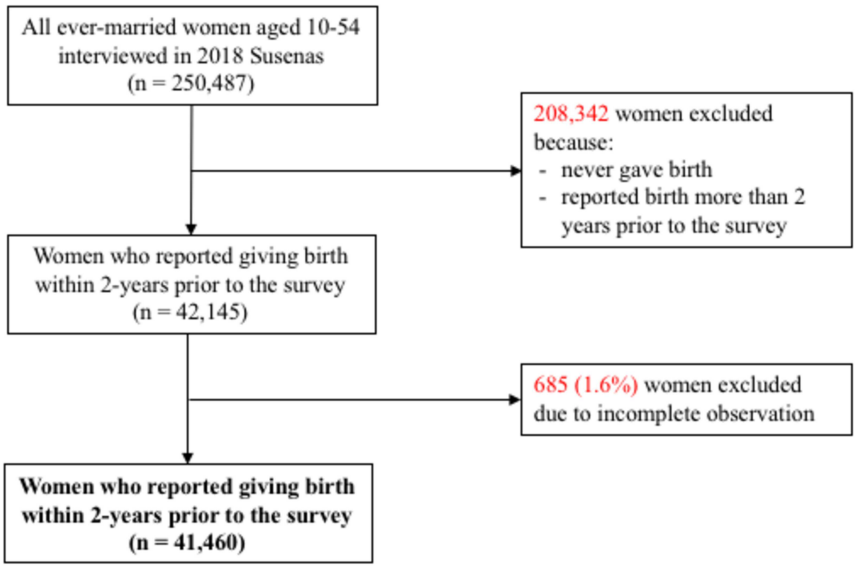
Appendix 1. Sample flowchart



Appendix 2. Multinomial logit results for types of provider

Variable	OBGYN or GP vs TBA/other non-skilled		Midwife/nurse vs TBA/other non-skilled	
	Coef.	95% CI	Coef.	95% CI
Income quintile (ref: poorest)				
Poor	0.47***	(0.30, 0.63)	0.25***	(0.11, 0.39)
Middle	0.88***	(0.66, 1.09)	0.46***	(0.26, 0.66)
Rich	1.71***	(1.44, 1.99)	0.92***	(0.66, 1.19)
Richest	2.51***	(2.08, 2.94)	1.20***	(0.78, 1.63)
Insurance status (ref: no insurance)				
JKN	1.07***	(0.92, 1.21)	0.45***	(0.33, 0.58)
Private insurance	1.87***	(1.14, 2.60)	0.86**	(0.14, 1.58)
Residency (ref: rural)				
Urban	1.09***	(0.88, 1.30)	0.84***	(0.64, 1.05)
Region of residence (ref: Java-Bali)				
Sumatra	-0.30***	(-0.5 , -0.11)	-0.11	(-0.30, 0.07)
Kalimantan	-1.04***	(-1.28, -0.80)	-0.58***	(-0.80, -0.36)
Sulawesi	-0.53***	(-0.76, -0.29)	-0.33***	(-0.55, -0.10)
Eastern Indonesia	-1.65***	(-1.85, -1.46)	-1.27***	(-1.45, -1.10)
Education (ref: no education)				
Primary	0.06	(-0.17, 0.28)	0.35***	(0.16, 0.54)
Secondary	1.26***	(1.02, 1.49)	1.21***	(1.01, 1.41)
Post-secondary	1.30***	(1.03, 1.57)	0.76***	(0.52, 1.00)
Women's work status (ref: not working)				
Working	-0.16**	(-0.30, -0.03)	-0.08	(-0.20, 0.04)
Maternal age (ref: <20 years)				
20-25 years	0.44***	(0.14, 0.74)	0.40***	(0.14, 0.66)
26-35 years	0.49***	(0.20, 0.78)	0.33***	(0.08, 0.58)
36+ years	0.90***	(0.59, 1.21)	0.41***	(0.14, 0.69)
Marital status (ref: not married)				
Married	0.38*	(-0.01, 0.77)	0.42***	(0.11, 0.73)

Note: Weighted for survey design; *significant at 10%; ** significant at 5%; ***significant at 1%.

Appendix 3. Multinomial logit results for place of delivery

Variable	Hospital vs home/others		Higher primary health facility vs home/others		Lower primary health facility vs home/others	
	Coef.	95% CI	Coef.	95% CI	Coef.	95% CI
Income quintile (ref: poorest)						
Poor	0.35***	(0.22, 0.48)	0.17***	(0.05, 0.28)	-0.08	(-0.21, 0.05)
Middle	0.61***	(0.46, 0.76)	0.31***	(0.17, 0.46)	-0.08	(-0.24, 0.08)
Rich	1.12***	(0.97, 1.27)	0.59***	(0.44, 0.74)	0.13	(-0.04, 0.30)
Richest	1.84***	(1.64, 2.05)	0.94***	(0.73, 1.15)	0.22*	(-0.03, 0.47)
Insurance status (ref: no insurance)						
JKN	1.20***	(1.09, 1.30)	0.54***	(0.45, 0.64)	0.29***	(0.18, 0.40)
Private insurance	1.56***	(1.27, 1.86)	0.60***	(0.30, 0.91)	0.38**	(0.03, 0.74)
Residency (ref: rural)						
Urban	1.09***	(0.97, 1.21)	1.08***	(0.96, 1.20)	0.56***	(0.42, 0.69)
Region of residence (ref: Java-Bali)						
Sumatra	-0.84***	(-0.97, -0.71)	-0.84***	(-0.96, 0.71)	-0.81***	(-0.95, -0.68)
Kalimantan	-1.11***	(-1.28, -0.95)	-1.16***	(-1.32, - -1)	-1.39***	(-1.58, -1.20)
Sulawesi	-0.68***	(-0.83, -0.52)	-0.75***	(-0.90, -0.6)	-1.53***	(-1.70, -1.35)
Eastern Indonesia	-0.90***	(-1.05, -0.76)	-1.06***	(-1.20, 0.92)	-1.50***	(-1.68, -1.33)
Education (ref: no education)						
Primary	-0.24***	(-0.42, -0.07)	-0.06	(-0.23, 0.11)	0.15	(-0.05, 0.35)
Secondary	0.63***	(0.46, 0.80)	0.64***	(0.47, 0.80)	0.66***	(0.47, 0.85)
Post-secondary	1.00***	(0.80, 1.19)	0.64***	(0.44, 0.84)	0.35***	(0.11, 0.59)
Women's work status (ref: not working)						
Working	-0.17***	(-0.27, -0.07)	-0.15***	(-0.25, 0.06)	0.00	(-0.10, 0.11)
Maternal age (ref: <20 years)						
20-25 years	0.20*	(-0.01, 0.42)	0.33***	(0.13 , 0.54)	0.10	(-0.12, 0.32)
26-35 years	0.31***	(0.10, 0.52)	0.33***	(0.14, 0.53)	0.10	(-0.11, 0.31)
36+ years	0.67***	(0.44, 0.89)	0.33***	(0.11, 0.54)	0.07	(-0.16, 0.30)
Marital status (ref: not married)						
Married	0.14	(-0.17, 0.45)	0.01	(-0.30, 0.32)	0.13	(-0.23, 0.48)

Note: Weighted for survey design; *significant at 10%; ** significant at 5%; ***significant at 1%.

Appendix 4 – Author Reflexivity Statement

1. How does this study address local research and policy priorities?

The study addresses an important public health issue in LMICs and in attaining UHC. whose researchers engage in collaboration with high-income country researchers.

2. How were local researchers involved in study design?

The study idea and design were developed by TM, an Indonesian researcher who was at the time, working on their PhD in Australia under the supervision of BM and JTL. As an Indonesian researcher, TM led the contextualization of the research with significant inputs on global health, methods, and analysis approaches from BM and JTL, both from HICs. TM also then involved LPP, KA, and DAP (all Indonesian-based researchers with ongoing experience as local researchers as well as conducting international research collaborations involving HICs) who provided their inputs on the methods, and discussion section. DAP specifically has experience with authorizing permission to publish health research publication that uses Susenas datasets for Indonesian studies. Finally, there were a couple high-income country researchers with ongoing experience as journal editors (BM and JTL). Many of the authors originated from low- and middle-income countries, with only two high-income country researchers involved in the manuscript. We reflect that this might reflect equitable authorship.

3. How has funding been used to support the local research team?

While there was no specific funding used to fund this study, TM received the DFAT-funded Australia Awards Scholarship (AAS) for their PhD program, of which this study was part of the PhD project. Since the AAS program aims to build capacity for LMIC students, the fund has been used to support local researcher.

4. How are research staff who conducted data collection acknowledged?

Not applicable as the study used a secondary dataset. Acknowledgment to the Indonesia Bureau of Statistics, that provided the dataset, has been stated in the manuscript.

5. Do all members of the research partnership have access to study data?

Only local researchers from Indonesia have access to the data due to conditions set by the Indonesia Bureau of Statistics.

6. How was data used to develop analytical skills within the partnership?

TM had multiple direct discussions with BM and JTL during the analysis phase of the study. Other authors would then get feedbacks from JTL to leverage their discussion points and interpretation of the findings.

7. How have research partners collaborated in interpreting study data?

Multiple discussions on data interpretations were held, which included all authors involved in the study but mainly between TM, JTL, BM, and KA. And thus, there is a room for improvement where the discussions could be more comprehensively involve all authors to further strengthen the collaboration in data interpretation.

8. How were research partners supported to develop writing skills?

The research team involved in this study is predominantly composed of junior academics. The PhD student (TM) and early career researchers (KA and LPP) on the authorship team were supported by senior academics within this research team to develop and refine their writing skills.

9. How will research products be shared to address local needs?

This study will be published as open access. We also plan to develop a media release through local and international media outlets to distribute recommendations across a wide constituency. This will include engagement with local stakeholders, international collaborators and those interested in a wider global health issues.

10. How is the leadership, contribution and ownership of this work by LMIC researchers recognised within the authorship?

Author TM worked as part of the senior authorship team in developing this manuscript, and their contribution has been recognised as the first author. We have specifically included researchers based in Indonesia, an LMIC within the authorship team. We acknowledge, however, that the senior authorship team is predominantly based in high-income countries. The primary reason for this is that the study was part of a PhD project (TM's), which was supervised by researchers based in HICs.

11. **How have early career researchers across the partnership been included within the authorship team?**

We have included early career researchers (TM, KA, and LPP) within the authorship team. They all contributed to the interpretation of the study findings, refining of the methods and the development of the manuscript. While TM is based in a high-income country, KA and LPP were at the time of the development of this study, based in an LMIC.

12. How has gender balance been addressed within the authorship?

Five authors are female (TM, BM, LPP, KA, and DAP) with only one male author (JTL). We would need a more gender-balanced authorship team.

13. How has the project contributed to training of LMIC researchers?

The main author was a PhD student undertaking their degree in a high-income country, but was originally based in an LMIC. In addition, the authorship team is composed of two ECRs from LMIC (LPP and KA). All the authors based in high-income countries are especially senior researchers.

14. How has the project contributed to improvements in local infrastructure?

This project has not directly contributed to improvements in local infrastructure.

15. What safeguarding procedures were used to protect local study participants and researchers?

There was no primary data collection as part of this project, therefore this question is not directly applicable.