

# Efficient and Patient-Centred Management of Patients Undergoing Induction of Labour

Prof Yeo Seow Heong, Dr Shephali Tagore, Dr Ann Wright, Dr Lionel Karuna, Ng Gaik Nai, Teo Chor Cher, Thilagamangai, Tay Suan Lay Julie, Teo Puay Ling, Juay Siew Ngoh, Hanisah Bte Barudin, Wee Chin Lee Joanne, Tan Bee Lian Magdalene, Thong Suk Sian Rebecca Tracy, Wong Chi Keong John

# Background

KK Women's and Children's Hospital provides comprehensive, multi-disciplinary care to low and high pregnancies, with approximately 12,000 deliveries a year. Of these deliveries, 22% of the pregnant women undergo elective induction of labour.

Induced labour is an artificially-triggered labour. It is indicated in postdates pregnancies and other complications such as preeclampsia, Diabetes etc.

Induction of labour (IOL) was previously scheduled with an appointment in Delivery Suite's triage observation room which often led to bed crisis, prolonged waiting times, increased utilization of resources (i.e transfer of patients from triage to ward, nursing handovers etc) and thus operational costs.

This led to setting up of an **Obstetric Monitoring Unit**. Advantages were efficient utilization of triage beds, minimize operational costs and increase patient satisfaction.

The opening of the Ward 32 Obstetric Monitoring Unit in June 2017 marked a milestone in the provision of care for KKH's antenatal patients.

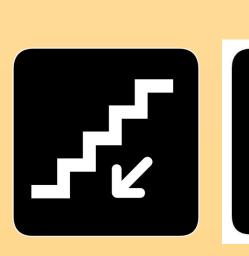
# **Problems and Aims**

- Legends
  - Triage patient: Patient presenting at Delivery Suite with pregnancy-related issues
  - IOL patient: Patients scheduled with appointment for IOL



#### **Triage patient**

Problem: Long waiting time for triage Aim: Reduce waiting time



#### **IOL** patient

Problem: **Discomfort** from being transferred up and down
Aim: **Increase** comfort

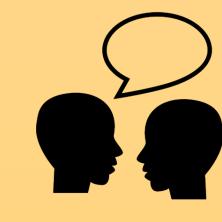


#### **IOL** patient

Problem: Long waiting time for another induction
Aim: Reduce waiting time

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#### **Delivery Suite and Ward**

Problem: Patient safety issues due to risk of miscommunication over many handovers

Aim: Reduce handovers



#### **IOL** patient

Problem: Husband cannot be with wife to support her due to violation of privacy of other patients

Aim: Allow husband to be with wife

# Solutions

Set up an Obstetric Monitoring Unit (OMU) in Ward 32 for these processes without increasing headcount of healthcare workers;

To provide coordinated, team based care with multidisciplinary approach for induction of labour patients.

Patients are monitored in OMU till they go into labour.

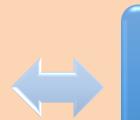
(1) Before - High IOL load (2) Before - Low IOL load





#### **Before**

Delivery Suite
IOL & monitor



<u>Ward</u> Monitor <u>Delivery Suite</u> Labour & deliver

#### <u>After</u>

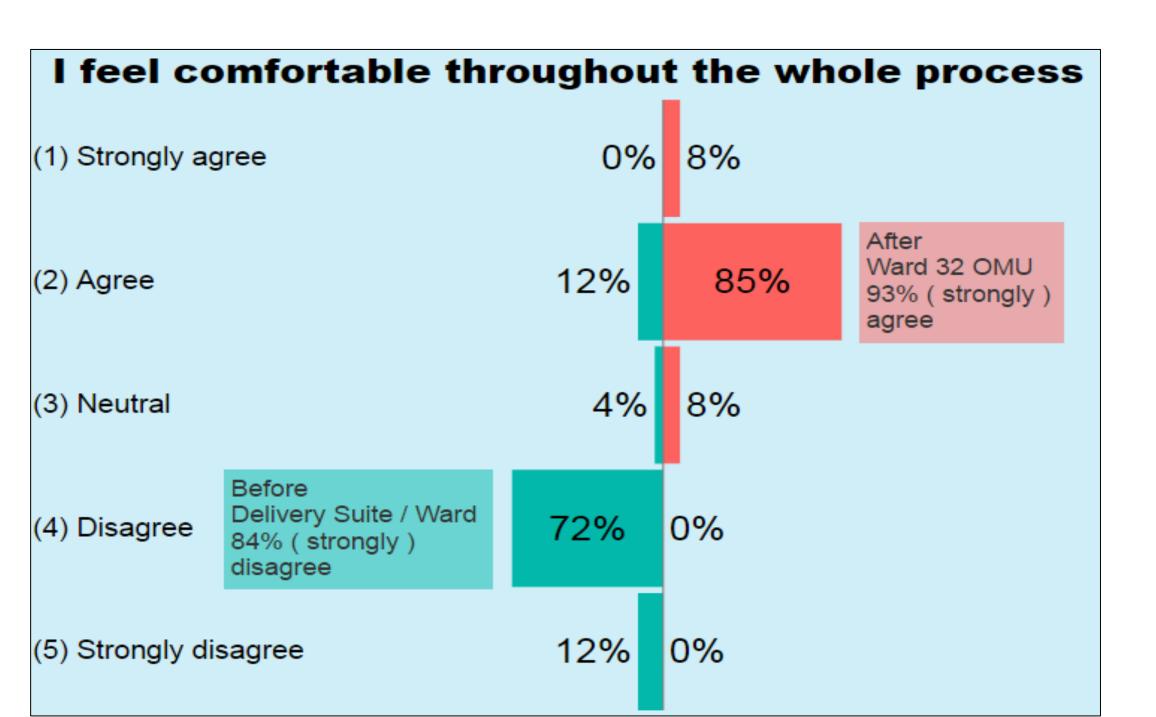
OMU in Ward 32
IOL and Monitor

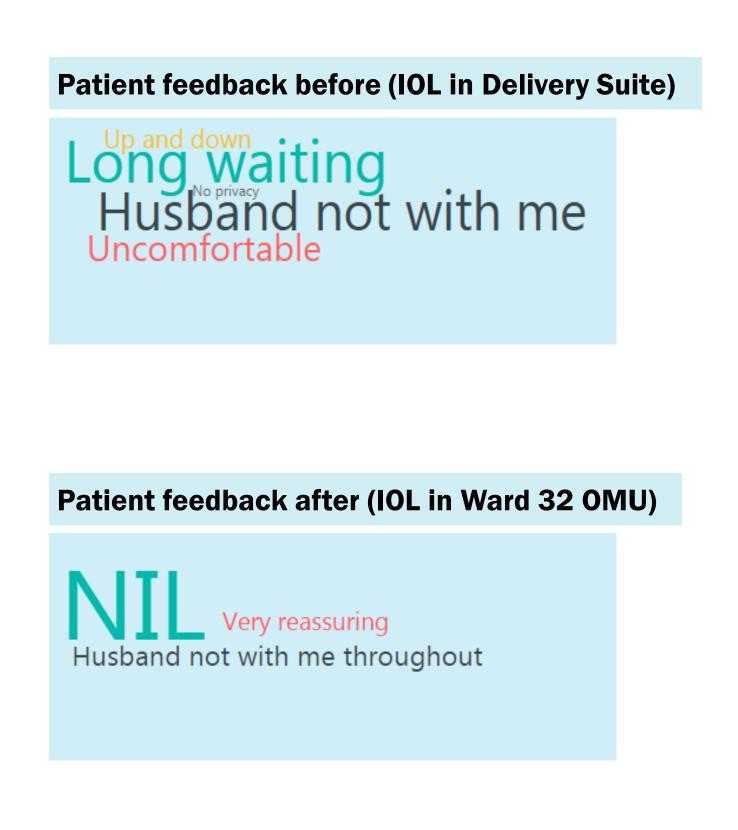


<u>Delivery Suite</u> Labour & deliver

### Results







# Waiting time for triage ( minutes ) Median = 18 min On average, 8 man-hour saved per day to handle triage patient to reduce their waiting time for triage Median = 6 min Median = 6 min

(3) After

# Conclusion

- Triage waiting time has been reduced from 18 min to 7 min
- Waiting time for another induction has been reduced from 9.9 hr to 6.3 hr
- Patient comfort agreement increased from 12% to 93%
- Fewer feedback on husband cannot be with wife
- Reduced handovers by not transferring patients between Delivery Suite and Ward for IOL and monitoring