# Project FIXIOL: Fixing the Induction of Labour (IOL) process at a Tertiary Metropolitan Hospital in Western Australia (WA)

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# **Background**

The aim was to evaluate the outcomes of women undergoing induction of labour (IOL) at a Tertiary Metropolitan Hospital in Western Australia (WA) in accordance with the ACHS Indicator 1.2.(1) The study was driven by the most recent ACHS data that IOLs have reached their highest rate in history of 31.6% with rates being highest in WA. These women are high risk in the antenatal and intrapartum period and contribute to a large burden of workload within the maternity department.

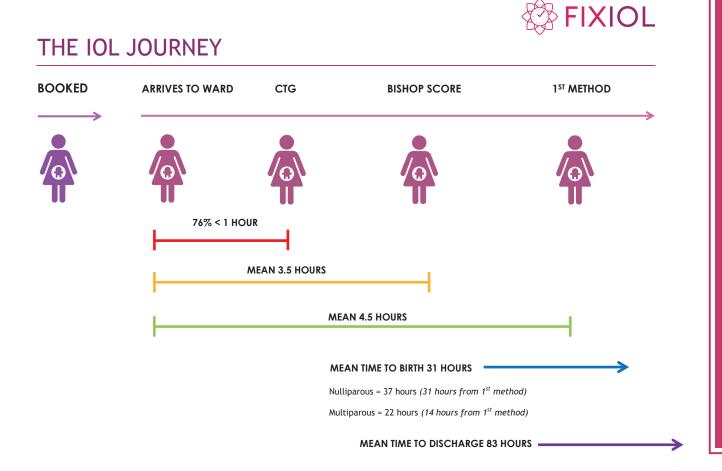
## Methods

We audited 50 cases of women undergoing inpatient IOL within a 3 month period (July to September 2018) at a Tertiary Metropolitan Hospital of WA. This represented 16% of all IOL cases (n=310) for that period and 4.5% of total births (n=1096). Data was collected from electronic records and analysed via SPSS using simple statistics.

# **Audit Results**

- In the period analysed our IOL rate was 28%.
- The majority of women were nulliparous (58%) and had Gestational Diabetes Mellitus (GDM) requiring Insulin (32%).
- 68% of women required cervical ripening and 24% required a second ripening method.
- Delivery was primarily spontaneous vaginal delivery (44%), followed by instrumental (40%) and emergency caesarean section (16%).
- Of those that required caesarean section, majority were nulliparous (87.5%) and unfavourable on admission (100%) and half had GDM requiring insulin.

Figure 1: The IOL Journey



# **Service Improvement Project**

Our service improvement project aimed to improve the experience of women undergoing Induction of Labour (IOL) at our hospital. The project had multiple drivers; the above audit results, patient and staff dissatisfaction with the current process and growing concerns as our IOL rate soared to over 30%. We set out to streamline the IOL process with particular focus on the policy surrounding women with GDM-I. We utilised the DMAIC model of service improvement with focus on cross-sectional stakeholder input throughout the root cause and improvement phase.

# **Service Improvement Outcomes**

Stakeholder led improvement goals led to the institution of a new IOL Policy for the department. This was released in line with the opening of a dedicated 'IOL Suite' where women are co-located during admission with a dedicated 'IOL Midwife'. We formulated a novel admission form that will document the continuum of management which was previously duplicated between many sources. We continue to audit qualitative and quantitative results throughout the implementation and current staff feedback is exceedingly positive.

### **Discussion**

Women undergoing IOL represent a significant proportion of women delivering at our hospital. Women with GDM on Insulin account for a major allocation of resources for IOL. Nulliparous women undergoing IOL required increased intervention for cervical ripening and birth. This information can help us to allocate resources effectively, improve workflow and aid the expectation of other hospitals becoming specialist centres for GDM.

We hope that our service improvement project can provide insight into a stakeholder driven vision to have co-located women with access to individualised care appropriate for their level of antenatal risk. This project motivated us to allocate resources effectively with the aim to improve IOL outcomes, as well as patient and staff satisfaction. Hopefully we can inspire other institutions to reflect on the changes occurring to the antenatal journey in their hospital and collaborate with us to improve the experience of women Australia Wide.

#### Figure 2: The IOL Data



Inductions of Labour July-Sep 2018 INDUCTION RATE = 28%









ROBSON INDICATORS

	Labour	inaucea	
Nulliparous Women requiring Caesarean	16%	38%	X2.4
Multiparous Women requiring caesarean	0%	4.2%	
ALL Women requiring caesarean	7.66%	23.65%	ХЗ

#### INDICATION = 32% GDM on INSULIN







Figure 3: Induction of Labour Admission Form Trial

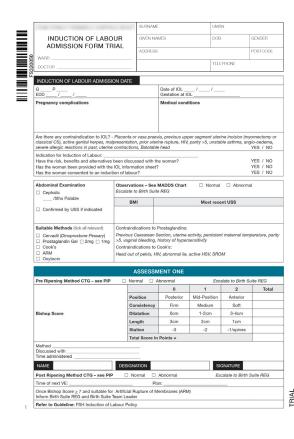
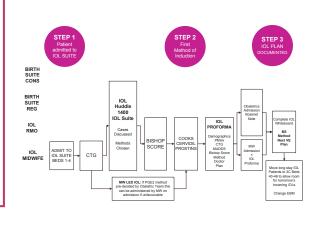


Figure 4: Desired State



#### Reference:

1. Australian Council on Healthcare Standards (ACHS) [Internet]. Ultimo NSW: ACHS 2018 Clinical Indicator Program Information; 2018 [Cited 2019 April 4]. Available from: https://www.achs.org.au/media/134023/achs\_2018\_clinical\_indicator\_program\_information.pdf





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