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A survey of time discrepancies in clocks and medical devices in the Rosie Hospital Delivery Unit at Cambridge University Hospitals

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Background and Aims

The General Medical Council's good medical practice guidance advocates the importance of accurate record keeping. The date and accurate time are essential components of a valid medical record. Poorly kept medical records often lead to issues during litigation processes against medical institutions and personnel.

Obstetrics is a high-risk field, where litigation is relatively common. A few minutes delay in delivery may lead to a sub- optimal outcome for the mother and/or the baby and hence recording accurate time is vital (*figure 1*).

It is our observation as clinicians working in the Rosie Hospital, that the devices that are used to record time vary widely; this is more pronounced immediately after a *"clock change"*. Due to the legal implications of time discrepancies in Obstetric practice, we decided to carry out a survey to investigate the time differences of various devices in our unit.

Methods

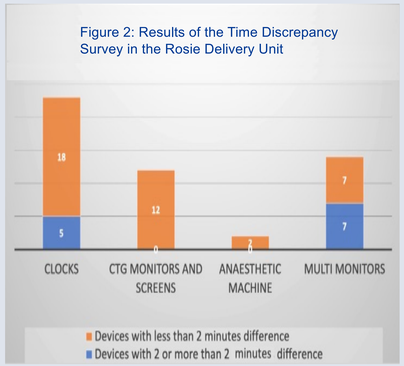
We undertook a snapshot survey in the delivery unit, Obstetric theatres and the recovery area. The date chosen was a date beyond 3 months after a clock change, so that we could rule out the immediate effect of such a change. The times were compared with GMT.

This survey included 23 wallclocks,12 CTG monitors, 13 multi-monitors, 2 anaesthetic machines and 2 of the central CTG monitoring screens. The time difference was only documented if it was more than 60 seconds.

Figure 1: Discrepant times displayed on clocks and medical devices in theatres and the Delivery Unit could have severe, unintended consequences



Figure 2: Results of the Time Discrepancy Survey in the Rosie Delivery Unit



Results

There is a marked time discrepancy in some of the devices used in the Rosie Hospital (*figure 2*).

Our survey revealed that the times of the wall clocks and CTG monitors in the delivery unit showed little discrepancy with GMT. However, the multi-monitors in the theatres and the high-risk delivery rooms recorded a large difference from the actual time. The monitors in the high dependency and recovery areas had a lesser discrepancy.

Discussion

Many professionals document events in a mother's medical records. The timing of these events are obtained by the information derived from many devices, such as CTG machines, wall clocks and multi-monitors. Therefore, it is vital that these devices reflect the accurate time.

Based on the results of our survey we can conclude that 12 out of the 51 devices assessed reflected a time difference of two minutes or more, giving a percentage of 24% of our devices being inaccurate.

We recommend the following:

- Use of radiofrequency-controlled clocks in the Delivery Unit.
- Liaison with the equipment maintenance team to devise a system to ensure correct multi- monitor times.

References

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Addenbrooke's Hospital Rosie Hospital