardpressed staff to focus on targets rather than patient need – "hitting the target but missing the point".' (NHS, 2019)

5.1.5 An HSIB investigation, 'Lack of timely monitoring of patients with glaucoma' (Healthcare Safety Investigation Branch, 2020b), explored the influence of national targets on follow-up appointments for patients with the eye condition glaucoma. During interviews with clinical leads and service managers responsible for glaucoma services, the investigation found that there was a belief that the national 18-week RTT access standard had resulted in newly referred patients being prioritised over follow-up patients. As such, the focus on achieving the 18week RTT and two-week wait pathway standards are not unique to gynaecology.

- 5.1.6 The HSIB investigation into lack of timely monitoring of patients with glaucoma met with the Director of Clinical Policy. Quality and Operations for NHS England and NHS Improvement (NHSE/I) to discuss the possibility of a national follow-up performance or quality measure. The investigation was informed that although prioritisation of follow-up appointments may be appropriate for patients with eye conditions such as glaucoma. such a target would not be appropriate across all specialties; for some it may be desirable to reduce follow-ups.
- 5.1.7 For outpatients in general, there is a national drive to redesign outpatient services so that faceto-face appointments are avoided (NHS England, 2019), and this continues in respect of the COVID-19 pandemic.

5.2 Outpatient transformation

NHS Long Term Plan and outpatient transformation programme

5.2.1 Prior to the COVID-19 pandemic, hospital outpatient attendances had increased to 94 million over the last 10 years at a cost of £8bn a year (NHS Benchmarking Network, 2019b). Evidence indicated that there was a mismatch between capacity and demand in outpatient services (Healthcare Safety Investigation Branch, 2020b; NHS

- Benchmarking Network, 2019c) and that this mismatch was unsustainable (Royal College of Physicians, 2018).
- 5.2.2 The NHS Long Term Plan stated that it aimed to remove the need for up to 30 million outpatient visits a year by reducing faceto-face outpatient visits by up to a third (NHS England, 2019). A key driver for the requirement to re-design outpatient services was the pressure on the elective care system and the increasing amount of RTT waiting times extending beyond the constituted 18 weeks (NHS Benchmarking Network, 2019a).
- 5.2.3 In 2019 (prior to the COVID-19 pandemic) NHSE/I set up an outpatient transformation programme to help achieve the Long Term Plan. The investigation spoke with the Director of Outpatients Transformation and Technology Enabled Improvement at NHSE/I. It was reported that the outpatient transformation programme is focused on avoiding unnecessary outpatient appointments. As such, ensuring that intended outpatient appointments are booked was not part of the outpatient transformation programme's remit. It was reported that there are two key workstreams which include increasing virtual consultations between clinicians and their patients where appropriate, and 'patient-initiated follow-up' (PIFU).

- 5.2.4 PIFU is a specific care pathway that is made available to some patients. The patient initiates the follow-up appointment based on their clinical need rather than patients being seen regularly when they may not need to be seen. It is anticipated that this will reduce unnecessary appointments, provide the patient with more access and ownership of their care, reduce risk as the patient can request to see a clinician when they have a concern, and make better use of clinicians' time (NHS England and NHS Improvement, 2019).
- 5.2.5 The investigation was informed that implementation guidance for PIFU was being finalised. This guidance will state that trusts should have robust processes in place to log and track patients on a PIFU pathway. This includes having:
- an end date for the PIFU window, which is reviewed and updated if necessary
- mechanisms in place to ensure patients are offered an appointment within a certain timeframe if they do not initiate it themselves
- a mechanism to ensure highrisk patients, such as those on a cancer pathway, who do not attend appointments are contacted to rebook their appointment.

- Therefore, PIFU implementation guidance does move towards improving assurance processes for patients, reducing the likelihood of 'lost to follow-up' (LTFU), but only for those on a PIFU pathway. Assurance mechanisms implemented for patients on a PIFU pathway are likely to be relevant for the wider cohort of patients requiring follow-up outpatient appointments.
- 5.2.6 The virtual consultation
 workstream was reported to have
 rapidly accelerated owing to
 the COVID-19 global pandemic.
 During the pandemic, many
 organisations were forced to
 cease business and enable
 employees to work remotely
 where possible; this included
 healthcare organisations.
- 5.2.7 NHS organisations have adapted by adopting technology such as telephone and video consultations to enable healthcare interactions between staff and between clinicians and patients to occur remotely where possible (see Healthcare Safety Investigation Branch, 2020c). It is recognised that virtual consultations are not always appropriate for patient care as there is a requirement for some patients to be physically examined or seen in person. However, conversations with trusts have revealed that although the way in which outpatients are seen and reviewed has changed,

the overall booking process remains the same.

Digital transformation

- 5.2.8 Digital transformation within the NHS is moving towards placing more emphasis on patients and providing patients with greater autonomy in their healthcare. While this may reduce unnecessary appointments, improve efficiency, reduce 'did not attends' (DNAs) and may prevent some patients becoming LTFU, it does not provide assurance to trusts that intended appointments are made. The investigation explored work at a national level related to digital transformation that may be relevant to outpatient booking processes.
- 5.2.9 The investigation found that manual processes remain in the referral and outpatient appointment booking process. For example, the NHS Benchmarking Network (2019b) found that only 15% of trusts that participated in the outpatients benchmarking project reported that their patient administration system (PAS) automatically pulls through referral letters from the electronic referral service (e-RS). The NHS e-RS is the mechanism through which a GP refers a patient to a healthcare specialist. The e-RS also 'provides an easy way for patients to choose their first hospital or clinic appointment with a specialist.

- Bookings can be made online, using the telephone, or directly in the GP surgery at the time of referral' (NHS Digital, 2020).
- 5.2.10 The investigation spoke with the e-RS team at NHSX. NHSX brings together teams from the Department of Health and Social Care and NHSE/I to drive the digital transformation of care. The e-RS team was predominantly focused on first referrals, that is, how a GP refers a patient to a specialist, to the patient receiving their first appointment. The e-RS has evolved over the years and is now part of the standard contract which means all GPs and trusts are mandated to use the e-RS for referrals. The e-RS team said that there had historically been intentions to expand the e-RS to cover the entire patient pathway. However, the management of follow-up was found to be complex and overlaying a national workflow tool would likely place a burden on trusts. As such, the next stage of booking, referrals and appointment management "never took off"
- 5.2.11 There are currently limitations in the interoperability between IT systems (that is, different systems are not always able to communicate and share data with one another) and these have been identified in other HSIB investigations. For example, 'Electronic prescribing and medicines administration systems

- and safe discharge' (Healthcare Safety Investigation Branch, 2019) found that important changes to a patient's medication were missed owing to the use of paper and electronic systems and limited information sharing between NHS services such as GP surgeries and pharmacies. The interoperability of IT systems has become the highest priority issue for NHS IT leaders according to findings of the 2018 NHS IT Leadership Survey (Digital Health, 2018).
- 5.2.12 The Department of Health and Social Care (2018) highlights that 'Open standards, secure identity and interoperability are critical to the safe and successful use of technology, ensuring that systems talk to each other and that the right data gets to the right place at the right time'. Its vision is to agree open standards so that technology can be developed in a way that enables it to align and integrate into the NHS's requirements. It also aims to move towards modular IT systems where any module can easily be switched out.
- 5.2.13 The investigation spoke with NHSX and found that it was undertaking work exploring and evaluating patient portals, which will empower patients to be more involved in their healthcare. Patient portals will include digital applications (or modules) that allow patients to undertake activities such as:

- viewing their personal health records
- viewing past and upcoming appointments
- booking appointments
- making changes to booked appointments.
- 5.2.14 The Shelford Group is a collaboration between 10 of the largest teaching and research NHS trusts in England. Its toolkit for new models of outpatient care (The Shelford Group, 2019) highlights two examples of how patient portals have been applied.
- 5.2.15 The toolkit (The Shelford Group, 2019) describes how, in 2016, Cambridge University Hospitals NHS Foundation Trust launched a patient portal that is integrated with the hospital's electronic patient record. This meant that patients could access hospital information electronically via the patient portal instead of it being posted to them. This included appointment letters, past appointment details, current health problems, clinic letters and clinical correspondence, vital signs, test results and allergies. The intention is that over time, more functionality will be activated within the patient portal, including the ability for patients to book and re-schedule appointments. It should be noted that this places emphasis on the patient, which may not be suitable and accessible for all patients.

- 5.2.16 The other example in the toolkit describes how Guv's and St Thomas' NHS Foundation Trust (GSTT) introduced an electronic system that allowed patients to manage appointments. GSTT's estimate of the impact on the service includes a reduction in phone calls and a time saving for completing booking requests of two minutes as email enables a faster booking method than phone calls. The percentage of patients who do not attend appointments had reduced from 12% to 10%. The toolkit states that these improvements enabled GSTT to address capacity and demand mismatches through more effective patient-led booking (The Shelford Group, 2019).
- 5.2.17 It should be noted, however, that both of the case studies described by the Shelford Group (2019) place more emphasis on the patient and achieving the national requirements to increase capacity, reduce demand, and reduce DNAs. Patients not attending outpatient appointments is reported to cost the NHS £1bn a year, at an average cost of £120 per appointment (NHS Benchmarking Network, 2019c) and so there is a focus on reducing DNAs. The case studies were not focused on increasing organisation reliability of the booking process.
- 5.3.18 There is potentially an opportunity not only to improve efficiency and capacity of outpatient services through

digital transformation, but to also build in assurance. The investigation considers that trusts need greater accountability and focus on ensuring that their booking systems not only achieve national requirements but also keep patients safe.

5.3 Assurance processes and mitigations for follow-up appointments

5.3.1 The investigation explored assurance processes and mitigations that are currently - or could potentially be - put in place to ensure intended outpatient follow-up appointments are made and reduce patients being LTFU.

Process for booking and monitoring appointments for patients on the two-week wait pathway

5.3.2 The investigation spoke with a clinical commissioning group which reported that although patients on the two-week wait pathway for suspected cancer may experience delays, fewer patients are LTFU because they are tracked by dedicated teams. Patients on the two-week wait pathway are deemed a priority (as discussed in section 5.1) and have rights to be seen promptly according to the NHS Constitution (Department of Health and Social Care, 2021). It was noted earlier that such standards and priorities do not exist for planned (nonpathway) follow-up patients.

The investigation sought to learn what guidance was in place for the two-week wait pathway and if this process could be applied to other outpatient follow-up appointments.

- 5.3.3 'Delivering cancer waiting times: a good practice guide' (NHS Interim Management and Support, 2016) provides national guidance on managing patients who are on a two-week wait pathway. The guidance outlines how each trust is to track their two-week wait pathway patients on a patient tracking list. The patient tracking list provides details of where each patient is on the pathway, the next stage of their care and the deadline for this. The patient tracking list should allow for easy filtering by tumour site or hospital area and flag patients who are at risk of missing a milestone on their pathway.
- 5.3.4 The guidance states that there should be dedicated staff for tracking and managing patients through the two-week wait pathway. It specifically outlines staff roles and what their responsibilities are for two-week wait pathway patient tracking.
- 5.3.5 The multidisciplinary team (MDT) co-ordinator is responsible for reviewing the patient list for specific tumour sites, focusing on pathways that require action, such as arranging/expediting appointments. The appointment booking process then has further mitigations to prevent

- patients being LTFU. The 'two-week wait office' booking clerks are responsible for reviewing and chasing up all un-booked patients daily and escalating unresolved issues. The two-week wait office supervisor/manager is also responsible for reviewing the patient tracking list and escalating concerns.
- 5.3.6 Similar to the MDT co-ordinator, the specialty or support service manager is also required to review a patient list for a specific tumour site or support service, arranging appointments as necessary. They also review and action escalations from the two-week wait office.
- 5.3.7 The guidance acknowledges that the data required to track two-week wait pathway patients will typically sit in several other IT systems such as the patient administration system (PAS), and specific systems related to pathology, radiology, endoscopy, chemotherapy, radiotherapy, and operating theatres. The guidance states that:

'Where technically possible, the ideal is to implement automated information feeds from these primary systems into the cancer information system. This has the threefold benefit of reducing the time staff spend on manual data entry, keeping cancer tracking (and audit) data up to date and minimising transcription/data quality errors. Most providers

have at least a basic feed of demographic information from PAS, but need to explore interfaces to other systems.' (NHS Interim Management and Support, 2016)

- 5.3.8 In addition to the guidance on patient tracking lists and staff roles, 'Delivering cancer waiting times: a good practice guide' (NHS Improvement, 2016) also details guidance around MDT meetings (to discuss the patient pathway), analysing and reporting when target timescales have not been met, acknowledgement of patient referrals and guidance on DNAs.
- 5.3.9 While the investigation acknowledges there are weaknesses with manual systems, and room for efficiency gains and minimising transcription/data quality errors, there are at least dedicated staff to provide assurance to the booking process. There is no national guidance for providing this level of assurance for non-two-week wait follow-up outpatient appointments.

Example of process for patients with suspected cancer

5.3.10 To gain a user perspective of implementing two-week wait pathway guidance, the investigation spoke with administrative staff at one trust who booked appointments for patients with suspected cancer and tracked their initial referral and treatment. The investigation

- identified that there can be challenges in ensuring that appointments are made for patients in the two-week wait pathway, which are discussed in this section.
- 5.3.11 The trust's booking process for the two-week wait pathway largely reflected the national guidance. It was reported that there was a dedicated centralised booking team to book appointments for patients with suspected cancer; routine appointments were booked by a separate team. It was noted by the investigation that there is variation in booking team structures between NHS organisations. NHS booking teams tend to be centralised or specialty specific, or a mixture of the two. Specialty booking teams are responsible for booking appointments for their specialty. whereas centralised teams coordinate appointments for several specialties. According to the NHS Benchmarking Network (2019b), 44% of the trusts who participated in the benchmarking project had a centralised booking team, while 46% reported a mix of centralised and specialty booking teams. A specialty-level booking structure was used in 10% of trusts.
- 5.3.12 The administrative staff stated that the process for booking the first two-week wait pathway appointment was "reliable". They explained that a report could be

- generated showing booked and non-booked appointments. It also showed if appointments had been cancelled by the patient or by the trust.
- 5.3.13 After the initial two-week wait pathway appointment was made, the patient was referred to the specialist team and a 'cancer pathway co-ordinator' for that specialty would then be responsible for tracking the patient's progress along the care pathway.
- 5.3.14 It was reported that the two-week wait pathway referral came into the trust electronically. The cancer pathway co-ordinator would then periodically check the electronic system throughout the day for patients allocated to their specialty that they needed to track. Patients were tracked by their team from the moment the patient was referred to the trust to the point at which they started treatment.
- 5.3.15 The cancer pathway co-ordinator reported that they used an IT system to track patients but that this had to be constantly reviewed. The IT system also had limitations in its interoperability with other hospital IT systems. As such, information from other IT systems would have to be manually transposed across.
- 5.3.16 The cancer pathway co-ordinator had to refer to and collate information from six different IT systems. They reported that having to search and review multiple IT systems for relevant

- information was challenging, requiring a lot of "clicking" (of the computer mouse) and moving back and forth between systems. The systems did not have automated nudge notifications to alert them to actions required, and errors could be made by accidently selecting the wrong item. As such, the two-week wait pathway relied on the vigilance and diligence of the co-ordinator to keep reviewing, monitoring and updating the IT systems.
- 5.3.17 The investigation spoke with an admissions officer from another trust who described a similar issue of having to access and refer to multiple IT systems which did not communicate with each other. The admissions officer stated that information had to be manually transposed between systems, required a lot of "clicks", multiple passwords and "bending the rules" to benefit patients. The investigation also noted that when manually transposing information between systems, there is also a chance that information may be missed or not entered correctly.
- 5.3.18 The cancer pathway co-ordinator reported being responsible for tracking approximately 96 patients across two specialties. They reported that due to the high number of patients they were tracking and issues around the design of the IT systems and user interface, it was possible to 'lose' patients.

- 5.3.19 The two cancer pathway booking co-ordinators that were interviewed by the investigation said that their workload could be high and required a lot of multitasking to manage the patients they were responsible for. While acknowledging that from a user perspective the two-week wait booking process has its challenges, there is some assurance that intended appointments are booked. No such assurance was provided for non-cancer follow-up outpatient appointments at the same trust.
- 5.3.20 The investigation spoke with a clinical commissioning group which stated that it would be challenging to dedicate the same amount of resource to track patients on routine follow-up appointment pathways owing to the sheer volume of patients. However, routine pathways are where there are greater numbers of patients who are exposed to the risk of being LTFU.

Process for booking and monitoring appointments for patients on the 18-week referral to treatment (RTT) pathway

- 5.3.21 The investigation also explored guidance in place for the 18-week RTT pathway.
- 5.3.22 According to the NHS

 Constitution (Department of Health and Social Care, 2021), when a new referral is made.

- patients have the right to start consultant-led non-emergency treatment within a maximum of 18 weeks of a GP referral. As such, trusts are required to collect waiting time data in relation to the 18-week RTT. The chief executive of each NHS trust and NHS foundation trust is responsible for ensuring waiting time data for the 18-week RTT pathway is recorded accurately and submitted to NHSE/I.
- 5.3.23 The waiting time 'clock' starts when any care professional or any service permitted to make such referrals, refers to:
- a) 'a consultant-led service,
 regardless of setting, with the
 intention that the patient will
 be assessed and, if appropriate,
 treated before responsibility is
 transferred back to the referring
 health professional or general
 practitioner;
- b) an interface or referral management or assessment service, which may result in an onward referral to a consultant-led service before responsibility is transferred back to the referring health professional or general practitioner.'

 (NHS England, 2015)
- 5.3.24 The RTT clock start date is defined as the date that the provider receives notice of the referral. Trusts are required to record the date so that the RTT waiting time of the patient can start to be tracked.

5.3.25 The RTT clock stops when:

- 'the patient starts consultant-led treatment;
- the patient starts therapy or healthcare science intervention as decided by a consultant;
- the patient is added to a national transplant waiting list;
- the patient is returned to primary care for non consultant-led treatment:
- a decision is made to start a period of active monitoring;
- the patient declines treatment;
- a clinical decision is made not to treat;
- the patient is discharged by their clinician back into the care of their GP.'
 (NHS England, 2015)
- 5.3.26 All trust annual governance statements from April 2015 are required to include an explicit statement on how the trust will assure waiting time data quality, accuracy, and risks. Trusts are also mandated to have regular assurance of waiting time data within their respective accountability frameworks through internal audit, external audit, or quality reports (NHS England, 2015).

- 5.3.27 The Department of Health (2012)
 has recommend that trusts review
 all their waits longer than the
 18-week standards on a monthly
 basis. It recommends monthly
 review reports that should include:
 - waits in the month and the distribution of their Referral to Treatment (RTT) waiting times at specialty level and where possible, separating those specialities reported in national returns under the 'Other' category to ensure greater visibility of those specialities at local level. It may also be helpful to report at sub-specialty level where appropriate (e.g. spinal surgery, bariatric surgery, etc);
 - a breakdown of waits longer than 18 weeks for legitimate reasons (choice and complexity) unnecessary waits;
 - for unnecessary waits, details of the systemic reasons identified, the total length of RTT waiting time and an estimate of the excess wait caused by the reason;
 - a commentary and action plan for resolving unnecessary waits.' (Department of Health, 2012).
- 5.3.28 The NHS England (2015)
 guidance does not provide
 as much detail on roles,
 responsibilities and tracking
 as 'Delivering cancer waiting

times: a good practice guide'
(NHS Improvement, 2016)
for patients with suspected
cancer. However, the focus on
achieving waiting times and
understanding breaches (where
the target timescale has not
been met) means patients on the
18-week RTT are under closer
scrutiny compared to when
their treatment has started and
they are on planned waiting lists
requiring follow-up care.

- 5.3.29 The way in which the reference event Trust tracked its 18-week RTT patients was to record each step of the patient's pathway (outpatient appointment, diagnostic appointment, preassessment, admission, discharge, any decisions by patients or clinicians to delay treatment) into their PAS. Administration staff would be informed of clinic outcomes via a 'clinic outcome sheet' which was to be completed by the clinician and attached to the front of the patient's notes. The clinic outcome would then be manually transposed into the PAS.
- 5.3.30 It was the responsibility of the 'waiting list holder' to regularly validate waiting lists to ensure they were always complete and correct. This information was then reported to the Trust board, executive committee, divisional performance reviews and 18-week elective access waiting list group meeting.
- 5.3.31 Similar to the two-week wait pathway, the 18-week RTT process relied on the vigilance

and diligence of the administration staff to keep reviewing, monitoring, and updating the PAS to ensure 18-week RTT waiting times were met.

Trust-led initiatives

- 5.3.32 Many trusts across the NHS are implementing electronic patient record systems and some trusts are embracing technology further by integrating IT with their clinical and appointment booking processes. The investigation spoke with three trusts about the systems and processes they had put in place to reduce the likelihood of intended appointments after an inpatient stay not being booked and/or a patient being LTFU. For example, one trust had fully integrated its outpatient appointment process with its electronic patient record system which meant all patients were automatically tracked and could be accounted for without relying on the vigilance of staff.
- 5.3.33 Details of the trust initiatives have been outlined in the appendix of this report, to provide some examples for how technology and mitigations to prevent patients being LTFU could be integrated into the outpatient booking process.

Establishing a model of 'what good looks like'

5.3.34 NHSX is developing a 'Tech Plan' for health and care (NHSX, 2020) by understanding how it can best support the health and care system to deliver the goals set out in the NHS Long Term Plan (NHS England, 2019), the Department of Health and Social Care's vision for digital, data and technology (Department of Health and Social Care, 2018), and NHS People Plan (NHS, 2020). One of the aims in the NHS Long Term Plan is for every NHS provider to be digitised by 2024. The Tech Plan aims to support the delivery of this aim and establish what might need to be developed to achieve it. The Tech Plan is being 'informed and coproduced by those on the front line, who are already bringing together people, technology and infrastructure to transform health and care' (NHSX, 2020).

5.3.35 The investigation spoke with a Senior Programme Lead at NHSX who was establishing a model of 'what good looks like' as part of the Tech Plan. The aim of this programme is to 'set clear criteria for different sorts of providers that leaders can use and will feed into the NHS's improvement methodology and CQC [Care Quality Commission] inspections' (Health Tech Newspaper, 2020). The Senior Programme Lead stated that the findings of this investigation, particularly those regarding trust-related initiatives (see Appendix) could provide examples of what good looks like. Other trusts could use these examples to improve assurance

of their own digital systems and outpatient appointment booking processes.

5.3.36 The investigation noted there are findings and safety recommendations from other HSIB investigations that may also be beneficial for informing organisations on what good looks like. For example, the HSIB investigation in to 'Electronic prescribing and medicines administration [ePMA] systems and safe discharge' (Healthcare Safety Investigation Branch, 2019) identified opportunities and systemic remedies to reduce the risk of medication errors when using ePMA systems.

HSIB makes the following safety recommendation

Safety recommendation R/2021/123:

HSIB recommends that NHSX's What Good Looks Like programme includes a requirement for organisations to be responsive to HSIB reports and recommendations within the 'Safe Practice' section of its guidance.

Summary, conclusion and safety recommendation

- 5.3.37 Overall, the investigation identified the following gaps in current booking processes for outpatient appointments:
- There is limited assurance that intended follow-up appointments are booked for patients who are not on a two-week wait or 18-week RTT pathway.

- Assurance is built into some outpatient appointment booking processes such as the two-week wait and 18-week RTT pathways. However, this assurance is resource intensive and often relies on the vigilance and diligence of staff.
- Some trusts do not know that an intended appointment has not been booked unless the patient informs them. As such, these events are often not reported.
- There is a lack of interoperability between IT systems which adds complexity and increases the likelihood of errors in the process.
- There is a national drive to redesign outpatient services so that up to a third of face-to-face appointment visits are avoided (NHS England, 2019). The national initiatives to transform outpatient services are not focused on building in assurance that intended appointments are booked beyond particular groups of patients, such as those on a patient-initiated follow-up pathway.
- Digital transformation is placing more emphasis on patients having greater autonomy in their healthcare. While this may reduce unnecessary appointments, improve efficiency, reduce DNAs and may prevent some patients becoming 'lost to follow-up' (LTFU) it does not provide assurance to trusts that intended appointments are made.

- The investigation recognises that providing greater patient autonomy in healthcare will not be appropriate for all patients.
- 5.3.38 The investigation found there were opportunities for improving and building in assurance processes into the outpatient booking process:
- There is an opportunity to integrate IT with appointment booking processes.
- Some trusts were undertaking work to reduce the number of patients LTFU. Their systems embraced technology and reduced the reliance on the vigilance of staff. One trust had fully integrated its outpatient appointment process with its IT system which meant all patients were automatically tracked and could be accounted for without relying on the vigilance of staff.
- The NHSX What Good Looks Like programme has the potential to share improvements in practice which integrate IT systems with appointment booking processes to provide assurance that intended appointments are booked.
- There is a national drive to improve interoperability between IT systems. This will help to reduce error and improve patient safety, including the outpatient booking process.

HSIB makes the following safety recommendation

Safety recommendation R/2021/122:

HSIB recommends that NHS England and NHS Improvement develops standards and an operating framework that describes the assurance required for all outpatient appointment booking processes, including after an inpatient stay. The assurance should include feedback mechanisms which provide safeguards that intended outpatient appointments are booked. Ideally, solutions will use technology and automation to create resilience and efficiency so that there is less reliance on staff vigilance.





6 References

British Psychological Society. (2010) Guidelines on Memory and the Law. Recommendations from the Scientific Study of Human Memory. Leicester: The British Psychological Society.

Cooke, M. W. (2014). Intelligent use of indicators and targets to improve emergency care. Emergency Medicine Journal, 31, 5-6.

Davis, A., Baldwin, A., Hingorani, M., Dwyer, A. and Flanagan, D. (2017) A review of 145234 ophthalmic patient episodes lost to follow-up. Eye, 31 (3), 422-429.

Department of Health. (2012) Referral to treatment consultant-led waiting times. Reviewing the pathways of patients who have waited longer than 18 weeks before starting their treatment [Online]. Available at https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/04/Reviewing-pathways-over-18-weeks-January-2012-Final.pdf (Accessed 22 September 2020).

Department of Health and Social Care. (2018) Policy paper. The future of healthcare: our vision for digital, data and technology in health and care [Online]. Available at https://www.gov.uk/government/publications/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care (Accessed 27 November 2020).

Department of Health and Social Care. (2021) Guidance. Handbook to the NHS Constitution for England [Online]. Available at https://www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england/the-handbook-to-the-nhs-constitution-for-england (Accessed 18 March 2021).

Digital Health. (2018) Interoperability now the top priority for NHS IT leaders [Online]. Available at https://www.digitalhealth.net/2018/07/interoperability-now-the-top-priority-for-nhs-it-leaders/#:~:text=The%20annual%20NHS%20 IT%20Leadership%20Survey%2C%20carried%20out,the%20views%20of%20 healthcare%20IT%20leaders%20in%202018 (Accessed 8 October 2020).

Health Tech Newspaper. (2020) NHSX launches Tech Plan call for engagement [Online]. Available at https://www.thehtn.co.uk/2020/02/27/nhsx-launchestech-plan-call-for-engagement/ (Accessed 27 November 2020).

Healthcare Safety Investigation Branch. (2019) Electronic prescribing and medicines administration systems and safe discharge [Online]. Available at https://www.hsib.org.uk/investigations-cases/epma-systems-and-safe-discharge/ (Accessed 7 December 2020).

Healthcare Safety Investigation Branch. (2020a) Unplanned delayed removal of ureteric stents [Online]. Available at https://www.hsib.org.uk/investigations-cases/unplanned-delayed-removal-ureteric-stents/ (Accessed 16 December 2020).

Healthcare Safety Investigation Branch. (2020b) Lack of timely monitoring of patients with glaucoma [Online]. Available at https://www.hsib.org.uk/investigations-cases/lack-timely-monitoring-patients-glaucoma/ (Accessed 7 December 2020).

Healthcare Safety Investigation Branch. (2020c) COVID-19 transmission in hospitals: management of the risk – a prospective safety investigation [Online]. Available at https://www.hsib.org.uk/investigations-cases/covid-19-transmission-hospitals/ (Accessed 7 December 2020).

Hendrick, K. and Benner, L. (1987) Investigating Accidents with S-T-E-P. New York: Marcel Dekker.

NHS. (2019) Clinically-led review of NHS access standards. Interim report from the NHS National Medical Director [Online]. Available at https://www.england.nhs.uk/wp-content/uploads/2019/03/CRS-Interim-Report.pdf (Accessed 16 December 2020).

NHS. (2020) We are the NHS: People Plan 2020/21 – action for us all [Online]. Available at https://www.england.nhs.uk/wp-content/uploads/2020/07/We-Are-The-NHS-Action-For-All-Of-Us-FINAL-March-21.pdf (Accessed 16 December 2020).

NHS Benchmarking Network. (2019a) Projects. Outpatient services [Online]. Available at https://www.nhsbenchmarking.nhs.uk/projects/2017/4/10/outpatient-services (Accessed 23 October 2020).

NHS Benchmarking Network. (2019b) Outpatients benchmarking 2019 summary report.

NHS Benchmarking Network. (2019c) 2019 Outpatients project – results published [Online]. Available at https://www.nhsbenchmarking.nhs.uk/news/2019-outpatients-project-results-published#:~:text=The%20NHS%20Long%20 Term%20Plan%20%28LTP%29%2C%20published%20in,models%20being%20 reviewed%20to%20offer%20virtual%20outpatient%20appointments (Accessed 23 October 2020).

NHS Digital. (2018) Hospital outpatient activity, 2017-18 [Online]. Available at https://digital.nhs.uk/data-and-information/publications/statistical/hospital-outpatient-activity/2017-18 (Accessed 20 January 2021).

NHS Digital. (2020) NHS e-Referral Service [Online]. Available at https://digital.nhs.uk/services/e-referral-service (Accessed 8 October 2020).

NHS England. (2015) Recording and reporting referral to treatment (RTT) waiting times for consultant-led elective care [Online]. Available at https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/04/Recording-and-reporting-RTT-guidance-v24-2-PDF-703K.pdf (Accessed 22 September 2020).

NHS England. (2019) The NHS Long Term Plan [Online]. Available at https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/(Accessed 22 September 2020).

NHS England and NHS Improvement. (2019) Transforming elective care services gynaecology [Online]. Available at https://www.england.nhs.uk/wp-content/uploads/2019/06/gynaecology-elective-care-handbook.pdf (Accessed 22 September 2020).

NHS Interim Management and Support (2016) Delivering cancer waiting times. A good practice guide [Online]. Available at https://www.england.nhs.uk/wp-content/uploads/2015/03/delivering-cancer-wait-times.pdf (Accessed 22 September 2020).

NHSX. (2020) Developing a plan for tech in health and care [Online]. Available at https://jointheconversation.scwcsu.nhs.uk/tech-plan (Accessed 27 November 2020).

Professional Record Standards Body. (2019) Implementation guidance report eDischarge standard V2.1 [Online]. Available at https://theprsb.org/wp-content/uploads/2019/02/eDischarge-Summary-Maintenance-Release-Implementation-Guidance-Report-v2.1-23.1.19.pdf (Accessed 5 November 2020).

Royal College of Physicians. (2018) Outpatients: the future – adding value through sustainability [Online]. Available at https://www.rcplondon.ac.uk/projects/outputs/outpatients-future-adding-value-through-sustainability (Accessed 16 December 2020).

The Shelford Group. (2019) Transforming care through technology. A toolkit for new models of outpatient care [Online]. Available at https://shelfordgroup.org/wp-content/uploads/2019/09/Transforming-care-through-technology-toolkit.pdf (Accessed 22 September 2020).

Salmon, P.M., Stanton, N.A., Lenné, M., Jenkins, D.P., Rafferty, L., and Walker, G.H. (2011) Human Factors Methods and Accident Analysis. Practical Guidance and Case Study Applications. Farnham: Ashgate Publishing Limited.

Svedung, J. and Rasmussen, J. (2002) Graphic representation of accident scenarios: mapping system structure and the causation of accidents. Safety Science, 40 (5), 397-417.

Wimble, K. (2012) Improving patient follow-up after inpatient stay. BMJ Quality Improvement Reports [Online]. Available at https://bmjopenquality.bmj.com/content/bmjqir/1/1/u474.w148.full.pdf?with-ds=yes (Accessed 22 July 2020).

7 Appendix

Trust-led initiatives for improving assurance of outpatient appointment booking processes

The investigation spoke with three trusts about systems and processes they had put in place to reduce the likelihood of intended appointments after an inpatient stay not being booked and/or a patient being lost to follow-up (LTFU).

Trust 1

Trust 1 had integrated its IT system into its outpatient appointment process which meant it was "now very difficult to have lost to follow-up patients".

The Trust reported that doctors were the only staff who could order an appointment and it was their responsibility to place the

appointment request onto the IT system. When the request for an appointment was placed, the requesting doctor assessed the clinical priority of the patient as either 'red', 'amber' or 'green' (see **Table 1**). The priority given would depend on whether the patient must be seen in a specific time or whether there was a degree of flexibility for when the appointment was required. The trust had a system of reviewing the priority scores of each patient to ensure that all patients were seen within the threshold of their priority score. The appointment request would be placed automatically in a work queue, in clinical priority order, where administrative staff could then schedule the outpatient appointment. An appointment letter would then be issued to the patient.

Table 1 Priority stratification for appointments

Priority stratification for outpatient activity

Priority (button)	Definition (guidance)	Time frames New referral booking (may vary per speciality)	Time frames Follow-up booking (may vary per speciality)	Reported as overdue outpatient appointment at
P1a - Immediate	Immediate action is required - to prevent death, loss of organ function/limb or eye sight	Advice to attend emergency department or ambulatory care unit within 24 hours	Not applicable	Not applicable
P1b - Acute	Urgent action is required - to prevent serious clinical harm or permanent injury	Emergency / ambulatory Outpatients appointment within 72 hours	Not applicable	Not applicable
P2 - High	Likelihood of sustained severe harm/pain/psychological injury/effect on functional ability/quality of life may occur as result of his condition	Very short time frame (e.g. 2 weeks)	Appointment must be booked within the stated interval for which it was ordered (no delay possible)	Stated interval Failsafe: stated date
P3 - Moderate	Likelihood of reversible moderate/harm/ psychological injury/effect on functional ability/ quality of life may occur as result of this condition	Short time frame (e.g. 6-8 weeks)	Appointment to be booked to stated interval + no more than 25%	Stated interval +25% Failsafe: stated date +25%
P4 Low	Likelihood of no or mild symptoms or mild reversible reduced function/ harm may occur as result of this condition	In turn	Appointment to be booked to stated interval + 25%	Stated interval +25% Failsafe: stated date +25%

The IT system meant that the assurance process for ensuring intended outpatient appointments had been booked was more robust. Trust 1 was able to create a report. which was reviewed every two weeks, which included overdue follow-up appointments. This report was discussed monthly at the trust's outpatients board meeting. Individual specialties were also expected to electronically monitor their patient tracking lists and could see which patients were waiting for an appointment. They could also monitor any breaches of the timescales given for receiving an appointment and so ensure patients were seen in a timely manner. Those specialties with high numbers of follow-up patients also had support from a 'failsafe team' who regularly reviewed the backlog and highlighted any patients who were close to going outside of the timeframe determined by their priority score.

It was reported that a failure point in the process was if a doctor did not place the appointment order into the IT system, especially at the point of discharge. This could be particularly problematic when a patient was being discharged from one specialty but was being referred to another. This was because the discharging specialty would need to remember to request the appointment for the other specialty. In addition, the system may query the authority of the requesting doctor to request an appointment for another specialty.

Once the appointment request was successfully placed, there were electronic safety nets and risk controls in place to ensure each patient was accounted for.

Trust 1 reported that there remained some challenges to the outpatient appointment process including clinic capacity and agreeing the risk stratification within and across specialties. The trust also aspired to making further improvements including:

- greater integration of its patient portal to enable patient-initiated follow-up
- using data to produce algorithms that could aid decision making when deciding suitable timescales for a patient's follow-up.

During the height of the COVID-19 pandemic in spring 2020, Trust 1 reported that its outpatient clinics were mainly conducted via telephone, with an increasing number being conducted via videoconferencing facilities. There were also additional challenges such as ordering blood tests and reviewing results as they were not initially linked to the IT system.

The trust reported that the way in which telephone and virtual appointments were requested and made was the same and was integrated into the existing workflow and work queues. The system required clinicians to select the type of appointment

required, whether face to face in a clinic, over the telephone or via videoconferencing.

The investigation sought to gain user perspectives on the outpatient appointment booking process. However, owing to the COVID-19 pandemic, it was not possible to do this.

Trust 2

The investigation spoke with Trust 2 in February/March 2020. It had implemented improvements in its outpatient administrative process following a cluster of incidences where outpatient appointments were intended but had not been booked. Trust 2 discovered there were issues associated with its electronic patient records system where appointments had been missed for a wide range of reasons including system and process errors. There were some issues with discharge letters not being recorded in a timely manner.

The trust was piloting a new discharge process following an inpatient stay whereby the discharge summary created by a doctor was available at the point of discharge. The discharging nurse was then expected to record the patient's discharge on the 'e-whiteboard'. The patient was then automatically placed on a 'ward discharge access plan' which acted as a work list for administration staff to review and action the next steps of the patient's pathway.

The ward discharge access plan should be reviewed and cleared within two working days. The central administration and management team also monitored appointment bookings through a 'failsafe report' to ensure worklists were cleared in a timely and effective manner.

The failsafe report also enabled the central team and management to obtain feedback about what had happened to patients.

The investigation spoke with Trust 2 again in November 2020. It reported that the pilot of the new discharge process was ongoing and improvements to the process were being made as required. For example, the trust had simplified the whiteboard functionality to improve the impact on staff workload and uptake of using the system. Trust 2 also found that getting patients onto the failsafe list and having defined responsibilities was key to preventing patients being LTFU.

Trust 3

In 2016, Trust 3 identified many incidences of patients being LTFU, 28 of which were reported as serious incidents. In response, the Trust reported to the investigation it implemented the following:

 Automated reports of potential LTFU patients for specialty teams to review. These reports were created three times a week.

- A weekly trend tracker which was reviewed at a weekly trust performance meeting to prioritise attention where required.
- Clear processes for specialty teams to follow.
- Training and buddying networks to ensure specialty administrative staff knew what the report meant, how to action it and who to ask for support.
- Workshops to collate expertise, transfer knowledge and support rapid pathway cleansing and action.
- Ongoing liaison with the informatics team to fine tune the report to ensure only potential LTFU patients were highlighted for teams to action.
- Regular feedback sessions to ensure specialty teams knew why patients were being highlighted on the LTFU report and encourage preventative actions.

- A new patient administration system to minimise the opportunity of patients being LTFU through directed workflow and reporting.
 - Trust 3 reported that the COVID-19 pandemic caused a rise in LTFU incidences as outpatient appointments and operational functions were significantly affected from March to July 2020. However, the investigation was informed that the number of incidences was decreasing owing to the mitigations in place and because regular reporting meant it remained high on the agenda for specialty teams.

The investigation sought to speak with booking staff to gain user perspectives on the outpatient appointment booking process. However, it was not possible to do this due to the COVID-19 pandemic.





Further information

More information about HSIB - including its team, investigations and history - is available at www.hsib.org.uk

If you would like to request an investigation then please read our **guidance** before contacting us.

@hsib_org is our Twitter handle.
We use this feed to raise awareness of our work and to direct followers to our publications, news and events.

Contact us

If you would like a response to a query or concern please contact us via email using enquiries@hsib.org.uk

We monitor this inbox during normal office hours - Monday to Friday (not bank holidays) from 09:00 hours to 17:00 hours. We aim to respond to enquiries within five working days.

To access this document in a different format – including braille, large-print or easy-read – please contact enquiries@hsib.org.uk

© Healthcare Safety Investigation Branch copyright 2021. Any enquiries regarding this publication should be sent to us at enquiries@hsib.org.uk