



Use of the QUIPP App to time administration of antenatal corticosteroids



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Introduction

- Antenatal corticosteroids play a key role in the management of preterm labour
- They reduce neonatal death, necrotising enterocolitis, respiratory morbidity and intraventricular haemorrhage⁽¹⁾
- Timed steroid administration results in better outcomes⁽¹⁾
- Delivery over 7 days from treatment has diminished benefit, possibly being detrimental with regards to infant neuodevelopment^(2,3)
- Using a higher threshold of fetal fibronectin in combination with the QUIPP app risk stratification tool can improve the targeted use of antenatal corticosteroids, reducing the risk of inappropriate, potentially harmful, treatment and admission to hospital⁽³⁾

Aim

- Influence local guidance on management of threatened preterm labour
- Appropriate timing of antenatal corticosteroids
- Reduce antenatal admissions and administration of steroids to those who deliver over seven days later
- Reduce risk of long term sequelae from inappropriate steroid administration

Method

Design: Retrospective audit

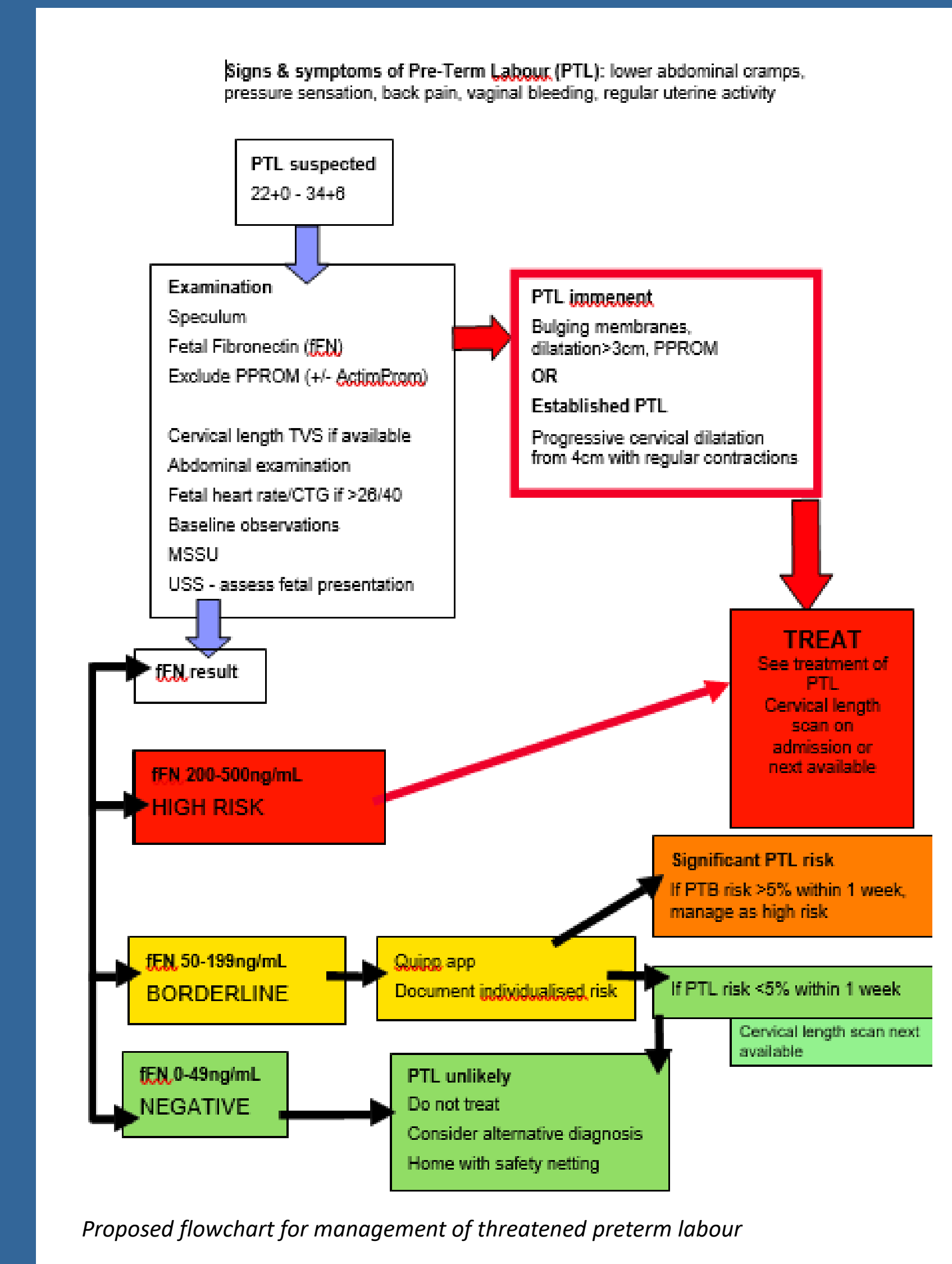
- Patients attending threatened preterm labour
- The cases were reviewed: whether corticosteroids were administered using a higher threshold of fetal fibronectin (50-200) and when they delivered.

Method: District general hospital

- Online records and a logbook of fetal fibronectin tests
- Patients identified through attendance at antenatal triage with symptoms of preterm labour under 34 weeks

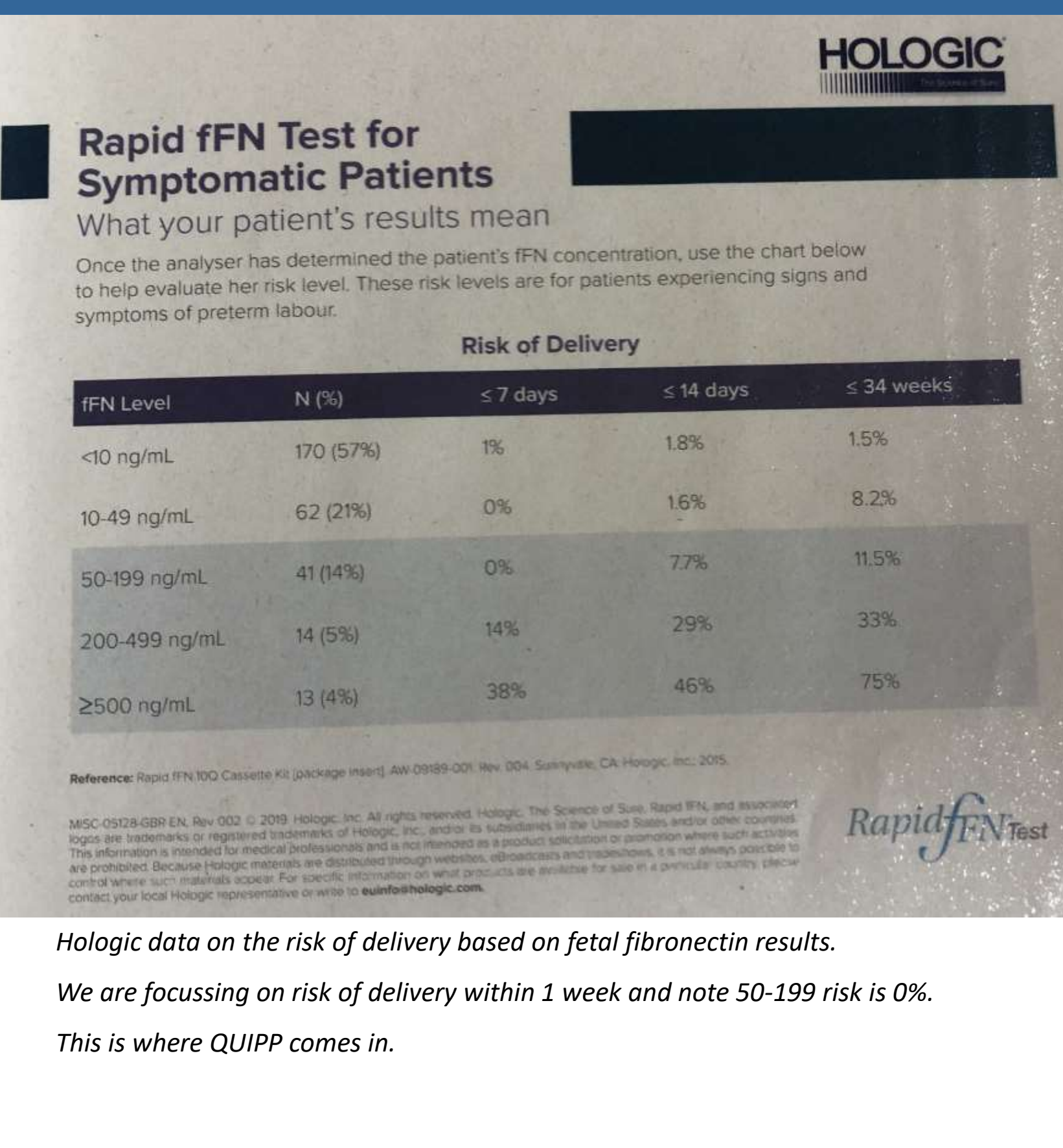
Results

- 15 patients identified
- All patients under the current guidance had been admitted and given corticosteroids
- All 15 patients gave birth over 7 days following treatment.
- The higher threshold and use of the QUIPP app implemented (do not offer treatment if risk of delivery within 1 week <5%)
- Of the four patients who have not received treatment under the new guidance, none have delivered in less than 7 days
- The author has now moved trusts:
- The same audit has been done in the new trust and guideline is currently being ratified
- New trust initial audit: 12 patients were identified, all had fibronectin 50-200 and risk of delivery <5% within 1 week – all pregnancies continued over 1 week
- This is potentially 12 unnecessary admissions and administrations of steroids and risk of future harm for the infant.



Conclusion

- Antenatal optimisation is critical to women and their babies
- There is also a financial incentive for the NHS to get this right: preterm birth costs the health service in England and Wales £3.4 billion per year⁽⁴⁾
- The steps outlined can improve the targeted use of antenatal corticosteroids, reducing the risk of inappropriate, potentially harmful, treatment and admission to hospital.



References

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