

Hypoglycaemia Screening in Neonates (A Quality Improvement Project)

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Objectives

To enable the process of performing hypoglycaemia screen easier and quicker in qualifying babies, utilising visual aids in the treatment room and the creation of a grouped order list in the local Information Technology (IT) system.

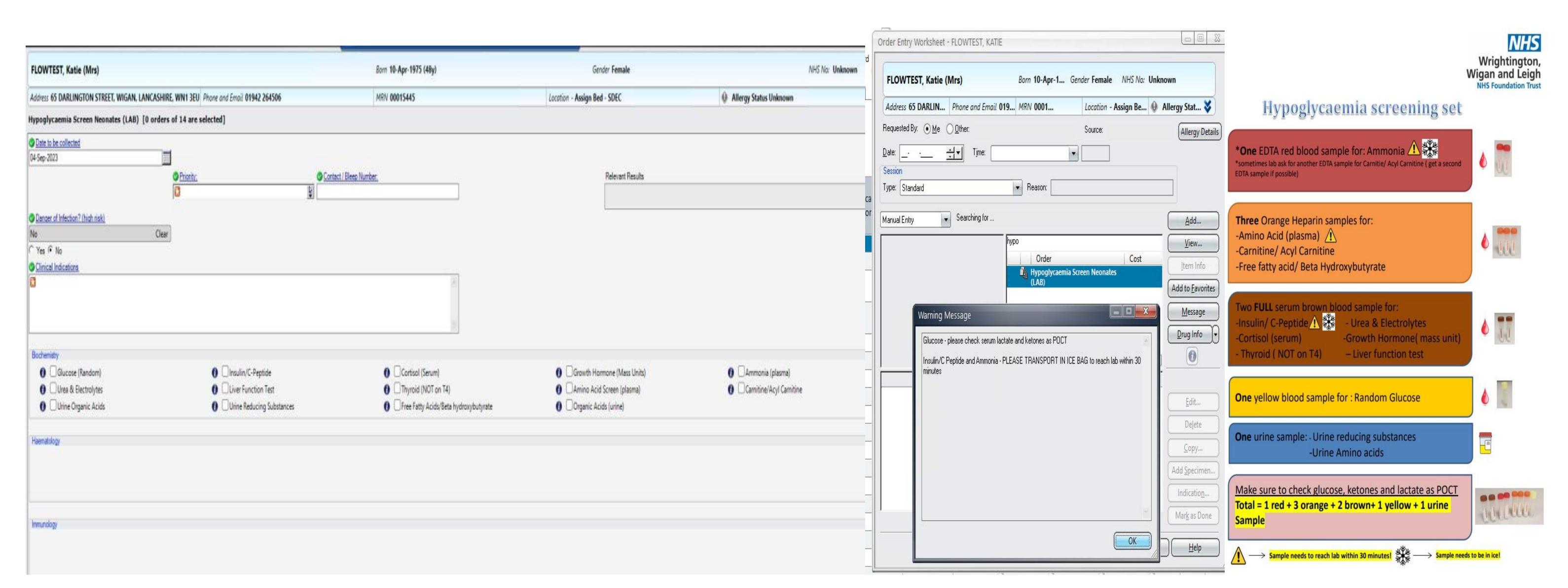
Methods

- > Departmental review of babies admitted to our Neonatal Unit for persistently low blood sugars highlighted the difficulties of finding relevant investigations leading to incomplete investigations or potential delay in commencing hypoglycemia treatment. This was more common during out of hours when staffing levels are low and there is limited senior presence.
- Investigating persistent hypoglycaemia in a neonate involved locating and consulting the local guidelines on trust intranet, identifying individual tests on IT system and collecting necessary sample bottles with appropriate labels before administering emergency treatment for hypoglycaemia. This is a time-consuming process for staff who are not necessarily familiar with the local guidelines and IT system, where individual investigations exist but are not grouped together.). The idea of pre-made investigation packs was not supported by the team because of the risk of sample bottles being removed, lost or not kept up to date.
- Neonatal team liaised with the local digital transformation board who agreed to create an order list to overcome this challenge. All the necessary investigations would be pooled together in a set, under the title "Hypoglycaemia Screen Neonates". When the investigator types "hypo" in the lab orders, the list will show up together with information on the various samples needed. The order set also assists investigators by providing prompts/warnings for iced samples, length of time from sampling to lab and advice on tests that need completing as point of care testing at the same time.

The order set has also been printed and laminated to serve as visual aids on procedure rooms of both Paediatric and neonatal wards.

Results

The hypoglycemia screen order set is now live on the IT system along with the printed visual aid readily visible on procedure rooms. We have increased awareness of this ready-made set by sharing with medical and nursing colleagues during handover meetings. The order set has also made the investigation process less time consuming and more effective in terms of completion and patient safety. Images as below(1)



Conclusions

In a QI project to improve the quality of hypoglycaemia screening in neonates, we liaised with our IT department and created an order set in the local IT system to make the process quicker and enable more consistent investigations. Verbal feedback has been positive so far with the order set being user friendly, efficient and educational. The impact of this tool will be investigated by an audit in the coming months.

References