

Birth Place Research Quality (ResQu) Index

	Item	Scoring rubric	Score
A Quality of design			
1	Includes clear statement of research question/objective	0=no 1=yes	
2	Defines and describes each birth setting clearly (e.g. provider, facilities, location)	0=not defined or described 1=minimal definition 2=definition only in terms of provider 4=comprehensive definition of each birth setting	
3	Indicates type of study design	0=study design unclear 1=single retrospective cohort 2=single prospective cohort 3=case control study OR 3=comparative retrospective cohort 4=comparative prospective cohort 5=non-randomised control trial 6=RCT	
4	Defines key terms (e.g. low risk, PPH, outcome, mortality) consistently, transparently and appropriately (e.g. NICE, ACOG guidelines)	0=key terms not defined 2=some terms defined 3=most terms defined 4=all relevant terms defined	
5	Indicates ethics approval	0=no 1=yes (approval cited or reason why no approval)	
B Definition of sample			
6	(If relevant) distinguishes between a) planned home births with skilled attendants AND b) free births or unplanned home births	0=no 6=yes OR 6=NA i.e. doesn't include a home birth cohort	
7	Includes sample size calculation	0=no mention 1=refers to sample size calculation 2=indicates ideal sample size required for outcomes	
8	Uses reliable method of sampling and recruitment for each cohort	0=not reliable for any cohort 3=reliable for some but not all cohorts 6=reliable for all cohorts	
C Measurement of outcomes			
9	Outcome data from reliable source e.g. medical records, registration data	0=no 1=yes	
10	Identifies planned birth setting at time in pregnancy that is appropriate to selected outcome measures	0=planned birth setting not identified 1=retrospectively defined based on actual birth setting 2=retrospectively defined with planned setting clear 3=retrospectively determined at onset of active labour 3=planned setting prospectively-defined at a time appropriate to study type and measured outcomes	
11	Provider type (for birth) is indicated, measured and adjusted for in analysis	0=provider type not indicated or measured 1=provider reported 2=provider type indicated but not stratified / adjusted for 3= analysis stratified by provider type 4= provider type adjusted for in analysis OR single provider type across study	
12	Uses cohort size with appropriate power for selected outcomes being measured	0=not adequate for any outcome 1=limited power 2=uses composite outcome variable to address power 2=adequate power for all outcomes used	
13	Uses reliable method to indicate changes of birth setting	0=no 1=change of birth setting acknowledged 2=changes of birth setting indicated clearly and reliably	

	Item	Scoring rubric	Score
14	Indicates timing of transfer between birth settings in labour or postpartum period	0= not indicated 2=reports timing of transfer 4=discusses impact/relevance of timing of transfer	
15	Applies reliable and appropriate statistical methods to compare outcomes between cohorts	0=statistical methods not described 2=descriptive statistics only 2=comparative statistical methods used inappropriately 4=some comparative statistical methods appropriate 6=all comparative methods appropriate and reliable	
16	Reports and minimises missing data	0=not reported 1=reports missing data 2=missing data excluded from denominator 3=missing data <5% OR missing data imputed 4=assesses differences between results from participants with missing and non-missing data OR no missing data	
D	Comparability of cohorts		
17	Uses cohorts with comparable obstetric and socio demographic characteristics	0=no comparison group 1=cohorts differ in terms of risk 3=cohorts comparable by risk, but vary by socio-demographic characteristics 4=comparable socio demographic and risk profile 6=cohort characteristics are matched	
18	Retains women in original birth place cohort for analysis (intention to treat)	0=no 6=yes	
19	Provides consistent inclusion criteria	0=no inclusion criteria 3=vague criteria (e.g. undefined 'low risk', 'normal') 6=appropriate, consistently-defined criteria all cohorts	
20	Controls for confounders including socio-demographic and health profile	0=no 2=acknowledges confounders, but not in data analysis 2=only accounts for one confounder e.g. parity 2=controls for undefined confounders 4=controls for multiple confounders in analysis OR 4=uses matched data effectively OR 4=RCT	
E	Accuracy of interpretation and reporting		
21	Presents results of statistical comparisons clearly and effectively	0=no comparison between cohorts presented 2=presentation of comparisons confusing or limited 4=clear presentation of comparison between cohorts e.g. AOR, ARR, RR with appropriate CIs	
22	Bases discussion and conclusions on reported data	0=no 3=partly 6=all conclusions based on reported data	
23	Addresses impact of size of cohorts for each outcome measured	0=no 2=yes OR 2=NA i.e. all cohorts of sufficient size	
24	Addresses impact of incomplete data	0=missing data not reported 0=missing data >5% but not addressed in limitations 2=missing data >5% and impact addressed 2=missing data <5%	
25	Addresses impact of retrospective data	0=no 2=yes OR NA i.e. not retrospective data	
26	Addresses effect of level of service integration between home, birth centre and hospital	0=no 2=acknowledges effect of limited integration 4=accounts for effects of limited integration OR 4=well integrated system	
27	Addresses impact of local/regional standards, policies and protocols	0=no 2=yes OR 2=NA i.e. local protocols have no negative impact	