

# Pregnancy –a key moment for engaging women with hepatitis B in care

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## BACKGROUND

- Hepatitis B affects 0.9% of the Australian population.<sup>1</sup>
- Preventing mother to child transmission (MTCT) is crucial.
- A previous study of health services across Victoria demonstrated the management of hepatitis B in pregnant women was suboptimal.<sup>2</sup>
- In 2013, a five year retrospective audit identified a health service gap at Barwon Health for pregnant women with hepatitis B, and developed a new referral pathway to improve care.<sup>3</sup>
- Five years on, we evaluated the efficacy of this referral pathway by undertaking a retrospective cohort study.

## AIM

To compare adherence to the RANZCOG guidelines<sup>4</sup> for management of pregnant women with hepatitis B at Barwon Health before and after the implementation of a new referral pathway

## METHOD

### Patient Selection

- Pre-intervention cohort: pregnant women with hepatitis B managed at University Hospital Geelong from 2008 - 2013.
- Post-intervention cohort: pregnant women with hepatitis B managed at University Hospital Geelong from 2013 - 2018 after introduction of new referral pathway.

### Data Collection

Patients were identified from delivery records and positive HBsAg on antenatal screening from clinical laboratory.

Medical records were examined for the following:

- Patient demographics
- Hepatitis B health information
- Management of hepatitis B during pregnancy and delivery

Adherence to RANZCOG guidelines was labelled appropriate care and defined as follows:

- Referral to liver clinic
- Hepatitis B work-up
- HBV sAg, viral load, HBV eAg, LFTs
- Antiviral therapy recommendation
- Threshold viral load 6 log/ml or >200,000IU/ml<sup>3</sup>
- Neonate care
- HBV immunoglobulin and vaccination at birth

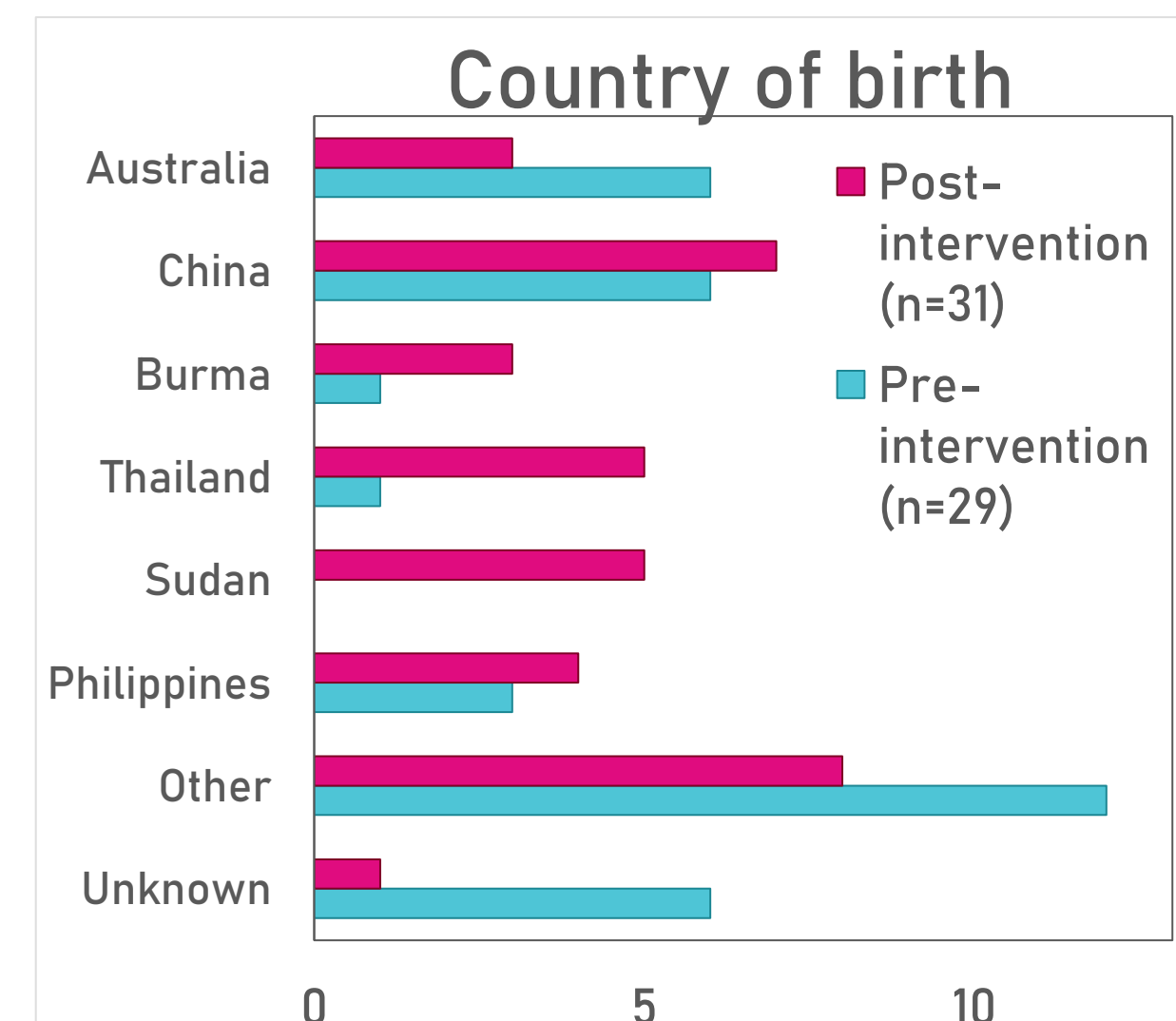
Outcome data was collected for the post-intervention cohort, and then compared with the pre-intervention cohort.

### Data Analysis

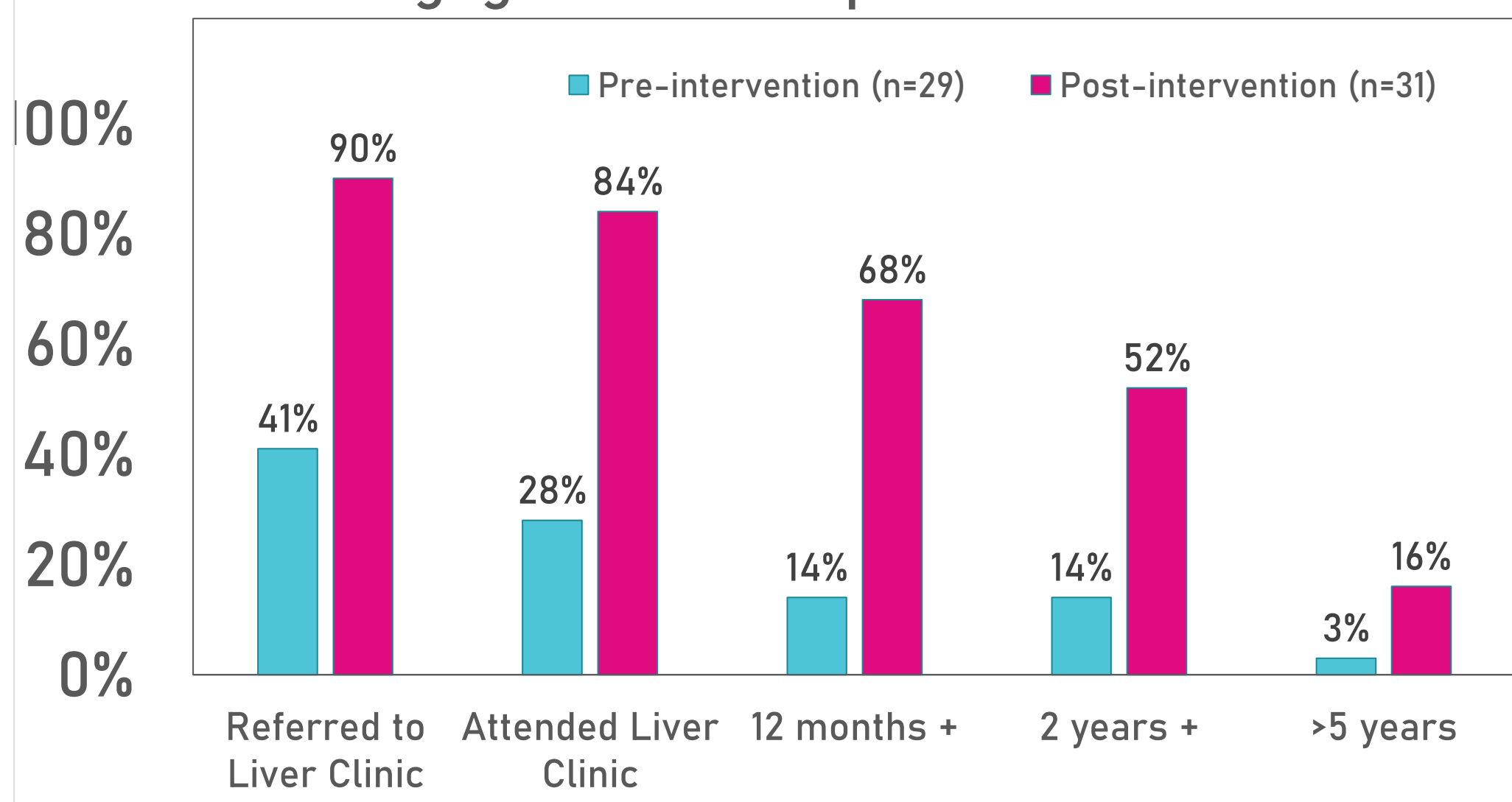
- Descriptive statistics were performed.
- Comparison of appropriateness of care between the two groups was done using a two proportions z test with a 95% confidence interval to determine the p-value

## RESULTS

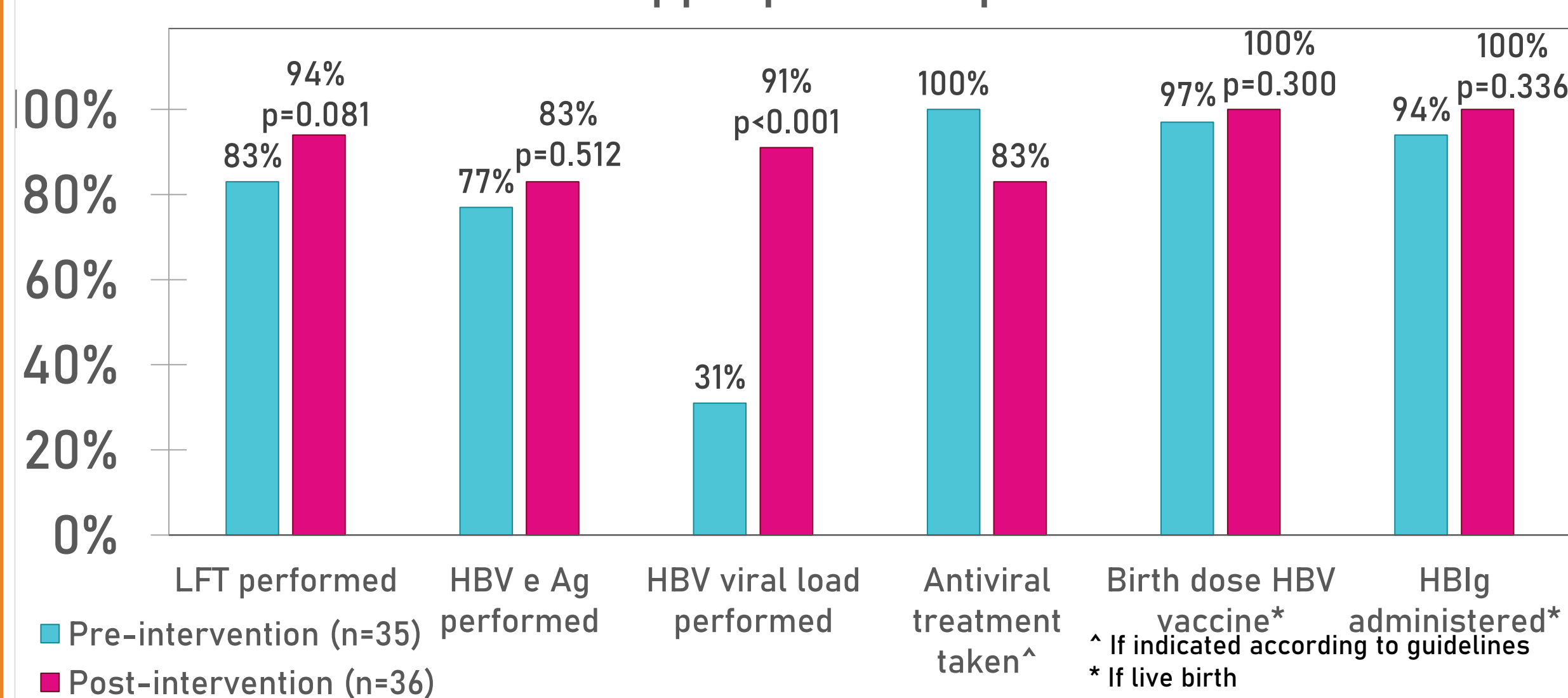
Variable	Pre-intervention	Post-intervention
No. pregnant women with hepatitis B	29	31
No. pregnancies	35	36
No. live births	34/35 (97%)	36/36 (100%)
Mean age at delivery	30 (IQR 25-34)	30.5 (IQR 26-32)
Overseas born	19/29 (66%)	28/31 (90%)



## Engagement in hepatitis B care



## Indicators of appropriate hepatitis B care



## DISCUSSION

- Appropriate care was improved in all four domains (referral to liver clinic, hepatitis B work-up, antiviral care and neonate care) following the introduction of a new referral pathway.
- This includes significant increased hepatitis B viral load testing of 31% vs 91% (p<0.0001).
- Women in the post-intervention group were significantly more likely to be engaged in Liver Clinic care post-partum (p<0.001)

## CONCLUSION

- The introduction of a collaborative referral pathway for hepatitis B in pregnant women at Barwon Health has significantly improved adherence to RANZCOG guidelines.
- Implementation of similar site-specific pathways across the state may be beneficial.