



System-Level Delays in Induction of Labour and Implications for Obstetric Risk

A Baseline Governance Audit at a Tertiary Centre – King Edward Memorial Hospital, Perth, Australia

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34

patients audited

2023

study year

BACKGROUND

Induction of labour (IOL) is undertaken in ~1 in 3 pregnancies, often for conditions carrying increased perinatal risk. Timely progression through the pathway matters – delays compound infection, hyperstimulation, operative birth, PPH and stillbirth risk. Following SAC1 recommendations, KEMH established the IOL Working Group to drive structured service reform.

AIM

To quantify delays within the inpatient IOL pathway at KEMH and identify system contributors with potential safety implications.

METHODS

Retrospective audit of 65 women undergoing inpatient IOL at KEMH in 2023; 34 met eligibility after excluding non-elective/augmentation cases and incomplete records. Time-based metrics analysed across admission-to-CTG, -ripening, -armable, armable-to-ARM, -delivery and -discharge intervals. Delay defined as >1 hour from documented armable status; reasons categorised (capacity, staffing, competing acuity).

Age: mean/median 30 yrs (range as documented is internally inconsistent – to be confirmed). Parity: mean 1.4 (range 0–7).

RESULTS

34

patients audited

29.5 hrs

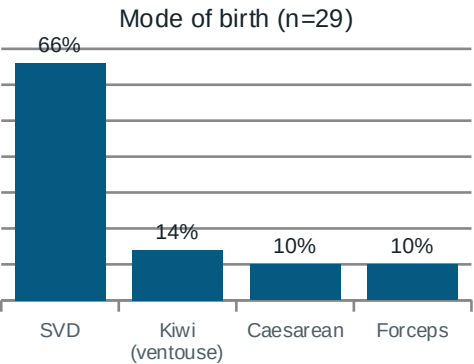
median time to delivery

46%

experienced delay

34%

operative birth rate



Delay breakdown (of 28 women with complete delay data)

46%

experienced delay (13/28)

62%

delay due to staffing (8/13)

4

median midwives involved (1–10)

Other delay reasons: awaiting epidural (n=1), registrar review (n=1), unclear (n=3). Median 2 induction methods required (range 0–3); nulliparous in 40.6% of cases.

Pathway interval (from admission)	Median
Time to CTG	12 min
Time to armable status	16.5 hrs
Time to ARM	17.5 hrs
Time to delivery	29.5 hrs
Time to discharge	65 hrs

DISCUSSION

Principal finding: median 29.5 hr admission-to-delivery, with 46% experiencing a delay >1 hr from armable status.

Workforce bottleneck: 62% of delays attributable to staffing; median 4 midwives (range 1–10) involved per induction.

Limitations: single-centre, retrospective; only 34/65 eligible and delay data complete for 28 – a pre-reform baseline, not yet a before/after comparison.

PROPOSED ACTIONS

- Strengthen escalation frameworks for competing labour ward acuity
- Workforce/staffing modelling matched to IOL demand
- Standardise time-stamped documentation across the pathway
- Re-audit post IOL Working Group reform to benchmark change

CONCLUSION

This audit demonstrates measurable, workforce-related system delays in the IOL pathway. In a population already selected for clinical risk, prolonged induction intervals represent a modifiable safety vulnerability – establishing a governance benchmark to guide service redesign and re-audit.