Local safety standards in invasive procedures in pain medicine

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Introduction
A study in 2009 reported that a series of serious incidences deemed preventable with guidance and safety measures, defined by the NHS Events Framework as Never Events (NE), continue to happen across the UK. To mitigate these serious incidents, the National Patient Safety Agency (NPSA) released a report recommending the creation and implementation of National Safety Standards for Invasive Procedures (NatSSIPs), and when applied at a local level, Local Safety Standards for Invasive Procedures (LocSSIPs).

Materials and methods
In 2017, University Hospitals Birmingham NHS Foundation Trust (UHB) set up a LocSSIP steering committee, with the commitment to develop and implement LocSSIPs across the trust. The aim of this committee was to ensure the ongoing safety of patients under UHB care and achieve a measurable reduction of serious incidences in invasive procedures conducted outside of theatres. Our aim was to create and develop LocSSIPs within the Pain Medicine Department. By making patient safety central to the introduction, we were able to identify several procedures that could benefit from LocSSIPs. Those procedures included nerve root blocks, epidurals, and denervation.
Using the Model for Improvement method, the project plan was divided into four phases: scoping, development, implementation and maintenance and monitoring. We collaborated with a LocSSIP ‘champion’ within pain medicine and identified key procedures which would require LocSSIPs.

To standardise safety checks UHB has developed five key areas or elements of safety pertaining to the operator, the patient, allergies, procedural and post-procedural care. Our safety standards were framed on NPSA guidance, safety alerts and standards of the WHO checklist but tailored for procedures within pain medicine. Following implementation, compliance was audited quarterly.

Results and discussion
LocSSIPs were developed and approved with all five key elements included (Fig 1).

Following a successful trial beginning in November 2020, the LocSSIPs were fully rolled out in January 2021. The first audit cycle in June 2021 showed compliance of 100% in the use of the LocSSIPs and correctly completed LocSSIPs was 83.3%. The second audit cycle in October showed compliance of 100%, but only 73% of those were correctly completed. Following further education on the use of LocSSIPs within the department, a third cycle audit of January 2022 showed an improvement of correctly completed LocSSIPs of 86% (Fig 2).

There has not been any reported NE or serious incidents in UHB since the introduction of the LocSSIPs.

The five key elements serve to ensure that at each point pre-procedure and post-procedure integral safety checks are completed.

Continuous feedback from the team is encouraged to improve compliance in use and correctly completed LocSSIPs. The checklists were also updated to reflect recent patient safety alerts and to make them more user-friendly for staff.

Conclusion
There is overall good compliance, however, as with every quality improvement process, the work is longitudinal, and the troubleshooting process is still ongoing. Continuous auditing and monitoring of their use are required as well as the long-term effects on serious incidents to determine the true impact of LocSSIPs on patient safety in invasive procedures.

References