

# LOCAL SAFETY STANDARDS IN INVASIVE PROCEDURES IN PAIN MEDICINE

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## Introduction

A study in 2009 reported a series of serious incidents deemed preventable with guidance and safety measures, defined by the NHS Events Framework as Never Events (NE)1, which continue to happen across the United Kingdom. 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)2, and when applied at a local level, Local Safety Standards for Invasive Procedures (LocSSIPs).

## Materials and methods

In 2017, University Hospitals Birmingham (UHB) NHS Foundation Trust 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 project, we were able to identify several procedures that could benefit from LocSSIPs. These procedures include nerve root blocks, epidurals, and denervation.

Using the Model for Improvement method, the project plan was divided into 4 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 5 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 5 key elements included. (Image 1)

Following a successful trial beginning in November 2020, the LocSSIP was fully rolled out in January 2021. 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 with the department, third cycle audit of January 2022 showed an improvement of correctly completed LocSSIPs of 86%. (Table 1)

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

Each of the 5 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.

**Pain Management LocSSIP For Chronic Pain injections ONLY**

(adapted from the WHO checklist) Has the patient been discussed at the Team Briefing? ☐ Yes ☐ No (If no - please give reason why):

**SIGN IN (To be read out loud)** **STOP - is everyone listening?**

Immediately after patient enters procedure area

Name and designation of performing practitioner: \_\_\_\_\_  
Responsible Consultant for the procedure: \_\_\_\_\_

Patient states details to team:  
Name and DOB match wristband and consent form Yes ☐ No ☐  
Name of procedure? Yes ☐ No ☐  
Procedure site? ☐ Right ☐ Left ☐ Bilateral  
Procedure side and site marked: Yes ☐ No ☐ N/A (emptied)  
Is there valid consent? Yes ☐ No ☐  
Has the patient confirmed pregnancy status if appropriate? ☐ Not appropriate ☐ Yes ☐ No ☐  
Known allergy? ☐ Yes - details \_\_\_\_\_ No ☐  
Anticoagulant/antiplatelet drugs stopped? ☐ Yes ☐ No - details \_\_\_\_\_ N/A ☐  
Does the patient have any metallic implants, including pacemaker or defibrillator or spinal cord stimulator? ☐ Yes - details \_\_\_\_\_ No ☐  
Has the patient had any antibiotics in the last 5 weeks? ☐ Yes - details \_\_\_\_\_ No ☐  
Signature \_\_\_\_\_  
Name and designation \_\_\_\_\_

**TIME OUT (To be read out loud)** **STOP - is everyone listening?**

Before start of injection

Confirm names and roles of everyone are known to all of the team  
☐ Yes ☐ No

All members of the team verbally confirm:  
☐ Patient's name, DOB and ID number against consent and wristband  
☐ Planned procedure site, side and position

Procedure:  
Are any variations to the standard procedure planned or likely? ☐ Yes - details \_\_\_\_\_ No ☐  
Patient:  
Are there any patient-specific concerns? ☐ Yes - details \_\_\_\_\_ No ☐  
Equipment:  
☐ Any equipment issues or concerns  
☐ X-ray  
☐ Ultrasound  
☐ Radiofrequency

Grounding pad: ☐ Yes - site \_\_\_\_\_ No ☐  
Cannula: ☐ Yes - site \_\_\_\_\_ No ☐  
Confirm the correct drug and dose to be injected  
☐ Yes - details \_\_\_\_\_ No ☐  
All medication drawn up in closed system Yes ☐ No ☐  
Immediately prior to injection - correct site confirmed verbally ☐ Yes ☐ No ☐  
Signature \_\_\_\_\_  
Name and designation \_\_\_\_\_

**SIGN OUT (To be read out loud)** **STOP - is everyone listening?**

Before any member of the team leaves the procedure area

Registered Practitioner verbally confirms with the team:  
☐ Name and side of the procedure been recorded?  
Swabs, sharps, guide wires, and instruments intact and accounted for? ☐ Yes ☐ No - details \_\_\_\_\_  
Grounding pads removed? ☐ Yes ☐ N/A  
Cannula removed? ☐ Yes ☐ N/A  
Cannulae/lines flushed ☐ Yes ☐ N/A  
Key concerns for recovery and/or changes to discharge protocol discussed? ☐ Yes ☐ No - details \_\_\_\_\_  
Has post procedural advice given to the patient? ☐ Yes ☐ No - details \_\_\_\_\_  
Date \_\_\_\_\_  
Procedure area \_\_\_\_\_  
Signature \_\_\_\_\_  
Name and designation \_\_\_\_\_

**This modified checklist must not be used for other procedures**

Responsible Consultant: \_\_\_\_\_  
Date and time of procedure: \_\_\_\_\_

**PATIENT DETAILS / LABEL**  
Last name: \_\_\_\_\_  
First name: \_\_\_\_\_  
Date of birth: \_\_\_\_\_ NHS Number: \_\_\_\_\_  
\*If the NHS number is not immediately available, a temporary number should be used.

For any procedure with the need for a change in position mid procedure, or differing operative sites an additional TIME OUT and SIGN OUT must be completed

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Image 1: Pain Management LocSSIPs

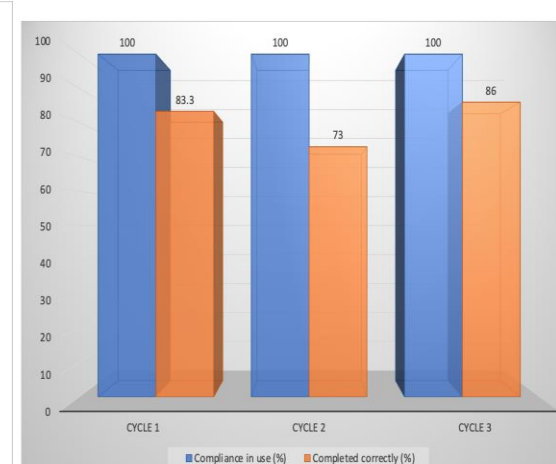


Table 1: Compliance and correctly completed LocSSIPs in %

## 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:** 1. NHS Improvement Never Events Policy and Framework. <https://www.england.nhs.uk/patient-safety/revised-never-events-policy-and-framework> [Accessed 11 February 2022].

2. NHS Improvement National safety standards for invasive procedures (NatSSIPs) <https://www.england.nhs.uk/patient-safety/natssips> [Accessed 11 February 2022].

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