

# Recruitment of obstetric patients for bio-sample donation. Is our biobank representative?

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## Background

- Since 2018, some women undergoing elective caesarean sections have been approached to donate placental and blood samples for research.<sup>1-4</sup>
- Research participants should ideally be representative of the general antenatal population
- This study assessed the success of our recruitment strategies for research bio-samples at Northern Health

## Method

- A retrospective audit was performed of all women approached to donate maternal blood and/or placentas at the The Northern Hospital between 2017-2020
- Data on women recruited under study protocols HREC/17/Austin/329 and HREC/18/Austin/44 were compared with routinely collected data from all hospital births at The Northern between 2011 and 2018.
- We conducted comparisons of
  1. Participation rates using pre-admission phone call and face-to-face recruitment versus face-to-face recruitment only.
  2. Demographic characteristics of patients who consented vs those who declined to participate
  3. Demographics characteristics of participants versus:
    - The singleton elective caesarean population
    - The total obstetric population
- The Chi-squared test was used to compare patient characteristics and recruitment rates (significance level  $p < 0.05$ ).

### References

1. Tham J. Evaluation of new coagulation assays for assessment of clotting function in normal pregnancy [MDRP monograph]. The University of Melbourne. Parkville (Vic); 2018.
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3. Nguyen N. Anti-thrombotic and anti-platelet therapy and their influence on placental release of cell free DNA [MDRP monograph]. The University of Melbourne. Parkville (Vic); 2019.
4. Pearce BJG. The effect of anti-thrombotic therapy on cell-free DNA release from first- and third-trimester placental explants [MDRP monograph]. The University of Melbourne. Parkville (Vic); 2020.

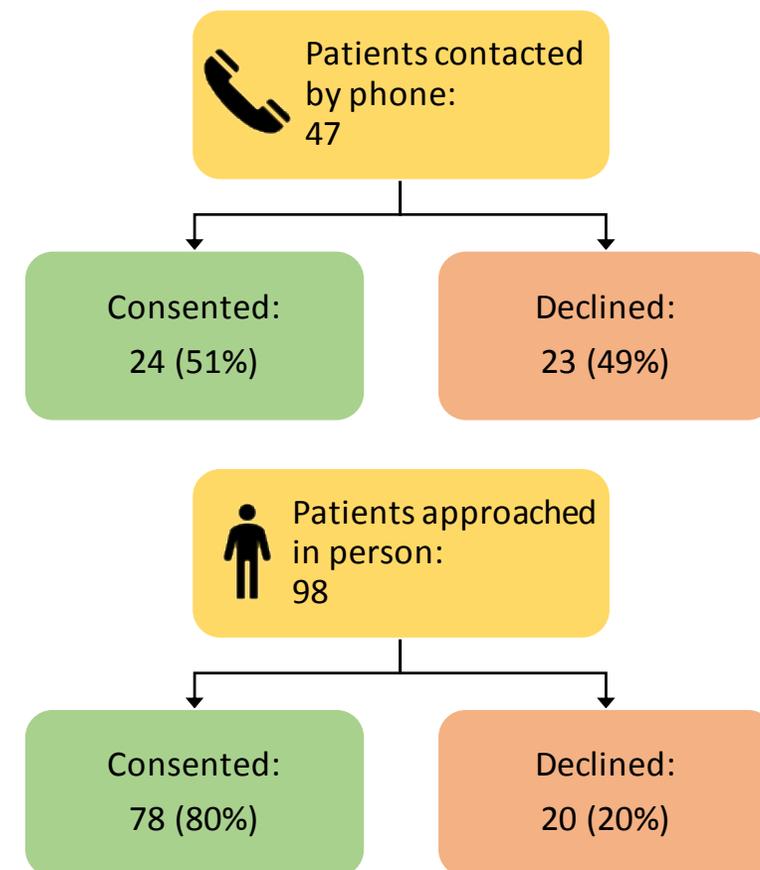
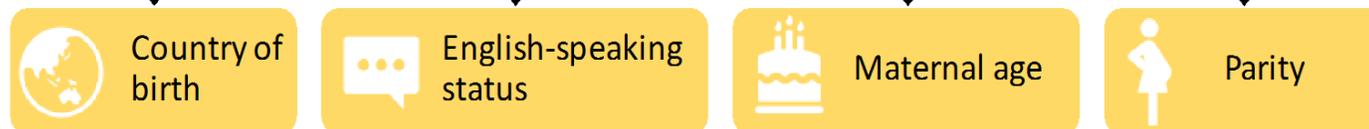
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## Comparison of consenting and declining patients

- 145 patients were contacted for bio-sample donation
- The overall recruitment rate was 77%
- A single face-to-face encounter at admission for caesarean section was significantly more successful without the use of an additional pre-admission phone call ( $p < 0.001$ ).
- There was no significant difference in demographic characteristics between those who consented and declined to participate.

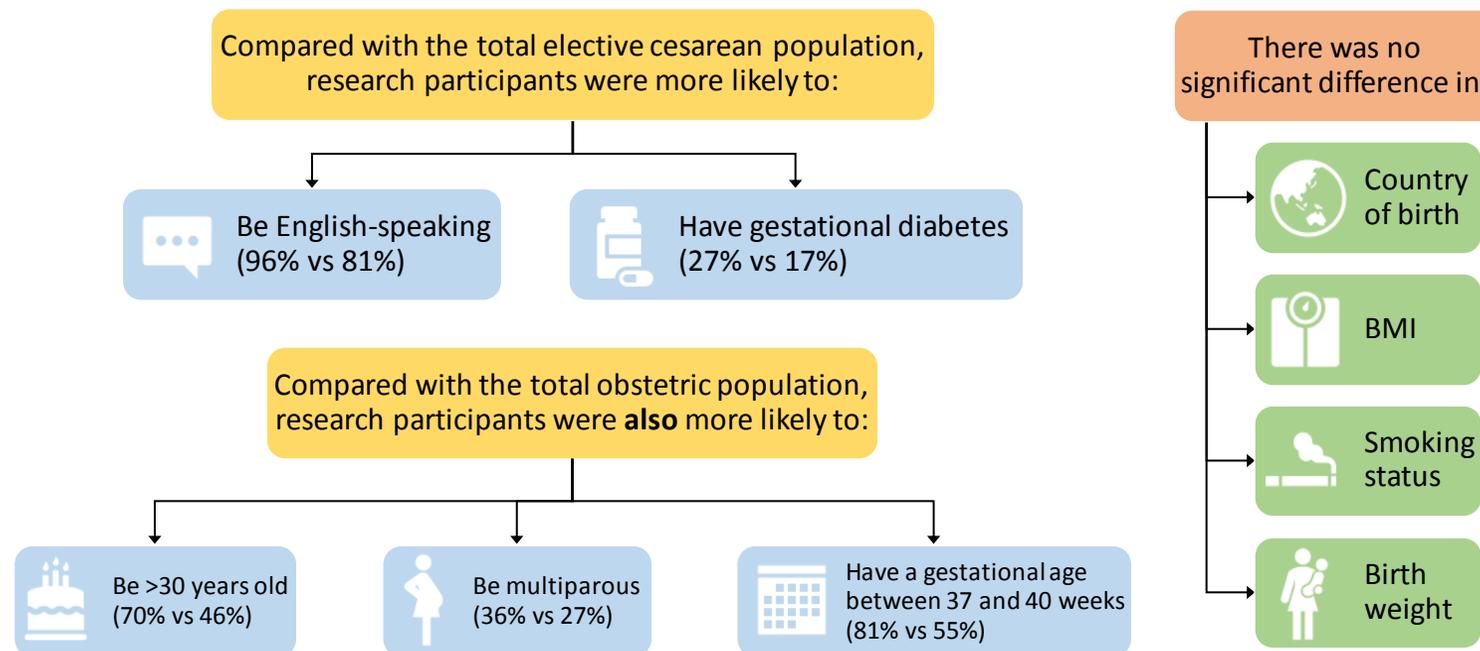
Comparing consenting and declining patients, there was no significant difference in:



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## Research participants vs elective caesarean and general obstetric populations



## Conclusions

- Pregnant woman at Northern Health are very willing to donate bio-samples for research
- Using a pre-admission phone call does not improve recruitment rates over a single face-to-face encounter alone
- The demographic differences in the research population reflect known characteristics of elective CS patients, and the scheduling of CS for gestational diabetic women
- Our results have resulted in new measures to facilitate the participation of linguistically diverse women in research at Northern Health