

# UC San Diego Health An education intervention to increase the use of evidence-based labor induction techniques

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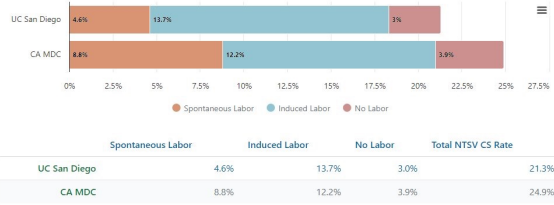


## Background:

The incidence of induced labor has tripled from 9.5% to 31.4% between 1990 and 2020, due to an increase in the incidence of maternal and fetal indications for induction, as well as an increased recognition of the safety of induction of labor by maternal request at 39 weeks of pregnancy<sup>2,2,3</sup>. Induced labor has been shown to lead to decreased antepartum office visits and postpartum hospitalizations, with an overall neutral impact on healthcare utilization<sup>4,5</sup>. However, the increased time and number of interventions on labor and delivery for patients undergoing induction can be challenging for patients and the health care system.

Induction of labor practices vary among physicians, midwives, and nursing staff, driven by both patient and provider preferences. Furthermore, UCSD cesarean birth rates for induced labor are higher than that for spontaneous labor. Given that induction itself is not thought to increase the risk of cesarean, this may be attributable to these patients' comorbidities or differences in management practices during induction.

There is a clear need to understand and increase the use of evidence-based labor induction practices that could decrease time to birth during inductions and decrease the rate of cesarean birth.



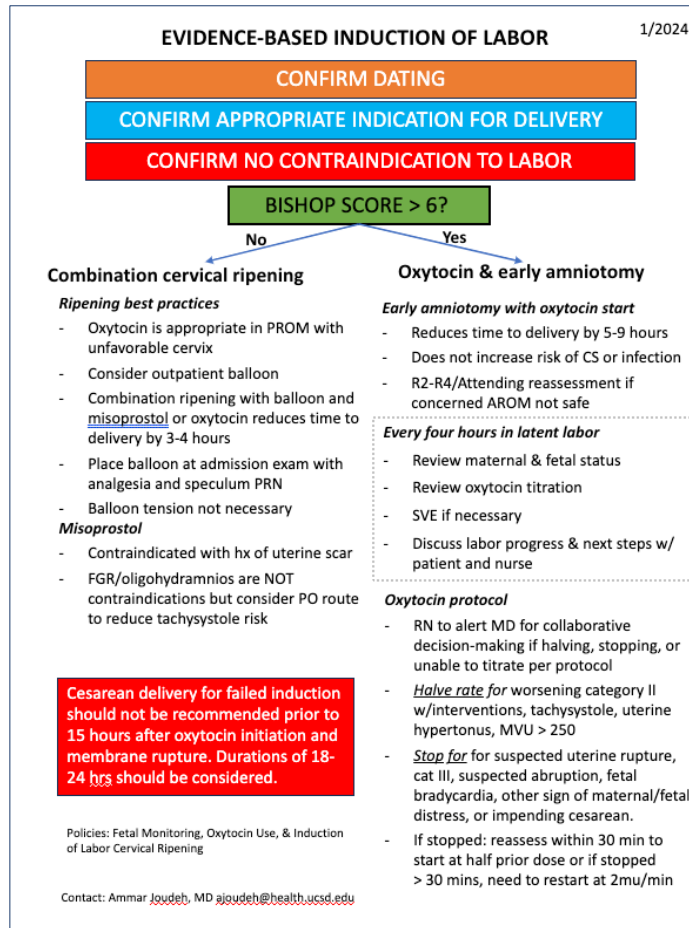
UC San Diego vs. CA MDC NTSV Total CS Rate by Spontaneous, Induced or No Labor. CMQCC Data. April 2023-Mar 2024. Retrieved 5/6/24

## Goals:

- Characterize patient characteristics, induction practices, and decisions leading to cesarean birth in birthing persons undergoing induction of labor
- Improve the implementation of provider and institution best practices for induction of labor and cesarean birth decisions
- Decrease the rate of cesarean birth in induced labor at UCSD

## Interventions:

Implement an induction of labor education intervention consisting of evidence-based best practices for induction of labor. Educational talks and handout on labor and delivery were rolled out in January 2024.

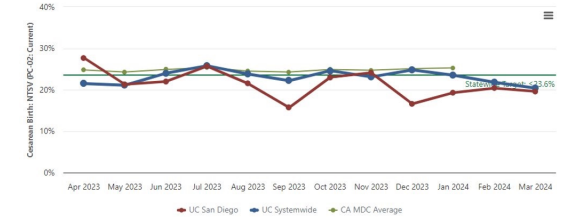


## References

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## Preliminary Results:

No apparent increase in cesarean rate since implementation of the labor checklist protocol, which is reassuring with respect to the safety of these interventions at our institution.



UC San Diego and Comparatives Rolling Year. CMQCC Data. April 2023-Mar 2024. Retrieved 5/6/24.

## Next Steps:

Granular data analysis of changes in labor induction techniques with introduction of the labor checklist. Analysis will include pre-intervention (Nov. 2024) and post-intervention (March 2024) comparisons of:

- NTSV cesarean birth rate
- Percentage of patients undergoing combination, individual, or staged approaches to cervical ripening
- Percentage of patients undergoing early amniotomy
- Maximum dose of oxytocin used and oxytocin discontinuation during labor

## Expected Outcomes:

We expect that evidence-based induction of labor practices will increase in frequency in the period following the implementation of the checklist without an adverse impact on the cesarean delivery rate.

## Final Recommendations:

If evidence-based practices do not improve in frequency as expected, surveys of the labor and delivery team could be undertaken to identify challenges in implementing these practices and appropriate next steps.