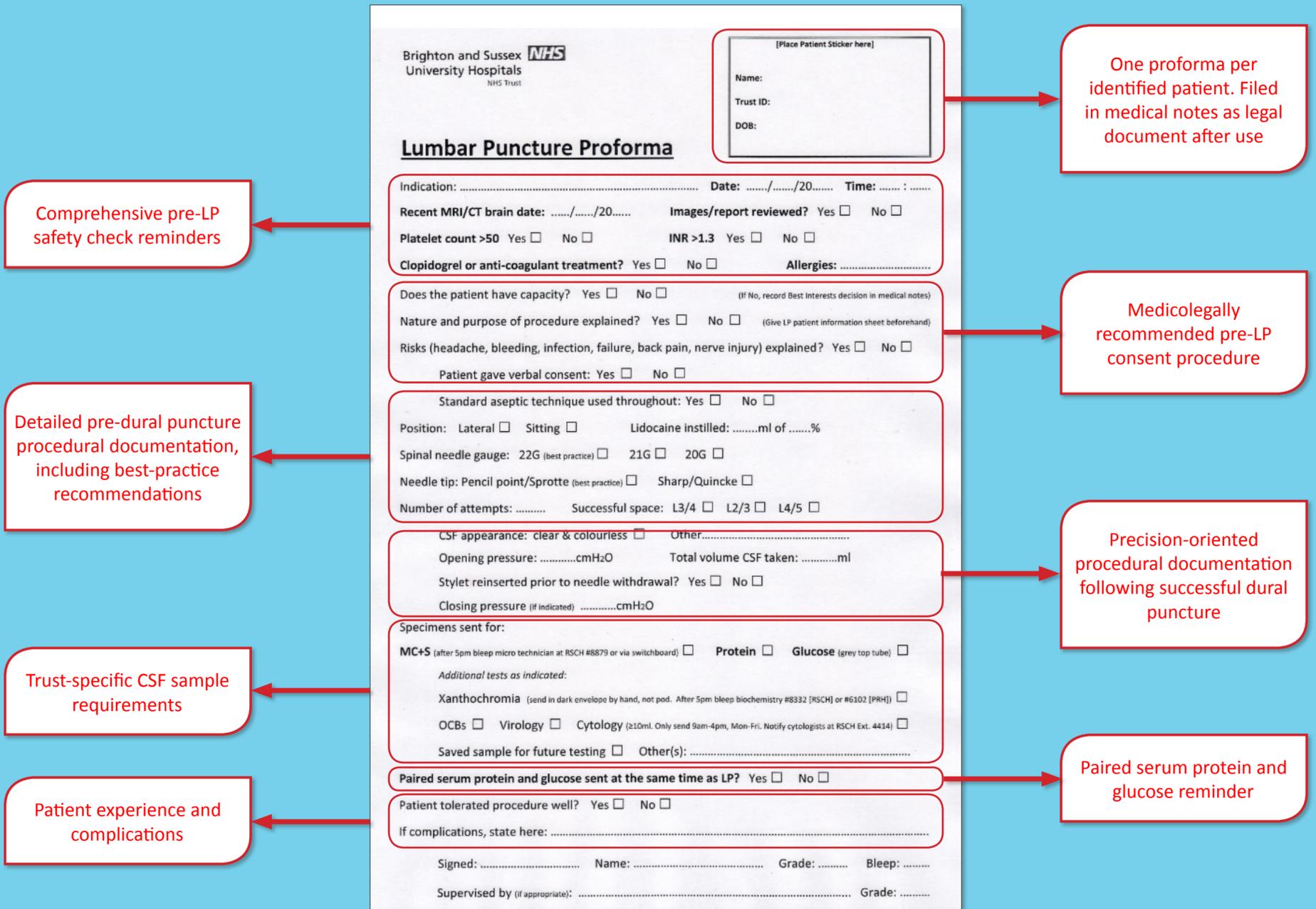


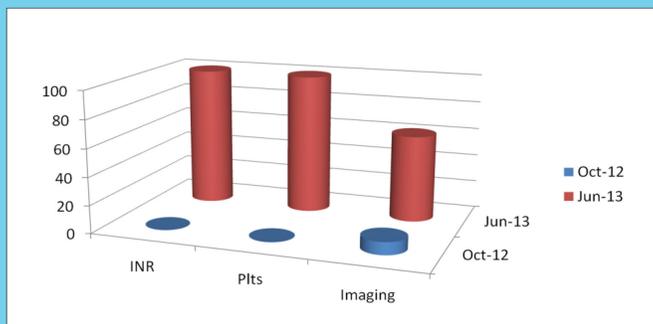
The Lumbar Puncture Proforma: Audit of a Novel Intervention to Improve Patient Safety

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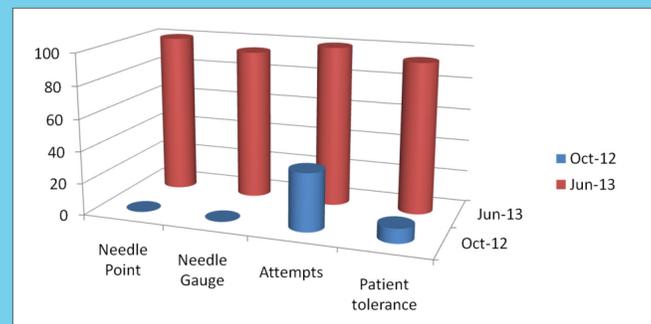
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Safety Check Improvements



Procedure Documentation



1. Aim

Lumbar puncture (LP) is a common procedure in acute medicine. The potentially serious associated risks of headache, bleeding and cerebral herniation¹ can be reduced using safety checks and optimal technique². Following several near-miss incidents involving LPs in our Trust, we undertook an audit cycle in order to improve patient safety.

2. Methods

We audited a representative sample of 11 sets of patient medical notes who had undergone an LP in our Trust over a one month period. Based on these results we designed a novel LP proforma in order to facilitate best practice. Printed copies were made available and an electronic version was placed on the Acute Medical Unit's intranet site. To assess its long-term effect and direct further work, a reaudit of 16 representative sets of medical notes was undertaken over June 2013, six months after the initial intervention.

3. Results

The initial audit demonstrated universally poor documentation of safety checks and LP technique. No patient had their clotting or platelet count documented, nor was needle gauge, stylet technique and needle point-type mentioned. 9% had documented cerebral imaging review prior to LP, 9% documented the presence or absence of complications, and 36% documented the total number of LP attempts.

Significant improvements in all key domains were found in the reaudit following introduction of the LP proforma. Every patient had clotting, platelet count, needle point-type and number of attempts documented. 94% of patients had needle gauge and the presence or absence of complications documented. 81% had stylet technique recorded and 62% had documented review of pre-LP cerebral imaging.

4. Conclusion

Standardised LP proformas can have a significant effect on improving documentation, promoting best practice and safeguarding patient safety. We encourage other Trusts to implement their own LP proformas, and offer ours as a template for their use and adaptation. If interested, please contact: robertbrodrick@doctors.org.uk