

Induction of Labour RAG system

Reducing the length of time for patients waiting to be transferred to Labour Ward from Induction of Labour

1. The Problem

- At the Royal Berkshire Hospital NHS Foundation Trust (RBH), the Induction of Labour (IOL) team undertake on average four induction per day on the IOL unit. In the last 6 months (July –December 2022) the average IOL rate at the RBH is 33.3%
- The women remain on the IOL unit until their cervix is favourable for an artificial rupture of membranes (ARM) or they spontaneously go in to labour. At this point, they are transferred to the Labour Ward to continue their care.
- The RBH has experienced an increase in negative patient feedback about the delays in waiting to be transferred to an intrapartum area.
- It is known that delays in the IOL process is associated with poor patients experience and can also be associated with adverse perinatal outcomes (Robertson et al: 2021)

2. The Evidence

- Between August 2021- December 2021, two Retrospective cohort studies were undertaken looking at the average length of time a patient spent waiting to be transferred to Labour Ward once they were deemed suitable (ARM'able or Prostin) for the next stages of their care.
- Quantitative Data was selected using the electronic patient records (EPR)
- 25 randomly selected samples were taken from August- September 2021. This was **Audit 1**
- 40 data samples were taken from September- December 2021. This was **Audit 2.**

Audit	Average wait time	Longest Wait time
1	19hours 48mins	73hours
2	14hour 09mins	83hours

3. The Aim & Action:

The Aim

To reduce the time patients are waiting to be transferred from IOL to Labour when they are favourable for the next stage of their Intrapartum care.

By achieving this, it should improve patients' experience of Induction of Labour.

The Action: *The creation of the IOL RAG system*

- The IOL RAG system is a visual aid for the Obstetric & Maternity Teams to visualise the delays in the patients waiting to be transferred from IOL to Labour Ward and create an individualised action plan based on it.
- Each patient is categorised on the length of time they have been waiting from the moment they become suitable for Labour Ward (the moment they are ARM'able, irrespective either mechanical or Membrane Sweep IOL).
- For patients admitted to IOL for Prostaglandins (Prostin) due to Premature Rupture of Membranes (PROM), categorising was determined by the length of time following the Prostaglandin had been administered (under Trust Guidelines, this is 6-8hours).

The categories for the RAG system are as follow are as followed:

- Green** – Between 0-12 hours of being suitable for ARM/transfer to Labour Ward. Transfer to Labour Ward when capacity allows, no further action required.
- Amber** - 12- 24 hours of being suitable for ARM/transfer to intrapartum area. Or 6 hours post Prostin administered. Transfer to Labour Ward when capacity allows. Action: Inform Delivery Suite Midwife in Charge and Maternity Coordinator.
- Red** – more than 24 hours waiting for ARM/transfer to intrapartum area. Or 8 Hours post Prostin administered. Prioritise Transfer to Labour Ward if able to do so. Action: Women should be escalated to the Consultant Obstetrician and Maternity Coordinator for an Obstetric review. An incident report is to be completed.

In June 2022, the IOL RAG system was implemented. In order to assess if the RAG system was having an impact; the same audit conducted for the initial evidence was to be undertaken at the 2months, 4months, 8 months and 1 year. This would provide comparable quantitative data.

4. The Initial Review

(2 months)

- The two month Audit was conducted to review the initial results 2 months after the introduction of the IOL RAG system. This was **Audit 3**
- The same format was applied: a Retrospective cohort studies using 40 data samples randomly selected from EPR from the 01st June-01st August 22

The results:

Audit	Average wait time	Longest Wait time
3	11hours 11mins	64 hours

5. The Second Review

(4 months)

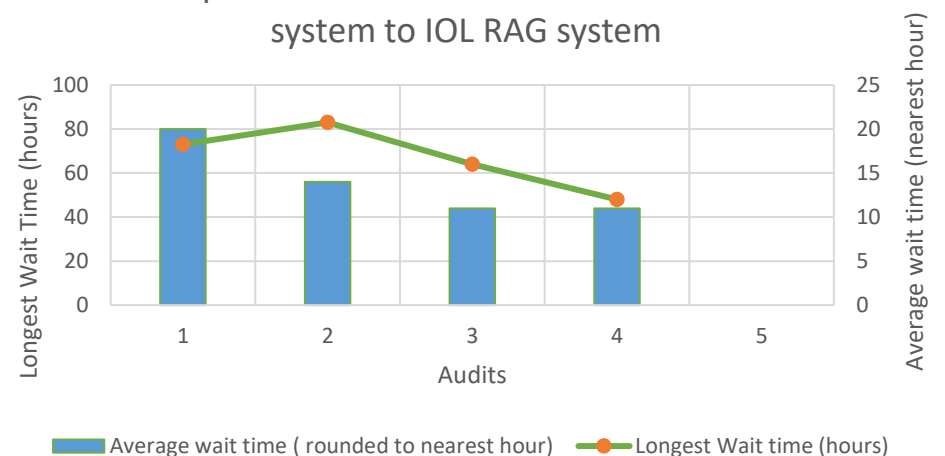
- The four month Audit was conducted to review the progress of the IOL RAG system. This was **Audit 4**
- The same format was applied: a Retrospective cohort studies using 40 data samples randomly selected from EPR from the 15th August-15th November 2022.

The results:

Audit	Average wait time	Longest Wait time
4	10hours 30mins	48hours

6. The Analysis

Comparison of Wait times from Pre IOL RAG system to IOL RAG system



- Comparing Audit 1 & 2 (Pre IOL RAG) to Audit 3 & 4 (Post IOL RAG): the average wait time and longest wait time for patients has continuously been reducing.
- Comparing Audit 1 to Audit 4 there has been a reduction in the average wait time of **9hours 18mins**. Audit 3 as the initial RAG progress review shows a reduction of the wait time of **8hours 37mins** between Audit 1 and 3 and **2hours 58minutes** between Audits 2 and 3.
- The data between Audits 3 and 4 record a decrease in time of 41minutes for the average wait time and 16 hours for the longest wait. Although this a small reduction, it is a reduction of both the average wait time and the longest wait time.

7. Conclusion

The introduction of the IOL RAG system in June 2022 has seen a positive impact on reducing the time for patients waiting to be transferred to Labour Ward from IOL. It has now been incorporated until our Trust IOL GL861 Guidelines and used by the Senior Team for the Daily Maternity Operations Meetings.

It has been proposed to continue to use the IOL RAG system. The next review is February 2023.