IT Digoxin caused long lasting paraplegia in 5 patients. IT or ED vasopressors or inotropes caused reversible haemodynamic changes of variable duration.

Primary causes included ampoule errors (mostly for digoxin and labelalol), syringe swaps (in cases of ephedrine, epinephrine and metaraminol) and ED-IV line confusion (for phenylephrine and mexiletine infusions). NRFit could have prevented 14 (of 34) errors.

Table 2 lists the human factor contributing to the errors. Conclusions Bar coding of both ampoules and syringes would have prevented several errors. In the absence of barcode reader or human double checking, NRFit devices could have prevented 14 misconnection (syringe or IV infusion lines) mistakes. Correction of deficiencies (e.g., high risk CV drug ampoules and syringes location, substandard supervision of anaesthesia residents/assistants) identified using HFACS are also fundamental. Management following neuraxial CV drugs is supportive.

Background and Aims The technique of drawing up opioids for spinal anaesthesia can lead to error. We identified stages in the process which could be overlooked by the anaesthetist causing inadvertent overdosing or underdosing of opioids. This error is usually made by inclusion of residual fluid in the tip of the syringe, due to withdrawing the opioid in the 1 ml syringe (figure 1a) rather than injecting (figure 1b). The tip contains 0.05–0.07 ml of greatest significance when dealing with small and concentrated amounts of opioid. We aimed to survey the department to identify the proportion of anaesthetists that were using a technique leading to inadvertent error.

Methods We identified fifty-seven anaesthetists in the department and surveyed their process of drawing up drugs for intrathecal injection. The main focus of the survey was the technique used to transfer the opioid into the spinal syringe injectate including the use of the filter needle.

Results Data was captured from 47/57 anaesthetists, the majority consultants. 40% of the department were administering a dose error of spinal fentanyl. 35% of the department were administering a dose error of spinal morphine and diamorphine. The filter needle was used inappropriately in 14% of cases.

Conclusions Precision is essential in regional anaesthesia when using small and concentrated amounts of opioid in the injectate, therefore the inclusion of the amount in the tip can lead to significant dose error. We presented the results and re-educated the department in our clinical governance meeting.