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Horizon scanning tool

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The horizon scanning tool supports health and social care teams to have a forward look at potential or current safety themes and issues

The safety themes and issues you choose to explore using the Horizon Scanning Tool can be identified in several ways, for example:

- from concerns raised during conversations with patients, families, staff or external stakeholders
- by observing how care is delivered
- insights from operational data showing increases in activity and/or demand, for example, increases in the number of referrals, admissions, 999 calls, NHS 111 calls
- Being informed about planned service reconfigurations or changes that affect the way care is delivered
- When developing or reviewing a safety improvement plan.

The horizon scanning tool uses the Systems Engineering Initiative for Patient Safety (SEIPS)[1] framework to structure conversations about work as done and emerging patient and staff safety risks (see SEIPS quick reference and work system explorer).

There are other system-based models and frameworks, for example, the Human Factors Analysis and Classification System (HFACS) and AcciMaps, which you may choose to use to instead of SEIPS when carrying out horizon scanning.

[1] Holden, R.J., Carayon, P., Gurses, A.P., Hoonakker, P., Schoofs Hundt, A., Ozok, A.A. and Rivera-Rodriguez, A,J. (2013) SEIPS 2.0: a human factors framework for studying and improving the work of healthcare professionals and patients. Ergonomics, 56(11), 1669-1686.

Steps	Tips for successful horizon scanning
Step 1: Identify a learning response lead who can facilitate the horizon scanning workshop	• Choose a learning response lead who: – is curious, inquisitive and has the skill set to facilitate an multidisciplinary team (MDT) discussion – will focus on good practice as well as pain points – has capacity and the skill set to scope out and collate different sources of safety information relating to the safety theme or issue being explored.
Horizon scanning question 1: What is happening?	
Prior to the workshop **Step 2: Do some fact finding and scoping work around the safety theme or safety issue being explored**	• Collate the available information on the safety theme or issue you have chosen to explore (eg observations of care, summary of concerns raised, outputs of the review of your organisation's safety improvement plan). • Consider using the time line mapping tool to identify and map key tasks in a pathway or process, or the interaction map tool to summarise insights gained from observing care. • Identify the stakeholders who need to be invited to participate in the horizon-scanning workshop. They will include members of the MDT who deliver care or support functions (eg administrative staff and estates) in the safety theme or issue being reviewed. • Send invitations to the workshop, clearly stating your purpose and scope.
At the workshop **Step 3: Introductions, scope and purpose**	• Clearly introduce the scope and purpose of the workshop.

Steps	Tips for successful horizon scanning
	• Agree with the participants how you will work together to ensure everyone's voice is heard and perspective captured.
Step 4: What is happening? Mapping the process, exploring work as done and identifying current risks	• Iteratively build on the summary you created in Step 2 (eg a timeline or interaction map) using the additional information shared by the workshop participants. • Explore the context in terms of the technology and tools, environment, person, organisation and external influences. Using different coloured post-it notes for each of these elements of the SEIPS framework helps produce a user-friendly process map of 'work as done'. • Referring to the SEIPS framework, clarify what the process aims are (the outcomes), and how the work system components will work together to achieve these outcomes. This could be summarised using an interaction map. • Carry out a work system scan by identifying the current pain points (challenges and barriers) to delivering safe patient care and good practice (ie what is working well, what facilitates safe patient care).
Horizon scanning question 2: What emerging issues and changes are on the horizon?	
Step 5: Take a forward-look: **How will the risks identified at Step 4 be exacerbated or mitigated by future changes/issues?** **What new risks will emerge?**	• Ask participants to identify planned or unplanned changes, emerging issues, or events on the horizon. • Future events may include service reconfigurations, estate, IT systems, staffing levels, pressures on delivering care, external regulatory or other external changes.

Steps	Tips for successful horizon scanning
	• Discuss how these future changes, issues and events will impact on care delivery – that is, what pain points will remain relevant going forward? How will the risks identified in Step 4 be exacerbated or mitigated? What new risks will emerge? • Remember to identify the positive as well as negative impacts of future changes.
Horizon scanning question 3: What have we learned?	
Step 6: Summarise the learning	• To ensure a shared understanding of the pain points, good practice, and impact of future changes, read back and summarise the main points identified. • Encourage participants to constructively challenge and clarify pain points and good practice as you summarise what has been learned. • Ask the question: Are there pain points and aspects of good practice we have not identified?
Horizon scanning question 4: What changes should be made?	
Step 7: Identify safety actions and solutions	• Be guided by the questions in the Safety action development guide to develop your system-based safety actions.
Step 8: Agree next steps	• Thank participants for their insights and agree the next steps. • Clearly assign roles, responsibilities and deadlines.

Appendix: Worked examples – carrying out a horizon scan

Example 1: Horizon scanning the impact of increased referral rates on safe patient care

NHS mental health trust A when developing its patient safety improvement plan identified safety priority areas from reviewing incident and incident investigation reports, complaints, risk registers and other data sources, including operational data on referral rates, staffing levels, staff turnover and ward skill mix. Focus groups were also carried out with staff, patients, carers and other stakeholders within the integrated care system (ICS).

The data analysis identified a significant increase in referrals of young people aged 15 to 17 years throughout the COVID-19 pandemic. Safety concerns were raised in the focus groups relating to the ability of teams to provide safe care to young people given current capacity, high staff turnover and the increased referral rates.

Step 1: Identify a learning response lead who can facilitate the horizon scanning workshop

Learning response lead A who worked for NHS trust A was identified as someone with appropriate expertise and interpersonal skills.

Horizon scanning question 1: What is happening?	
Prior to the workshop **Step 2: Do some fact finding and scoping work around the safety theme or safety issue being explored**	• Learning response lead A **reviewed the data for referral** to both community and inpatient mental health services for 15 to 17-year olds. This showed a 40% increase in referrals for this age group over the two years from the start of the COVID-19 pandemic. • Learning response lead A **also reviewed national reports and past incident data** relating to 15 to 17-year olds. The review identified past safety risks when young people were treated on adult inpatient wards due to insufficient Tier 4 bed capacity; self-harm on children and young people (CYP) wards where a ward had 95% bed occupancy rates for a prolonged time; and harm relating to delays in starting therapeutic treatment following GP referrals. Mental health trusts have to report the numbers of young people being treated on adult inpatient wards to NHS England as one of their key performance indicators. • The CYP pathway was reviewed to explore potential pain points and good practice, specifically focusing on referrals of 15 to 17-year olds. Learning response lead A shadowed two patients' journeys through the pathway and developed **a draft timeline** of

	tasks and observable actions based on the shadowing exercise and review of the pathway documentation. • A two-hour workshop explored patient safety risks along the CYP pathway in view of the concerns raised about the impact of the increase in referral rates.
At the workshop **Step 3: Introductions, scope and purpose**	• Learning response lead A introduced the scope and purpose of the workshop. Workshop participants co-created ground rules to ensure everyone's perspective was heard.
Step 4: What is happening? Mapping the process and exploring work as done	• Learning response lead A used the draft timeline to frame a conversation with participants to identify the current pain points (including barriers and challenges) and good practice, including facilitators of safe patient care, using the six elements of the SEIPS framework (ie tasks, technology and tools, environment, person, organisation and external influences). • Participants completed a work system scan that identified pain points, including: – lack of clear referral information – generic electronic referral and risk assessment proformas, which do not capture information and risks specific to young people – the CYP administrative staff had recently moved to a new workspace: an open plan office with high noise levels and frequent interruptions – staff in the eating disorders team shared their concerns that team members were striving to deliver a safe service in a healthcare system that had not been designed to treat this volume of patients – gaps in the CYP team: one of the senior consultants was on long-term sick leave, two ward sisters were due to go on maternity leave and the team were struggling to recruit healthcare support workers with experience working with young people with eating disorders. • Good practice was also identified – specifically, a positive multidisciplinary team culture where staff members went above and beyond to deliver safe patient care.
Horizon scanning question 2: What emerging issues and changes are on the horizon?	
Step 5: Take a forward-look:	• The 'forward look' discussion focused on how the increase in referrals would impact on delivery of personalised care in environments that met young people's needs. Once again,

How will the risks identified at Step 4 be exacerbated or mitigated by future changes/issues? **What new risks will emerge?**	learning response lead A framed the forward look conversation using the six elements of the SEIPS framework. • **Exacerbated risks:** It was agreed that the increase in referrals would exacerbate the patient safety risks caused by the poor design of electronic and risk assessment pro forma (identified at Step 4): some CYP referrals could get lost in the system. • **Mitigated risks:** The importance of the administrative staff having a suitable workspace was discussed; the team were due to move to a quieter office where there would be fewer interruptions (technology and tools, external influences, physical environment and task). • **Emerging risks:** – Some participants were aware that administrative team members were looking for jobs elsewhere. It was agreed that a high turnover of administrative staff in the CYP team could also increase the risk of losing referral information and delays in processing referrals (organisation and person). – Over the next six months, capacity in the eating disorders unit would not meet the increasing demand on the service: Staff in the eating disorders team shared their concerns that they were at risk of burnout and secondary trauma because of continuing pressures to deliver a safe service in a healthcare system that had not been designed to treat this volume of patients (person, organisation, physical environment). – Participants identified that the increased referral rate could potentially re-introduce a historical risk relating to bed management decisions that increased the number of young people treated on adult inpatient wards or out of area referrals (organisation and task).
Horizon scanning question 3: What have we learned?	
Step 6: Summarise the learning	The learning was summarised as follows: • The potential re-emergence of historical risks where, in response to overwhelming bed pressures on the inpatient service and limited bed capacity, young people were cared for on adult inpatient wards. • Young people referred to out of area mental health units for treatment. • Referrals to the CYP team getting lost in the referral system because of factors including volume of referrals, the design of

	referral and risk assessment pro formas, gaps in referral pathways and admissions criteria, and the high turnover and high workload of administrative staff. • Delays in admitting and treating young people with eating disorders. • Psychological harm to staff working in the CYP service, especially the eating disorders team.
Horizon scanning question 4: What changes should be made?	
Step 7: Identify areas for improvement	• Learning response lead A asked the staff participating in the workshop to identify areas for improvement. • Together the group identified and prioritised areas for improvement using the safety action development guide. Some issues needed further work across the ICS to ensure commissioning decisions reflected the increasing demands, and the referral and admissions criteria and pro formas were redesigned.
Step 8: Agree next steps	• Learning response lead A thanked participants for their insights. Roles, responsibilities, and deadlines were assigned.

Example 2: Horizon scanning the transition to a paperless electronic healthcare record

Step 1: Identify a learning response lead who can facilitate the horizon scanning workshop

Patient safety specialist B who worked for NHS trust A was identified as someone with appropriate expertise and interpersonal skills.

Horizon scanning question 1: What is happening?	
Prior to the workshop **Step 2: Do some fact finding and scoping work around the safety theme or safety issue being explored**	• Patient safety specialist B interviewed the theatre teams and administrative staff who had participated in user group meetings with the external supplier commissioned to deliver the electronic patient record (EPR). • She observed the use of the EPR in another similar NHS trust and user group meetings with theatre team members in her own trust. • A group of stakeholders including surgeons, theatre nurses, anaesthetists, OHPs, surgical admissions. administrators, recovery team members and IT experts were invited to participate in the workshop. • Two surgical pathways (orthopaedic spinal surgery and ENT surgery) were to be used to explore potential pain points and good practice. Patient safety specialist B spent time observing theatre lists for these two pathways and developed a draft **process map**[2] for each pathway. • Two workshops were set up, one for orthopaedic spinal surgery and one for ENT surgery.
At the workshop **Step 3: Introductions, scope and purpose**	• Patient safety specialist B introduced the scope and purpose of the workshop. Workshop participants co-created ground rules to ensure everyone's perspective was heard.

[2] A process map visually represents the individual steps in a process, identifying task owners and detailing expected timelines and so giving teams a better understanding of a process and its components. There are different types of process maps and you may refer to them by a different name.

Step 4: What is happening? Mapping the process and exploring work as done	The draft **process map** was used to frame a conversation with participants to identify the current pain points and good practice. These included: • A culture of last-minute changes to the theatre list: It had become the norm for theatre lists to change and patients to be cancelled or their order changed. When this happened, the theatre team annotated the paper theatre list and confirmed the final list order at the team brief and in conversations they had throughout the day. • Tracking where patients were in the hospital on the day of surgery. • There was good practice relating to team engagement with the surgical safety checklists, and a positive culture of whole team involvement in the morning team brief.
Horizon scanning question 2: What emerging changes and issues are on the horizon?	
Step 5: Take a forward-look: **How will the risks identified at Step 4 be exacerbated or mitigated by future changes/issues?** **What new risks will emerge?**	The forward-look walked through how transitioning to an electronic healthcare record would impact on the risks identified at Step 4, including: • **Exacerbated risks:** How the pain point relating to late changes to a theatre list identified at Step 4 would be exacerbated if the theatre team had no paper theatre list to annotate. • **Mitigated risks:** How the risk relating to tracking patient location in the hospital would be mitigated by the EPR: The patient tracking functionality of the new IT system would make it easier to track patients. This would save time and reduce distractions and interruptions on the morning of the theatre list. • **Emerging risks:** – Taking consent (which starts at a patient's outpatient appointment(s)). Some outpatient appointments are carried out at satellite sites where the new EPR system was not being implemented. – How theatre teams complete the team brief, surgical safety checklist and debrief (without a paper checklist to refer to).

Horizon scanning question 3: What have we learned?	
Step 6: Summarise the learning	It was agreed there were safety risks relating to: • How to maintain the good practice of creating shared team situational awareness of late changes to the theatre list following the introduction of the new EPR system. • The transition to paperless consent (especially for patients whose outpatient appointments are at satellite sites and who, as a result, will not be entered into the patient journey on the EPR system at their preoperative outpatient appointment). • Theatre teams carrying out the time out and sign out when the surgical safety checklist transitions from being paper based to hosted on the EPR.
Horizon scanning question 4: What changes should be made?	
Step 7: Identify areas for improvement	• Together the group identified and prioritised areas for improvement using the safety action development guide. • Patient safety specialist B empowered workshop participants to identify safety actions for the identified areas for improvement. • Immediate solutions could not be identified for some of the issues. Participants decided to use **simulation**[3] and walk-throughs to further test how the transition to an EPR could be safely introduced without compromising the quality of the team brief, surgical safety checks and debrief.
Step 8: Agree next steps	• Patient safety specialist B thanked participants for their insights. Roles, responsibilities, and deadlines were clearly assigned.

[3] A simulation is the imitation of the operation of a real-world process or system over time.