Appendices for "A realist synthesis to develop an explanatory model of how policy instruments impact child and maternal health outcomes"

By

Maxwell S. Barnish, Si Ying Tan, Sophie Robinson, Araz Taeihagh, G.J. Melendez-Torres

Full reference:

Maxwell S. Barnish, Si Ying Tan, Sophie Robinson, Araz Taeihagh, G.J. Melendez-Torres, A realist synthesis to develop an explanatory model of how policy instruments impact child and maternal health outcomes, *Social Science & Medicine*, 2023, 116402, ISSN 0277-9536, doi: 10.1016/j.socscimed.2023.116402

Link to published article:

https://doi.org/10.1016/j.socscimed.2023.116402

https://www.sciencedirect.com/science/article/pii/S0277953623007591

Appendix A: Database search report

Search results

Database	Hits
Medline	18,578
HMIC	665
PsycInfo	2788
Global Health	4305
Social policy and practice	566
Web of Science	2834
IBSS	10,007
Total	39,743
Duplicates	5969
Total to screen	**33,774**

Search strategies

Database: MEDLINE ALL

Host: Ovid

Data Parameters: 1946 to 16 March 2021

Date Searched: 17/03/2021

Searcher: SR

Hits: 18,578

Search strategy:

1. *politics/ or *diplomacy/ or *lobbying/ or *political activism/ or *stakeholder participation/

2. *political systems/ or *apartheid/ or *capitalism/ or *colonialism/ or *communism/ or *democracy/ or *fascism/ or *national socialism/ or *socialism/

3. Professional Corporations/

4. "Constitution and Bylaws"/

5. exp Policy Making/

6. exp Policy/

7. exp Social Welfare/

8. ((politic* or historic* or socioeconomic*) adj5 (tradition* or cultur* or system* or idea* or practice* or institution* or belief* or attitude* or exposure*)).ti,ab,kw.

9. "health system*".ti,ab,kw.

10. ((democra* or autocra*) adj5 (system* or govern* or regime* or state* or rule*)).ti,ab,kw.

11. (welfare adj5 (social* or regime* or state* or capitalism or corporatism)).ti,ab,kw.

12. (globali?ation or industriali?e*).ti,ab,kw.

13. (governance adj5 (level* or multilevel or mode* or international*)).ti,ab,kw.

14. (policy adj5 (instrument* or capacit* or tool* or capabilit* or quality or skill*)).ti,ab,kw.

15. or/1-14

16. adolescent health/ or child health/ or family health/ or infant health/ or reproductive health/ or exp women's health/

17. adolescent health services/ or exp child health services/ or family planning services/ or exp maternal health services/

18. *Population Health/

19. ((health or wellbeing or "well being") adj3 (population* or service* or public* or economic* or determinant* or family or families or child* or women or woman or adolescen* or infant* or inequalit*)).ti,ab,kw.

20. health status disparities/ or Social Change/

21. or/16-20

22. (teen* or youth* or adolescen* or juvenile* or (young adj2 (adult* or person* or individual* or people* or population* or man or men or wom?n)) or youngster* or highschool* or college* or ((secondary or high*) adj2 (school* or education))).ti,ab. or adolescent/ or young adult/

23. (child* or stepchild* or step-child* or kid or kids or girl or girls or boy or boys or preschool* or pre-school* or kindergarten* or school* or p?ediatric*).ti,ab. or exp child/

24. (baby or babies or neonate* or neo-nate* or newborn* or new-born* or infant*).ti,ab. or infant/ or infant, newborn/ or infant, postmature/ or infant, premature/ or infant, extremely premature/

25. (pregnan* or childbear* or child-bear* or childbirth* or child-birth* or antenatal* or ante-natal* or neonatal* or neo-natal* or perinatal* or peri-natal* or postnatal* or post-natal* or postpartum or post-partum or prenatal* or pre-natal*).ti,ab.

26. exp pregnancy/ or exp pregnancy complications/

27. (pregnan* or gestation* or fertility or fertile or obstetric* or reproduction or (expectant* adj2 mother*) or "mother-to-be" or "mothers-to-be" or maternit* or maternal or parturient* or "before delivery" or childbearing or child-bearing or gravidit*).ti,ab.

28. maternal exposure/ or pregnant women/ or breast feeding/

29. Mothers/

30. or/22-29

31. child mortality/ or fetal mortality/ or exp infant mortality/ or maternal mortality/

32. exp Infant, Low Birth Weight/ or Birth Weight/

33. exp Child Welfare/

34. Prenatal Care/

35. Midwifery/

36. Pregnancy Complications, Hematologic/

37. exp Hemoglobins/

38. body weight/ or exp weight loss/ or thinness/

39. exp Immunization/

40. exp Immunization Programs/

41. Pregnancy in Adolescence/

42. exp Smoking/

43. ((infant* or child* or matern*) adj2 mortality).ti,ab,kw.

44. (low adj2 "birth weight").ti,ab,kw.

45. ("well being" or wellbeing or welfare or "poor health" or "bad health" or "ill health").ti,ab,kw.

46. ((prenatal or antenatal or before birth) adj2 care).ti,ab,kw.

47. ("skilled birth attendant" or midwife or midwives).ti,ab,kw.

48. (underweight or "low weight" or thin or emaciated).ti,ab,kw.

49. (an?emic or an?emia).ti,ab,kw.

50. ("h?emoglobin level*" or "h?emoglobin status").ti,ab,kw.

51. (vaccin* or immuni?ation).ti,ab,kw.

52. ((teen* or youth or young* or adolescen*) adj2 (pregnan* or birth)).ti,ab,kw.

53. (smoking or smoke*).ti,ab,kw.

54. or/31-53

55. 15 and 21 and 30 and 54

56. limit 55 to english language

Database: **Health Management Information Consortium - HMIC**
Host: Ovid
Data Parameters: 1979 to January 2021
Date Searched: 18/03/2021

Searcher: SR

Hits: 665

Search strategy:

1. exp politics/

2. exp political systems/

3. exp law/

4. Policy formulation/

5. exp Policy/

6. exp Social Welfare/

7. ((politic* or historic* or socioeconomic*) adj5 (tradition* or cultur* or system* or idea* or practice* or institution* or belief* or attitude* or exposure*)).ti,ab.

8. "health system*".ti,ab.

9. ((democra* or autocra*) adj5 (system* or govern* or regime* or state* or rule*)).ti,ab.

10. (welfare adj5 (social* or regime* or state* or capitalism or corporatism)).ti,ab.

11. (globali?ation or industriali?e*).ti,ab.

12. (governance adj5 (level* or multilevel or mode* or international*)).ti,ab.

13. (policy adj5 (instrument* or capacit* or tool* or capabilit* or quality or skill*)).ti,ab.

14. or/1-13

15. child health/ or family health/ or exp women's health/

16. young peoples health services/ or exp child health services/ or exp family planning services/ or exp Maternity services/

17. health inequalities/ or exp Social Change/

18. ((health or wellbeing or "well being") adj3 (population* or service* or public* or economic* or determinant* or family or families or child* or women or woman or adolescen* or infant* or inequalit*)).ti,ab.

19. or/15-18

20. (teen* or youth* or adolescen* or juvenile* or (young adj2 (adult* or person* or individual* or people* or population* or man or men or wom#n)) or youngster* or highschool* or college* or ((secondary or high*) adj2 (school* or education))).ti,ab. or exp young people/

21. (child* or stepchild* or step-child* or kid or kids or girl or girls or boy or boys or preschool* or pre-school* or kindergarten* or school* or p?ediatric*).ti,ab. or exp children/

22. (baby or babies or neonate* or neo-nate* or newborn* or new-born* or infant*).ti,ab.

23. (pregnan* or childbear* or child-bear* or childbirth* or child-birth* or antenatal* or ante-natal* or neonatal* or neo-natal* or perinatal* or peri-natal* or postnatal* or post-natal* or postpartum or post-partum or prenatal* or pre-natal*).ti,ab.

24. exp pregnancy/ or exp pregnancy complications/

25. (pregnan* or gestation* or fertility or fertile or obstetric* or reproduction or (expectant* adj2 mother*) or "mother-to-be" or "mothers-to-be" or maternit* or maternal or parturient* or "before delivery" or childbearing or child-bearing or gravidit*).ti,ab.

26. pregnant women/ or breastfeeding/

27. exp Mothers/

28. or/20-27

29. child mortality/ or exp foetal death/ or exp infant mortality/ or maternal mortality/

30. exp Birth Weight/

31. exp Child Welfare/

32. exp antenatal care/

33. body weight/ or weight loss/ or exp thinness/

34. exp Smoking/

35. midwifery services/ or exp midwives/ or midwifery/

36. haemoglobins/

37. immunisation/

38. immunisation rates/

39. ((infant* or child* or matern*) adj2 mortality).ti,ab.

40. (low adj2 "birth weight").ti,ab.

41. ("well being" or wellbeing or welfare or "poor health" or "bad health" or "ill health").ti,ab.

42. ((prenatal or antenatal or before birth) adj2 care).ti,ab.

43. ("skilled birth attendant" or midwife or midwives).ti,ab.

44. (underweight or "low weight" or thin or emaciated).ti,ab.

45. (an?emic or an?emia).ti,ab.

46. ("h?emoglobin level*" or "h?emoglobin status").ti,ab.

47. (vaccin* or immuni?ation).ti,ab.

48. ((teen* or youth or young* or adolescen*) adj2 (pregnan* or birth)).ti,ab.

49. (smoking or smoke*).ti,ab.

50. or/29-49

51. 14 and 19 and 28 and 50

52. limit 51 to english language

Database: APA PsycInfo
Host: Ovid
Data Parameters: 1806 to March week 2 2021

Date Searched: 18/03/2021

Searcher: SR

Hits: 2788

Search strategy:

1. exp politics/ or exp Political Economic Systems/

2. exp Laws/

3. exp policy making/ or welfare reform/ or "welfare services (government)"/

4. ((politic* or historic* or socioeconomic*) adj5 (tradition* or cultur* or system* or idea* or practice* or institution* or belief* or attitude* or exposure*)).ti,ab.

5. "health system*".ti,ab.

6. ((democra* or autocra*) adj5 (system* or govern* or regime* or state* or rule*)).ti,ab.

7. (welfare adj5 (social* or regime* or state* or capitalism or corporatism)).ti,ab.

8. (globali?ation or industriali?e*).ti,ab.

9. (governance adj5 (level* or multilevel or mode* or international*)).ti,ab.

10. (policy adj5 (instrument* or capacit* or tool* or capabilit* or quality or skill*)).ti,ab.

11. or/1-10

12. child health/ or adolescent health/

13. exp women's health/

14. young peoples health services/ or exp child health services/ or exp family planning services/ or exp Maternity services/

15. health disparities/ or exp Social Change/

16. ((health or wellbeing or "well being") adj3 (population* or service* or public* or economic* or determinant* or family or families or child* or women or woman or adolescen* or infant* or inequalit*)).ti,ab.

17. or/12-16

18. (teen* or youth* or adolescen* or juvenile* or (young adj2 (adult* or person* or individual* or people* or population* or man or men or wom#n)) or youngster* or highschool* or college* or ((secondary or high*) adj2 (school* or education))).ti,ab. or exp young people/

19. (child* or stepchild* or step-child* or kid or kids or girl or girls or boy or boys or preschool* or pre-school* or kindergarten* or school* or p?ediatric*).ti,ab. or exp children/

20. (baby or babies or neonate* or neo-nate* or newborn* or new-born* or infant*).ti,ab.

21. (pregnan* or childbear* or child-bear* or childbirth* or child-birth* or antenatal* or ante-natal* or neonatal* or neo-natal* or perinatal* or peri-natal* or postnatal* or post-natal* or postpartum or post-partum or prenatal* or pre-natal*).ti,ab.

22. (pregnan* or gestation* or fertility or fertile or obstetric* or reproduction or (expectant* adj2 mother*) or "mother-to-be" or "mothers-to-be" or maternit* or maternal or parturient* or "before delivery" or childbearing or child-bearing or gravidit*).ti,ab.

23. exp pregnancy/ or breast feeding/

24. exp Mothers/

25. exp obstetrical complications/

26. or/18-25

27. child mortality/ or exp foetal death/ or exp infant mortality/ or maternal mortality/

28. exp Birth Weight/

29. exp Child Welfare/

30. exp prenatal care/

31. body weight/ or weight loss/ or exp thinness/

32. exp tobacco smoking/

33. midwifery services/ or exp midwives/ or midwifery/

34. hemoglobin/

35. immunization/

36. ((infant* or child* or matern*) adj2 mortality).ti,ab.

37. (low adj2 "birth weight").ti,ab.

38. ("well being" or wellbeing or welfare or "poor health" or "bad health" or "ill health").ti,ab.

39. ((prenatal or antenatal or before birth) adj2 care).ti,ab.

40. ("skilled birth attendant" or midwife or midwives).ti,ab.

41. (underweight or "low weight" or thin or emaciated).ti,ab.

42. (an?emic or an?emia).ti,ab.

43. ("h?emoglobin level*" or "h?emoglobin status").ti,ab.

44. (vaccin* or immuni?ation).ti,ab.

45. ((teen* or youth or young* or adolescen*) adj2 (pregnan* or birth)).ti,ab.

46. (smoking or smoke*).ti,ab.

47. or/29-49

48. 11 and 17 and 26 and 47

49. limit 48 to english language

Database: Global Health
Host: Ovid
Data Parameters: 1973 to 2021 Week 10
Date Searched: 18/03/2021
Searcher: SR
Hits: 4305
Search strategy:
1. exp politics/

2. exp political systems/

3. exp law/

4. Policy formulation/

5. exp Policy/

6. exp Social Welfare/

7. ((politic* or historic* or socioeconomic*) adj5 (tradition* or cultur* or system* or idea* or practice* or institution* or belief* or attitude* or exposure*)).ti,ab.

8. "health system*".ti,ab.

9. ((democra* or autocra*) adj5 (system* or govern* or regime* or state* or rule*)).ti,ab.

10. (welfare adj5 (social* or regime* or state* or capitalism or corporatism)).ti,ab.

11. (globali?ation or industriali?e*).ti,ab.

12. (governance adj5 (level* or multilevel or mode* or international*)).ti,ab.

13. (policy adj5 (instrument* or capacit* or tool* or capabilit* or quality or skill*)).ti,ab.

14. or/1-13

15. women's health/ or child health/ or exp health services/

16. young peoples health services/ or exp child health services/ or exp family planning services/ or exp Maternity services/

17. health inequalities/ or exp Social Change/

18. ((health or wellbeing or "well being") adj3 (population* or service* or public* or economic* or determinant* or family or families or child* or women or woman or adolescen* or infant* or inequalit*)).ti,ab.

19. or/15-18

20. (teen* or youth* or adolescen* or juvenile* or (young adj2 (adult* or person* or individual* or people* or population* or man or men or wom#n)) or youngster* or highschool* or college* or ((secondary or high*) adj2 (school* or education))).ti,ab. or exp young people/

21. (child* or stepchild* or step-child* or kid or kids or girl or girls or boy or boys or preschool* or pre-school* or kindergarten* or school* or p?ediatric*).ti,ab. or exp children/

22. (baby or babies or neonate* or neo-nate* or newborn* or new-born* or infant*).ti,ab.

23. (pregnan* or childbear* or child-bear* or childbirth* or child-birth* or antenatal* or ante-natal* or neonatal* or neo-natal* or perinatal* or peri-natal* or postnatal* or post-natal* or postpartum or post-partum or prenatal* or pre-natal*).ti,ab.

24. exp pregnancy/ or exp pregnancy complications/

25. (pregnan* or gestation* or fertility or fertile or obstetric* or reproduction or (expectant* adj2 mother*) or "mother-to-be" or "mothers-to-be" or maternit* or maternal or parturient* or "before delivery" or childbearing or child-bearing or gravidit*).ti,ab.

26. pregnant women/ or breast feeding/

27. exp Mothers/ or exp adolescents/ or exp children/ or exp infants/

28. or/20-27

29. child mortality/ or exp foetal death/ or exp infant mortality/ or maternal mortality/

30. exp Birth Weight/

31. Child Welfare/

32. prenatal care/

33. body weight/ or weight loss/ or exp thinness/

34. exp Smoking/

35. midwifery services/ or exp midwives/ or midwifery/

36. haemoglobin/

37. exp immunization/or exp vaccination/

38. immunisation rates/

39. ((infant* or child* or matern*) adj2 mortality).ti,ab.

40. (low adj2 "birth weight").ti,ab.

41. ("well being" or wellbeing or welfare or "poor health" or "bad health" or "ill health").ti,ab.

42. ((prenatal or antenatal or before birth) adj2 care).ti,ab.

43. ("skilled birth attendant" or midwife or midwives).ti,ab.

44. (underweight or "low weight" or thin or emaciated).ti,ab.

45. (an?emic or an?emia).ti,ab.

46. ("h?emoglobin level*" or "h?emoglobin status").ti,ab.

47. (vaccin* or immuni?ation).ti,ab.

48. ((teen* or youth or young* or adolescen*) adj2 (pregnan* or birth)).ti,ab.

49. (smoking or smoke*).ti,ab.

50. or/29-49

51. 14 and 19 and 28 and 50

55. 19 or 52 or 53 or 54

56. limit 55 to english language

Database: Social Policy and Practice
Host: Ovid
Data Parameters: 202101
Date Searched: 19/03/2021
Searcher: SR
Hits: 566

Search strategy:

1. ((politic* or historic* or socioeconomic*) adj5 (tradition* or cultur* or system* or idea* or practice* or institution* or belief* or attitude* or exposure*)).ab,de,hw,ti.

2. "health system*".ab,de,hw,ti.

3. ((democra* or autocra*) adj5 (system* or govern* or regime* or state* or rule*)).ab,de,hw,ti.

4. (welfare adj5 (social* or regime* or state* or capitalism or corporatism)).ab,de,hw,ti.

5. (globali?ation or industriali?e*).ab,de,hw,ti.

6. (governance adj5 (level* or multilevel or mode* or international*)).ab,de,hw,ti.

7. (policy adj5 (instrument* or capacit* or tool* or capabilit* or quality or skill*)).ab,de,hw,ti.

8. or/1-7

9. ((health or wellbeing or "well being") adj3 (population* or service* or public* or economic* or determinant* or family or families or child* or women or woman or adolescen* or infant* or inequalit*)).ab,de,hw,ti.

10. "social change".ab,de,hw,ti.

11. 9 or 10

12. (teen* or youth* or adolescen* or juvenile* or (young adj2 (adult* or person* or individual* or people* or population* or man or men or wom#n)) or youngster* or highschool* or college* or ((secondary or high*) adj2 (school* or education))).ab,de,hw,ti.

13. (child* or stepchild* or step-child* or kid or kids or girl or girls or boy or boys or preschool* or pre-school* or kindergarten* or school* or p?ediatric*).ab,de,hw,ti.

14. (baby or babies or neonate* or neo-nate* or newborn* or new-born* or infant*).ab,de,hw,ti.

15. (pregnan* or childbear* or child-bear* or childbirth* or child-birth* or antenatal* or ante-natal* or neonatal* or neo-natal* or perinatal* or peri-natal* or postnatal* or post-natal* or postpartum or post-partum or prenatal* or pre-natal*).ab,de,hw,ti.

16. (pregnan* or gestation* or fertility or fertile or obstetric* or reproduction or mother* or maternit* or maternal or parturient* or "before delivery" or childbearing or child-bearing or gravidit*).ab,de,hw,ti.

17. or/12-16

18. ((infant* or child* or matern*) adj2 mortality).ab,de,hw,ti.

19. (low adj2 "birth weight").ab,de,hw,ti.

20. ("well being" or wellbeing or welfare or "poor health" or "bad health" or "ill health").ab,de,hw,ti.

21. ((prenatal or antenatal or before birth) adj2 care).ab,de,hw,ti.

22. ("skilled birth attendant" or midwife or midwives).ab,de,hw,ti.

23. (underweight or "low weight" or thin or emaciated).ab,de,hw,ti.

24. (an?emic or an?emia).ab,de,hw,ti.

25. ("h?emoglobin level*" or "h?emoglobin status").ab,de,hw,ti.

26. (vaccin* or immuni?ation*).ab,de,hw,ti.

27. ((teen* or youth or young* or adolescen*) adj2 (pregnan* or birth)).ab,de,hw,ti.

28. (smoking or smoke*).ab,de,hw,ti.

29. or/18-28

30. 8 and 11 and 17 and 29

31. limit 30 to English language

Database: Web of Science – SSCI and CPCI-SSH
Host: Clarivate Analytics
Data Parameters: Social Sciences Citation Index (SSCI) – 1956-present
Conference Proceedings Citation Index- Social Science & Humanities (CPCI-SSH) – 1990-present
Date Searched: 23/03/2021
Searcher: SR
Hits: 2,834

Search strategy:

1. TS=((politic* or historic* or socioeconomic*) near/4 (tradition* or cultur* or system* or idea* or practice* or institution* or belief* or attitude* or exposure*))
2. TS="health system*"
3. TS=((democra* or autocra*) near/4 (system* or govern* or regime* or state* or rule*))
4. TS=(welfare near/4 (social* or regime* or state* or capitalism or corporatism))
5. TS=(globali?ation or industriali?e*)
6. TS=(governance near/4 (level* or multilevel or mode* or international*))
7. TS=(policy near/4 (instrument* or capacit* or tool* or capabilit* or quality or skill*))
8. #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
9. TS=((health or wellbeing or "well being") near/2 (population* or service* or public* or economic* or determinant* or family or families or child* or women or woman or adolescen* or infant* or inequalit*))
10. TS="social change"
11. #10 OR #9
12. TS=(teen* or youth* or adolescen* or juvenile* or (young near/2 (adult* or person* or individual* or people* or population* or man or men or wom?n)) or youngster* or highschool* or college* or ((secondary or high*) near/2 (school* or education)))
13. TS=(child* or stepchild* or step-child* or kid or kids or girl or girls or boy or boys or preschool* or pre-school* or kindergarten* or school* or p?ediatric*)
14. TS=(baby or babies or neonate* or neo-nate* or newborn* or new-born* or infant*)
15. TS=(pregnan* or childbear* or child-bear* or childbirth* or child-birth* or antenatal* or ante-natal* or neonatal* or neo-natal* or perinatal* or peri-natal* or postnatal* or post-natal* or postpartum or post-partum or prenatal* or pre-natal*)

16. TS=(pregnan* or gestation* or fertility or fertile or obstetric* or reproduction or mother* or maternit * or maternal or parturient* or "before delivery" or childbearing or child-bearing or gravidit*)
17. #16 OR #15 OR #14 OR #13 OR #12
18. TS=((infant* or child* or matern*) near/2 mortality)
19. TS=(low near/2 "birth weight")
20. TS=("well being" or wellbeing or welfare or "poor health" or "bad health" or "ill health")
21. TS=(care (prenatal or antenatal or before birth))
22. TS=("skilled birth attendant" or midwife or midwives)
23. TS=(underweight or "low weight" or thin or emaciated)
24. TS=(an?emic or an?emia)
25. TS=("h?emoglobin level*" or "h?emoglobin status")
26. TS=(vaccin* or immuni?ation)
27. TS=((teen* or youth or young* or adolescen*) near/2 (pregnan* or birth))
28. TS=(smoking or smoke*)
29. #28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18
30. #29 AND #17 AND #11 AND #8
31. **Refined by: LANGUAGES:** (ENGLISH)

Database: International Bibliography of the Social Sciences - IBSS
Host: ProQuest
Data Parameters: 1951-current
Date Searched: 24/03/2021
Searcher: SR
Hits: 10,007

Search strategy:

noft((ti,ab(teen* OR youth* OR adolescen* OR juvenile* OR "young adult*" OR "young person*" OR "young individual*" OR "young people*" OR "young man" OR "young men" OR "young woman" OR "young women" OR youngster*) OR ti,ab(child* OR stepchild* OR step-child* OR kid OR kids OR girl OR girls OR boy OR boys) OR ti,ab(baby OR babies OR newborn* OR new-born* OR infant*) OR ti,ab(pregnan* OR childbear* OR child-bear* OR childbirth* OR child-birth* OR antenatal* OR ante-natal* OR postnatal* OR post-natal*) OR ti,ab(pregnan* OR gestation* OR fertility OR fertile OR obstetric* OR reproduction OR mother* OR maternity OR maternal OR childbearing OR child-bearing)) AND (ti,ab("infant* mortality" OR "child* mortality" OR "matern* mortality") OR ti,ab("birth weight") OR ti,ab("well being" OR wellbeing OR welfare OR "poor health" OR "bad health" OR "ill health") OR ti,ab(prenatal OR antenatal OR "before birth") OR ti,ab("skilled birth attendant" OR midwife OR midwives) OR ti,ab(underweight OR "low weight" OR thin OR emaciated) OR ti,ab(anaemic OR anemic OR anaemia OR anemia) OR ti,ab("hemoglobin level*" OR "hemoglobin status" OR "haemoglobin level*" OR "haemoglobin status") OR ti,ab(vaccin* OR immunisation OR immunization) OR ti,ab(teen* (pregnan* OR birth)) OR ti,ab(young (pregnan* OR birth)) OR ti,ab(youth (pregnan* OR birth)) OR

ti,ab(adolescen* (pregnan* OR birth)) OR ti,ab(smoking OR smoke*))) AND noft((ti,ab(social* OR regime* OR state* OR capitalism OR corporatism OR governance OR policy) OR ti,ab(globali?ation OR industriali?e*) OR ti,ab(politic* OR historic* OR socioeconomic*) OR ti,ab("health system*") OR ti,ab(democra* OR autocra*)) AND (ti,ab(health OR wellbeing OR "well being" OR inequalit*) OR ti,ab("social change")))

Appendix B: Excluded studies with reasons

#	Exposures	Data only at one time point	Outcomes	Article type	Duplicate	Population	Other
1	Aassve et al. Childbearing and well-being: a comparative analysis of European welfare regimes. Journal of European Social Policy 2005; 15 (4): 283-299.	Abdulahi et al. The effect of Lagos state government expenditure on maternal mortality ratio. Polish Psychological Bulletin. 2019;50(3):247-53	Aber et al. The Impact of a Holistic Conditional Cash Transfer Program in New York City on Parental Financial Investment, Student Time Use, and Educational Processes and Outcomes. J Res Educ Eff. 2016;9(3):334-63.	Adam et al. Achieving the millennium development goals for health: Cost effectiveness analysis of strategies for maternal and neonatal health in developing countries. British Medical Journal. 2005;331(7525):1107-10	Adam et al. Cost effectiveness analysis of strategies for maternal and neonatal health in developing countries. BMJ. 2005;331(7525):1107.	Alves et al. The association between a conditional cash transfer programme and malaria incidence: a longitudinal ecological study in the Brazilian Amazon between 2004 and 2015. BMC public health. 2021;21(1):1253.	Hiam et al. What caused the spike in mortality in England and Wales in January 2015? Journal of the Royal Society of Medicine. 2017;110(4):131-7. Insufficient description of methods.
2	Abdel Rahman et al. BDN programmes and the effect of medical students' interventions to promote child health in Sudan. Eastern Mediterranean Health Journal 2007; 13: 1319-29.	Adebowale. Intra-demographic birth risk assessment scheme and infant mortality in Nigeria. Global Health Action. 2017;10(1): 1366135.	Aboagye et al. Maternal health-seeking behavior: the role of financing and organization of health services in Ghana. Global Journal of Health Science 2013; 5(5): 67-79.	Adams et al. Explaining equity gains in child survival in Bangladesh: scale, speed, and selectivity in health and development. Lancet 2013; 382: 2027-2037.	Arifeen et al. Effect of the Integrated Management of Childhood Illness strategy on childhood mortality and nutrition in a rural area in Bangladesh: a cluster randomised trial. The Lancet. 2009;374(9687):393-403	Balkhi et al. Impact of Healthcare Expenditures on Healthcare Outcomes in the Middle East and North Africa (MENA) Region: A Cross-Country Comparison, 1995–2015. Frontiers in Public Health. 2021;8: 624962.	Messaili et al. Public spending on health and population health in Algeria: An econometric analysis. Sante Publique. 2017;29(3):383-92. Language.

3	Abdul Karim et al. Welfare state regimes and population health: integrating the East Asian welfare states. Health Policy 2010; 94(1): 45-53.	Adegbosin et al. Efficacy of deep learning methods for predicting under-five mortality in 34 low-income and middle-income countries. BMJ Open. 2020;10(8): e034524.	Adam et al. Improving maternal and newborn health: Effectiveness of a community health worker program in rural Kenya. PLoS ONE. 2014;9(8): e104027.	Agaba et al. Implementing legal accountability to reduce maternal mortality and morbidity in Uganda. African Human Rights Law Journal 2018; 18 (1): 123.	Jongh et al. Barriers and enablers to integrating maternal and child health services to antenatal care in low and middle income countries. BJOG 2016; 123 (4): 549-557.	Bobak et al. Societal characteristics and health in the former communist countries of Central and Eastern Europe and the former Soviet Union: a multilevel analysis. Journal of Epidemiology and Community Health 2007; 61: 990-996.	
4	Adamu et al. Maternal mortality in Northern Nigeria: A population-based study. Eur J Obstet Gynecol Reprod Biol. 2003;109(2):153-9	Adinma et al. Effect of government-community healthcare co-financing on maternal and child healthcare in Nigeria. West African Journal of Medicine. 2011;30(1):35-41.	Aguilera et al. Under five and infant mortality in Chile (1990-2016): trends, disparities, and causes of death. PLoS ONE 2020; 15 (9): e0239974.	Aguero et al. The Impact of Unconditional Cash Transfers on Nutrition: The South African Child Support Grant. The Impact of Unconditional Cash Transfers on Nutrition: The South African Child Support Grant. Working Papers 39, International Policy Centre for Inclusive Growth, 2007	Labrecque et al. Effect of a conditional cash transfer program on length-for-age and weight-for-age in Brazilian infants at 24 months using doubly-robust, targeted estimation. Social Science and Medicine. 2018;211:9-15	Gonzalez. The impact of government interventions on health, schooling and family planning in the Philippines. Philippine Review of Economics and Business 1992; 29 (1): 10-53.	
5	Afshan et al. Social determinants and causes of child mortality in Pakistan: Analysis of national demographic health surveys from 1990 to 2013. Journal of	Adongo et al. The role of community-based health planning and services strategy in involving males in the provision of	Ahmed et al. The impact of a nurse mentoring program on the quality of labour and delivery care at primary health care facilities in Bihar, India. BMJ	Ahmed et al. Cross-National Systematic Review of Neonatal Mortality and Postnatal Newborn Care: Special Focus on Pakistan. International Journal of Environmental Research and Public Health 2017; 14(12): 23	Rasella et al. Effect of a conditional cash transfer programme on childhood mortality: A nationwide analysis of Brazilian municipalities. The Lancet.	Nery et al. Effect of the Brazilian Conditional Cash Transfer and Primary Health Care Programs on the New Case	

	Paediatrics and Child Health. 2020;56(3):457-72.	family planning services: a qualitative study in Southern Ghana. Reproductive Health 2013; 10: 36.	Global Health. 2019;4(6): e001767.		2013;382(9886):57-64.	Detection Rate of Leprosy. PLoS Neglected Tropical Diseases. 2014;8(11): e3357.	
6	Agho et al. Factors associated with under-5 mortality in three disadvantaged East African districts. International Health. 2020;12(5):417-28.	Adu et al. The effects of individual and community-level factors on maternal health outcomes in Ghana. PLoS ONE 2018; 13: e0207942.	Arifeen et al. Integrated Management of Childhood Illness (IMCI) in Bangladesh: Early findings from a cluster-randomised study. Lancet. 2004;364(9445):1595-602	Ahn et al. Initiatives to Reduce Maternal Mortality and Severe Maternal Morbidity in the United States: A Narrative Review. Annals of Internal Medicine 2020; 173: 11: S3-S10.		Pankratz et al. Theorizing the relationship between welfare state regimes and health using comparative national-level health measures. Journal of Comparative Research in Anthropology and Sociology 2018; 9(1): 45-65.	
7	Ahmed et al. Population-based rates, timing, and causes of maternal deaths, stillbirths, and neonatal deaths in south Asia and sub-Saharan Africa: a multi-country prospective cohort study. The Lancet Global Health. 2018;6(12):e1297-e308.	Aguilera. Can better infrastructure and quality reduce hospital infant mortality rates in Mexico? Health Policy 2007; 80: 239-252.	Armstrong Schellenberg et al. The effect of Integrated Management of Childhood Illness on observed quality of care of under-fives in rural Tanzania. Health Policy and Planning 2004; 19: 1-10.	Aitken et al. The maternal health outcomes of paid maternity leave: A systematic review. Social Science and Medicine 2015; 130: 32		Pescarini et al. Conditional Cash Transfer Program and Leprosy Incidence: Analysis of 12.9 Million Families from the 100 Million Brazilian Cohort. American Journal of Epidemiology.	

						2020;189(12):1547-58	
8	Alkema et al. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: A systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. The Lancet. 2016;387(10017):462-74.	Ahluwalia et al. The effect of WIC participation on small-for-gestational-age births: Michigan, 1992. American Journal of Public Health. 1998;88(9):1374-7.	Avila-Burgos et al. Government expenditure on maternal health and family planning services for adolescents in Mexico, 2003–2015. International Journal of Environmental Research and Public Health. 2020;17(9): 3097.	Aizawa. Joint impact of the conditional cash transfer on child nutritional status and household expenditure in Indonesia. J Hum Cap. 2020;14(1):122-64		Rajmil et al. Austerity policies and mortality rates in European Countries, 2011-2015. American Journal of Public Health. 2019;109(5):768-70	
9		Al Serouri et al. Reducing maternal mortality in Yemen: challenges and lessons learned from baseline assessment. International Journal of Gynaecology and Obstetrics 2009; 105: 86-91.	Bjegovic-Mikanovic et al. A Gap Analysis of Mother, New-born, and Child Health in West Africa with Reference to the Sustainable Development Goals 2030. African Journal of Reproductive Health 2018; 22 (4): 123-134.	Akister et al. Leaving care and mental health: outcomes for children in out-of-home care during the transition to adulthood. Health Research Policy and Systems 2010; 8: 10.		Rasella et al. Child morbidity and mortality associated with alternative policy responses to the economic crisis in Brazil: A nationwide microsimulation study. PLoS Medicine 2018; 15(5): e1002570.	
10		Andrade et al. Income transfer policies and the impacts on the immunization of	Bjegovic-Mikanovic et al. A gap analysis of SDG 3 and MDG 4/5mortality health targets in the six	Amoako et al. Bridging the Gap: Ghana's National Health Insurance Scheme and Its Impact on Under-Five Healthcare. Current Trends in			

		children: The Bolsa Família Program. Cadernos de Saude Publica. 2012;28(7):1347-58.	Arabic countries of North Africa: Egypt, Libya, Tunisia, Algeria, Morocco, and Mauritania. Libyan Journal of Medicine 2019; 14(1): 1607698.	Public Sector Research 2019; 9:17.			
11		Ariyo et al. The influence of the social and cultural environment on maternal mortality in Nigeria: Evidence from the 2013 demographic and health survey. PLoS ONE. 2017;12(12): e0190285.	Blau et al. Strengthening national decision-making on immunization by building capacity for economic evaluation: Implementing ProVac in Europe. Vaccine 2015; 33 (S1): A34-39.	Aradeon et al. Reducing rural maternal mortality and the equity gap in northern Nigeria: the public health evidence for the Community Communication Emergency Referral strategy. International Journal of Women's Health 2016: 8: 77-92.			
12	Armstrong Schellenberg et al. Risk factors for child mortality in rural Tanzania. Tropical Medicine and International Health. 2002;7(6):506-11. Exposures.	Arthur et al. The Effects of Health Expenditure on Health Outcomes in Sub-Saharan Africa (SSA). African Development Review. 2017;29(3):524-36.	Bleijenberg et al. Trading Well-Being for Economic Efficiency: The 1990 Shift in EU Childcare Policies. Marriage & Family Review 2006; 39 (3-4): 315-336.	Asad et al. The impact of health reform on maternal and child health indicators in developing countries: a systematic review. Bali Medical Journal 2019; 8(1): 9-17			
13	Becker et al. Returns on investment in public health:	Aukes et al. Causes and circumstances of maternal death: a	Bonneson et al. How gender-neutral are the Nordic countries really? Father-	Attanasio et al. The Short-Term Impact of a Conditional Cash Subsidy on Child Health and Nutrition in Colombia.			

	effect of public health expenditures on infant health, 1983-1990. Journal of Health Care Finance 1998; 25: 5-18.	secondary analysis of the Community-Level Interventions for Pre-eclampsia (CLIP) trials cohort. The Lancet Global Health. 2021;9(9):e1242-e51	friendliness in leave schemes for families with children. European Journal of Social Security 2013; 15 (4): 403-428.	The short-term impact of a conditional cash subsidy on child health and nutrition in Colombia. The Institute for Fiscal Studies, 2005.			
14	Bhuiya et al. Unlocking community capability through promotion of self-help for health: experience from Chakaria, Bangladesh. BMC Health Services Research 2016; 16; S7.	Binagwaho et al. Impact of implementing performance-based financing on childhood malnutrition in Rwanda. BMC Public Health 2014; 14: 1132.	Borsari et al. An Innovative Mobile Health System to Improve and Standardize Antenatal Care Among Underserved Communities: A Feasibility Study in an Italian Hosting Center for Asylum Seekers. Journal of Immigrant & Minority Health 2018; 20(5): 1128-1136.	Awoonor-Williams et al. The Ghana essential health interventions program: a plausibility trial of the impact of health systems strengthening on maternal & child survival. BMC Health Services Research 2013; 13 (S2): S3.			
15	Blair et al. How community resources mitigate the association between household poverty and the incidence of adverse childhood experiences. International Journal of Public	Bisika et al. The effectiveness of the TBA programme in reducing maternal mortality and morbidity in Malawi. East African Journal of Public Health	Bradley et al. Improving the quality of child health services: participatory action by providers. International Journal for Quality in Health Care 2005; 17 (5): 391-399.	Baird et al. Girl power: cash transfers and adolescent welfare: evidence from a cluster-randomized experiment in Malawi. Working paper, National Bureau of Economic Research, 2013.			

	Health 2019; 64(7): 1059-1068.	2008; 5(2): 103-110.					
16	Blanc et al. Measuring progress in maternal and newborn health care in Mexico: validating indicators of health system contact and quality of care. BMC Pregnancy and Childbirth 2016; 16: 255.	Blank et al. Exempting schoolchildren from immunizations: states with few barriers had highest rates of nonmedical exemptions. Health Affairs 2013; 32: 1282-1290.	Brinda et al. Correlates of out-of-pocket and catastrophic health expenditures in Tanzania: results from a national household survey. BMC International Health and Human Rights 2014; 14:5.	Barenberg et al. The Effect of Public Health Expenditure on Infant Mortality: Evidence from a Panel of Indian States, 1983-1984 to 2011-2012. Working paper, University of Massachusetts, Amhurst, 2015. Article type.			
17	Blanchard et al. Understanding the roles of community health workers in improving perinatal health equity in rural Uttar Pradesh, India: a qualitative study. International Journal for Equity in Health 2021; 20:1.	Bokhari et al. Government health expenditures and health outcomes. Health Economics. 2007;16(3):257-73.	Brindis et al. Service integration and teen friendliness in practice: a program assessment of sexual and reproductive health services for adolescents. Journal of Adolescent Health 2005; 37(2): 155-162.	Barnish et al. Linking political exposures to child and maternal health outcomes: a realist review. BMC Public Health 2021; 21: 127.			
18	Blau. A model of child nutrition, fertility, and women's time allocation: the case of Nicaragua. Research in Population Economics 1984; 5: 113-135.	Bolarinwa et al. Mapping knowledge management resources of maternal, newborn and child health (MNCH) among people living in rural and urban settings of Ilorin,	Brindis et al. The role of policy advocacy in assuring comprehensive family life education in California. Health Education and Behavior 2009; 36(6): 1095-1108.	Benova et al. The role of the private sector in delivery in low-income and middle-income countries: a retrospective, observational analysis of Demographic and Health Surveys from 57 countries. Lancet 2014; 384: S1.			

		Nigeria. The Pan African medical journal 201; 17: 34.					
19	Bloomfield et al. Hesitant hopes: How a comprehensive approach to learning impacts on the transition hopes of marginalised young people in an alternative learning programme in regional Australia. British Educational Research Journal 2020; 46 (1): 75-91.	Bonfrer et al. The effects of Ghana's National Health Insurance Scheme on maternal and infant health care utilization. PLoS ONE 2016; 11: e0165623	Caldwell et al. The informal health sector and health care-seeking behaviour of mothers in urban Dhaka slums. Journal of population research 2014; 31 (2): 111-129.	Black. The legacy of the Child Health and Nutrition Research Initiative (CHNRI). Journal of Global Health 2016; 6(1): 10101			
20	Boerma et al. Preceding birth intervals and child survival: searching for pathways of influence. Studies in Family Planning 1992; 23(4): 243-256.	Bora et al. Neonatal and under-five mortality rate in Indian districts with reference to Sustainable Development Goal 3: An analysis of the National Family Health Survey of India (NFHS), 2015-2016. PLoS ONE 2018; 13(7): e0201125	Canning et al. Birth outcomes associated with prenatal participation in a government support programme for mothers with low incomes. Child: Care, Health and Development. 2010;36(2):225-31	Blake-Lamb et al. Strengthening integration of clinical and public health systems to prevent maternal-child obesity in the First 1,000 Days: A Collective Impact approach. Contemporary Clinical Trials 2018; 65: 46-52.			
21	Bonu et al. Global public health	Borders et al. Devolution's	Chaturvedi et al. Does the *Janani*	Blanchard et al. Effects of community health worker			

	mandates in a diverse world: the polio eradication initiative and the expanded programme on immunization in sub-Saharan Africa and South Asia. Health Policy 2004; 70(3): 327-345.	policy impact on non-emergency medical transportation in State Children's Health Insurance Programs. Social Work in Public Health 2011; 26 (2): 137-157.	*Suraksha Yojana* cash transfer programme to promote facility births in India ensure skilled birth attendance? A qualitative study of intrapartum care in Madhya Pradesh. Global Health Action 2015; 8: 27427.	interventions on socioeconomic inequities in maternal and newborn health in low-income and middle-income countries: a mixed-methods systematic review. BMJ Global Health 2019; 4(3): e001308			
22	Bosdriesz et al. The association between tobacco control policy and educational inequalities in smoking cessation in the Netherlands from 1988 through 2011. Nicotine and Tobacco Research 2015; 17 (11): 1369-1376	Borisova et al. Public evaluation of health services across 21 European countries: The role of culture. Scandinavian Journal of Public Health 2017; 45 (2): 132-139.	Chaudhuri. Organization of child health services. Indian Journal of Pediatrics 1956; 23 (101): 231-237.	Brault et al. Measuring child survival for the Millennium Development Goals in Africa: what have we learned and what more is needed to evaluate the Sustainable Development Goals? Global Health Action 2020; 13(1): 1732668.			
23	Boulet et al. Health care use and health and functional impact of developmental disabilities among US children, 1997-2005. Archives of Pediatrics and Adolescent Medicine 2009; 163(1): 19-26.	Buffarini et al. Vaccine coverage within the first year of life and associated factors with incomplete immunization in a Brazilian birth cohort. Archives of Public Health 2020; 78: 21	Chen et al. Cost-effectiveness of insuring the uninsured: the case of Korean American children. Medical Decision Making 2009; 29(1): 51-60.	Bright et al. A systematic review of strategies to increase access to health services among children in low and middle income countries. BMC Health Services Research 2017; 17: 252.			

24	Branum et al. The National Children's Study of environmental effects on child health and development. Environmental Health Perspectives 2003; 111 (4): 642-646.	Bulatao et al. Which health services reduce maternal mortality? Evidence from ratings of maternal health services. Tropical Medicine and International Health. 2003;8(8):710-21.	Chen et al. Improving children's healthcare through state health insurance programs: an emerging need. Health Policy 2011; 99 (1): 72-82.	Bright et al. Systematic review of strategies to increase access to health services among children over five in low- and middle-income countries. Tropical Medicine and International Health 2018; 23 (5): 476-507.			
25	Brieba. State capacity and health outcomes: comparing Argentina's and Chile's reduction of infant and maternal mortality, 1960-2013. World Development 2018; 101: 37-53.	Carpiano. Actual or potential neighborhood resources and access to them: Testing hypotheses of social capital for the health of female caregivers. Social Science and Medicine 2008; 67(4): 568.	Cherry et al. Obstacles to the delivery of medical care to children of neglecting parents. American Journal of Public Health 1971; 61(3): 568-573.	Brim et al. Macro-structural influences on child development and the need for childhood social indicators. American Journal of Orthopsychiatry 1975; 45(4): 516.			
26	Brockerhoff et al. Inequality of child mortality among ethnic groups in sub-Saharan Africa. Bulletin of the World Health Organization 2000; 78 (1): 30-41.	Chatterjee et al. Cost-Effective Recruitment need for 24x7 Paediatricians in the State General Hospitals in Relation to the Reduction of	Chinitz et al. Improving outcomes for babies and toddlers in child welfare: a model for infant mental health intervention and collaboration. Child	Brindis. A public health success: understanding policy changes related to teen sexual activity and pregnancy. Annual Review of Public Health 2006; 27: 277-295.			

		Infant Mortality. Journal of Clinical and Diagnostic Research JCDR 2016; 10(10): SC01-SC03.	Abuse and Neglect 2017; 70: 190-198.				
27	Chaturvedi et al. Are we really making motherhood safe? A study of provision of iron supplements and emergency obstetric care in rural Maharashtra. National Medical Journal of India 2007; 20 (6): 294-296.	Cheah et al. A structural equation model of the determinants of malnutrition among children in rural Kelantan, Malaysia. Rural and Remote Health 2010; 10 (1): 1248.	Coonrod et al. Interconception health services for women at high risk for adverse pregnancy outcomes: a descriptive study. British Journal of Medicine and Medical Research 2014; 4(21): 3844-3855	Brouwere et al. Access to maternal and perinatal health services: lessons from successful and less successful examples of improving access to safe delivery and care of the newborn. Tropical Medicine and International Health 2010; 15(8): 901-909			
28	Chavane et al. Maternal death and delays in accessing emergency obstetric care in Mozambique. BMC Pregnancy and Childbirth 2018; 18: 71.	Cheetham et al. Impact of Universal Credit in North East England: a qualitative study of claimants and support staff. BMJ Open 2019; 9 (7): e029611.	Courtin et al. Conditional cash transfers and health of low-income families in the US: Evaluating the family rewards experiment. Health Affairs. 2018;37(3):438-46	Child Mortality Coordination Group. Tracking progress towards the Millennium Development Goals: reaching consensus on child mortality levels and trends. Bulletin of the World Health Organization 2006; 84 (3): 225-232.			
29	Chavane et al. The magnitude and factors related to facility-based maternal mortality in Mozambique. Journal of Obstetrics &	Chesoli et al. Strengthening Care Delivery in Primary Care Facilities: Perspectives of Facility Managers on the	Dalinjong et al. Are health facilities well equipped to provide basic quality childbirth services under the free maternal health policy? Findings from	Dawson et al. Barriers to equitable maternal health in Aotearoa New Zealand: an integrative review. International Journal for Equity in Health 2019; 18: 168.			

	Gynaecology 2017; 37 (4): 464-470.	Immunization Program in Kenya. International Journal of Health Policy and Management 2018; 7(12): 1130-1137.	rural Northern Ghana. BMC Health Services Research 2018; 18 (1): 959.				
30	Chen. Primary health care in developing countries: overcoming operational, technical, and social barriers. Lancet 1986; 2 (8518): 1260-1265.	Chitete et al. What Health Service Provider Factors Are Associated with Low Delivery of HIV Testing to Children with Acute Malnutrition in Dowa District of Malawi? PLoS ONE 2015; 10(5): e0123021.	Dalinjong et al. Has the free maternal health policy eliminated out of pocket payments for maternal health services? Views of women, health providers and insurance managers in Northern Ghana. PLoS ONE 2018; 13(2): e0184830.	De Brouwere et al. Access to maternal and perinatal health services: lessons from successful and less successful examples of improving access to safe delivery and care of the newborn. Tropical Medicine and International Health 2010; 15 (8): 901-909.			
31	Esmaeilzadeh et al. Association of gross domestic product with under-five mortality rate and life expectancy during 1990 - 2015 in Iran: An ecological study. Shiraz E Medical Journal. 2019;20(12): e88415.	Coonrod et al. Influenza Vaccine Coverage among Pregnant Women in a Public Hospital System during the 2009-2010 Pandemic Influenza Season. Influenza Research & Treatment Print	Dalinjong et al. The free maternal health policy: acceptability and satisfaction with quality of maternal health services during pregnancy in rural Northern Ghana. Journal of Health Sciences 2019; 9(2): 108-117.	De Costa et al. Could the Baby Bonus be a bonus for babies? Medical Journal of Australia 2009; 190(5): 242-243.			

		2012; 2012: 329506.					
32	Fan et al. Insights in public health: a tale of two polities: health in Independent and American Samoa. Hawai'i Journal of Medicine & Public Health 2015; 74(5): 179-184.	Dalinjong et al. The operations of the free maternal care policy and out of pocket payments during childbirth in rural Northern Ghana. Health Economics Review 2017; 7: 41.	Dalinjong et al. The implementation of the free maternal health policy in rural northern Ghana: synthesised results and lessons learnt. BMC Research Notes 2018 (11): 341	De Jongh et al. Barriers and enablers to integrating maternal and child health services to antenatal care in low and middle income countries. BJOG 2016; 123(4): 549-557.			
33	Fedock et al. A life course perspective of victimization, child welfare involvement, cumulative stress and mental health for mothers on probation and parole. Child Abuse & Neglect 2018; 86: 235-246.	David et al. Maternal near miss and maternal deaths in Mozambique: a cross-sectional, region-wide study of 635 consecutive cases assisted in health facilities of Maputo province. BMC Pregnancy and Childbirth 2014; 14: 401.	Daviaud et al. South-Africa (Goodstart III) trial: community-based maternal and newborn care economic analysis. Health Policy and Planning 2017; 32 (Suppl 1): i53-i63	Edouard. Challenges for reproductive health in the attainment of the Millennium Development Goals. Journal of Obstetrics & Gynaecology Canada 2012; 34(10): 909-912.			
34	Feldman et al. Women's Political Participation and Health: A Health Capability Study in Rural India. Journal of Health Politics Policy and	Davies et al. Association between country preparedness indicators and quality clinical care for cardiovascular disease risk	De Brauw et al. Can conditional cash transfers improve maternal health care? Evidence from El Salvador's Comunidades Solidarias Rurales program. Health	Edwin et al. Family support policies and child outcomes: a realist-scoping review. Community Work and Family 2017; 20(3): 292-306.			

	Law 2015; 40(1): 101-164.	factors in 44 lower- and middle-income countries: A multicountry analysis of survey data. PLoS Medicine 2020; 17(11): e1003268.	Economics 2020; 29 (6): 700-715				
35	Ferragnina et al. The four worlds of 'welfare reality' - social risks and outcomes in Europe. Social Policy and Society 2015; 14(2): 287-307.	De Fatima Vasques Monteiro et al. Access to public health services and integral care for women during the puerperal gravid period period in Ceara, Brazil. BMC Health Services Research 2019; 19(1): 851.	De Jong et al. Capabilities, reproductive health and well-being. Journal of Development Studies 2006; 42 (7): 1158-1179.	English et al. Millennium Development Goals progress: a perspective from sub-Saharan Africa. Archives of Disease in Childhood 2015; 100 (Suppl): S57-58.			
36	Ferrarini et al. Family policy, economic development and infant mortality: a longitudinal comparative analysis. International Journal of Social Welfare 2010; 19 (Suppl 1): S89-S102.	De Francisco et al. Comparison of mortality between villages with and without Primary Health Care workers in Upper River Division, The Gambia. Journal of Tropical Medicine and Hygiene 1994; 97(2): 69-74.	De Jong et al. The safety and quality of childbirth in the context of health systems: mapping maternal health provision in Lebanon. Midwifery 2010; 26 (5): 549-557.	Esan et al. Performance Needs Assessment of Maternal and Newborn Health Service Delivery in Urban and Rural areas of Osun State, South-West, Nigeria. African Journal of Reproductive Health 2014; 18(2): 105-116.			

37	Ferrarini et al. Unemployment insurance and deteriorating self-rated health in 23 European countries. Journal of Epidemiology & Community Health 2014; 68 (7): 657-662.	DeVoe et al. Uncertain health insurance coverage and unmet children's health care needs. Family Medicine 2010; 42(2): 121-132.	DeVoe et al. Uninsurance among children whose parents are losing Medicaid coverage: Results from a statewide survey of Oregon families. Health Services Research 2008; 43 (1, pt 2): 401-418.	Fawzi et al. Closing the implementation gap in services for children affected by HIV/AIDS: from assisting orphans and vulnerable children (OVC) to providing long-term opportunities for economic growth. Journal of Health Care for the Poor & Underserved 2011; 22 (4): 1401-1412.			
38	GBD 2015 Maternal Mortality Collaborators. Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet. 2016;388(10053):1775-812.	Edgley. The perceptions of statutory service providers of a local Sure Start programme: a shared agenda? Health and Social Care in the Community 2007; 15(4): 379-386.	Doctor et al. Evidence-based health programme planning in Northern Nigeria: results from the Nahuche Health and Demographic Surveillance System pilot census. Journal of Rural and Tropical Public Health 2011; 10: 21-28.	Firoz et al. A framework for healthcare interventions to address maternal morbidity. International Journal of Gynecology & Obstetrics 2018; 141 (Suppl 1): 61-68.			
39	GBD 2017 Child and Adolescent Health Collaborators. Diseases, Injuries, and Risk Factors in Child and Adolescent Health, 1990 to 2017: Findings from the Global Burden of Diseases, Injuries, and Risk Factors 2017 Study. JAMA	Escuriet-Peiro et al. Impact of maternity care policy in Catalonia: a retrospective cross-sectional study of service delivery in public and private hospitals. BMC Pregnancy and Childbirth 2015; 15: 23	Doctor et al. Health facility delivery in sub-Saharan Africa: successes, challenges, and implications for the 2030 development agenda. BMC Public Health 2018; 18(1): 765.	Forde et al. Cash transfer schemes and the health sector: making the case for greater involvement. Bulletin of the World Health Organization 2012; 90 (7): 551-553.			

	Pediatrics. 2019;173(6): e190337.						
40	GBD 2017 Lower Respiratory Infections Collaborators. Quantifying risks and interventions that have affected the burden of lower respiratory infections among children younger than 5 years: an analysis for the Global Burden of Disease Study 2017. Lancet Infect Dis 2020; 20(1): 60-79.	Frey et al. The determinants of infant mortality in the less developed countries: A cross-national test of five theories. Social Indicators Research 2000; 52 (3): 215-234.	Eboreime et al. Primary healthcare planning, bottleneck analysis and performance improvement: an evaluation of processes and outcomes in a Nigerian context. Evaluation and Program Planning 2019; 77: 101712.	Forfar. Voluntary service in child health and child care. Scottish Medical Journal 1966; 11 (5): 159-163.			
41	GBD 2019 Diseases and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet. 2020;396(10258):1204-22.	Gage et al. Service readiness, health facility management practices, and delivery care utilization in five states of Nigeria: a cross-sectional analysis. BMC Pregnancy and Childbirth 2016; 16 (1): 297	Edu et al. Effect of free maternal health care program on health-seeking behavior of women during pregnancy, intra-partum and postpartum periods in Cross River State of Nigeria: a mixed method study. Open Access Macedonian Journal of Medical Sciences 2017; 5(3): 370-382.	Fortney et al. Saving mother's lives: programs that work. Clinical Obstetrics & Gynecology 2009; 52 (2): 224-236.			
42	GBD 2019 Diseases and	Ganle et al. A qualitative study	Eisert et al. Effect of Child Health	Gabel et al. Conditional Cash Transfers (CCTs): A Child			

	Injuries Collaborators. Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet. 2020;396(10258):1223-49.	of health system barriers to accessibility and utilization of maternal and newborn healthcare services in Ghana after user-fee abolition. BMC Pregnancy & Childbirth 2014; 14: 425.	Insurance Plan enrollment on the utilization of health care services by children using a public safety net system. Pediatrics 2002; 110(5): 940-945.	Policy Strategy in Asia. Revista de Asistenta Sociala 2011; 4: 41-61.			
43	Ghoneim et al. An intervention programme for improving the nutritional status of children aged 2-5 years in Alexandria. Eastern Mediterranean Health Journal 2004; 10 (6): 828-843.	Ghosh-Jerath et al. Ante natal care (ANC) utilization, dietary practices and nutritional outcomes in pregnant and recently delivered women in urban slums of Delhi, India: an exploratory cross-sectional study. Reproductive Health 2015; 12: 20.	English et al. Lessons from a Health Policy and Systems Research programme exploring the quality and coverage of newborn care in Kenya. BMJ Global Health 2020; 5(1): e001937	Gao et al. Effect of health system and policy on maternal and newborn health in China since 1949: a countdown to 2015 case study. Lancet 2015; 386: Suppl 1.			
44	Girum et al. Correlates of maternal mortality in developing countries: an ecological study in 82 countries.	Granato et al. Results from a rapid national assessment of services for the prevention of mother-to-child	Fanti et al. Public expenditure on health and private old-age insurance in an OLG growth model with endogenous fertility: chaotic dynamics	Glassman et al. Impact of conditional cash transfers on maternal and newborn health. Journal of Health, Population & Nutrition 2013; 31 (4 Suppl 2): 48-66.			

	Maternal Health, Neonatology and Perinatology 2017; 3: 19.	transmission of HIV in Cote d'Ivoire. Journal of the International AIDS Society 2016; 19 (5, Suppl 4): 20838.	under perfect foresight. Computational Economics 2012; 40(4): 333-353.				
45	Glisson et al. The effects of organizational culture and climate on the access to mental health care in child welfare and juvenile justice systems. Administration & Policy in Mental Health 2006; 33 (4): 433-448.	Hall et al. Government Revenue and Child and Maternal Mortality. Open Econ Rev. 2021;32(1):213-29.	Feinstein et al. Antenatal and delivery services in Kinshasa, Democratic Republic of Congo: care-seeking and experiences reported by women in a household-based survey. Tropical Medicine & International Health 2013; 18(10): 1211-1221.	Greene-McIntyre et al. State Medicaid and Children's Health Insurance Program's perspective on CHIPRA core measures. Academic Pediatrics 2011; 11 (Suppl 3): S89-90.			
46	Guarnizo-Herreno et al. Inequalities in oral impacts and welfare regimes: analysis of 21 European countries. Community Dentistry & Oral Epidemiology 2014; 42 (6):517-525.	Harimanana et al. Organizational analysis of maternal mortality reduction programs in Madagascar. International Journal of Health Planning & Management 2011; 26(3): e186-196.	Fikree et al. Scaling Up a Strengthened Youth-Friendly Service Delivery Model to Include Long-Acting Reversible Contraceptives in Ethiopia: A Mixed Methods Retrospective Assessment. International Journal of Health Policy & Management 2020; 9(2): 53-64.	Grundy et al. An approach to health system strengthening in the Democratic Peoples Republic of Korea (North Korea). International Journal of Health Planning & Management 2009; 24 (2): 113-129.			

47	Guarnizo-Herreno et al. Oral health and welfare state regimes: a cross-national analysis of European countries. European Journal of Oral Sciences 2013; 121 (3, Pt 1): 169-175.	Harknett et al. Are public expenditures associated with better child outcomes in the U.S.? A comparison across 50 states. Analyses of Social Issues and Public Policy. 2005;5(1):103-25	Findley et al. Reinvigorating health systems and community-based services to improve maternal health outcomes: case study from northern Nigeria. Journal of Primary Care & Community Health 2015; 6 (2): 88-99.	Grundy et al. The impact of conflict on immunisation coverage in 16 countries. International Journal of Health Policy and Management 2019; 8(4): 211-221.			
48	Habibov et al. Does prenatal healthcare improve child birthweight outcomes in Azerbaijan? Results of the national Demographic and Health Survey. Economics and Human Biology 2011; 9(1): 56-65	Heo et al. Maternal, neonatal, and child health systems under rapid urbanization: a qualitative study in a suburban district in Vietnam. BMC Health Services Research 2020; 20 (1): 90	Fisher et al. Access to health and therapy services for families of children with disabilities in China. Disability and Rehabilitation 2013; 35(25): 2157-2163.	Hamal et al. Social determinants of maternal health: a scoping review of factors influencing maternal mortality and maternal health service use in India. Public Health Reviews 2020; 41: 13.			
49	Haley et al. Promoting progress in child survival across four African countries: the role of strong health governance and leadership in maternal, neonatal and child health. Health Policy and	Houweling et al. Determinants of under-5 mortality among the poor and the rich: a cross-national analysis of 43 developing countries. International Journal of	Frimpong et al. The complex association of health insurance and maternal health services in the context of a premium exemption for pregnant women: a case study in Northern Ghana. Health Policy and	Hepburn et al. Ontario's Provincial Council for Maternal and Child Health: building a productive, system-level, change-oriented organization. Healthcare Quarterly 2012; 15: 54-62.			

	Planning 2019; 34(1): 24-36.	Epidemiology 2005; 34(6): 1257-1265	Planning 2014; 29 (8): 1043-1053.				
50	Hall et al. Government Revenue and Child and Maternal Mortality. Open Economies Review 2021; 32 (1): 213-229.	Houweling et al. Determinants of under-5 mortality among the poor and the rich: A cross-national analysis of 43 developing countries. International Journal of Epidemiology. 2005;34(6):1257-65	Gamino. The Effect of Health Insurance on Young Adult HIV Testing: Evidence from the Affordable Care Act Dependent Coverage Mandate. The B.E. Journal of Economic Analysis & Policy 2021; 21 (1): 147-174	Holtermann. The impact of public expenditure and fiscal policies on Britain's children and young people. Children and Society 1996; 10(1): 3-13			
51	Herbst et al. Child care subsidies, maternal health, and child-parent interactions: evidence from three nationally representative datasets. Health Economics 2014; 23 (8): 894-916.	Huicho et al. Implementation of the Integrated Management of Childhood Illness strategy in Peru and its association with health indicators: an ecological analysis. Health Policy and Planning 2005; 20: i32-i41.	Giacomini et al. Beyond "financial incentives": how stakeholders interpret Ontario's funding structure for midwifery. Canadian Public Administration-Administration Publique Du Canada 1998; 41 (4): 553-586.	Iddrisu et al. Strengthening Health Systems to Accelerate Achievement of Millennium Development Goals 4 and 5: A Case Study of Ketu South and Keta Municipalities in Ghana. African Journal of Reproductive Health 2015; 19(2): 101-107			
52	Hosseinchimeh et al. Using a Stakeholder Analysis to Improve Systems Modelling of Health Issues: The Impact of	Hwang et al. Does Paid Maternity Leave Affect Infant Development and Second-Birth Intentions? Family	Glisson et al. Assessing the Organizational Social Context (OSC) of child welfare systems: implications for research and practice. Child Abuse	Kana et al. Maternal and child health interventions in Nigeria: a systematic review of published studies from 1990 to 2014. BMC Public Health 2015; 15: 334.			

	Progesterone Therapy on Infant Mortality in Ohio. Systems Research and Behavioral Science 2019; 36 (4): 476-493.	Relations. 2016;65(4):562-75.	and Neglect 2012; 36 (9): 621-632.				
53	Jatrana et al. Why do some infants survive and others not?: Determinants of infant mortality in the Mewat region of Haryana state, India. Asian Journal of Social Science 2005; 33 (2): 186-207.	Ibrahim et al. Perinatal mortality among infants born during health user-fees (Cash & Carry) and the national health insurance scheme (NHIS) eras in Ghana: a cross-sectional study. BMC Pregnancy and Childbirth 2016; 16: 385.	Gomez et al. Improving maternal care through a state-wide health insurance program: a cost and cost-effectiveness study in rural Nigeria. PLoS ONE 2015; 10 (9): e0139048.	Kane et al. A realist synthesis of randomised control trials involving use of community health workers for delivering child health interventions in low and middle income countries. BMC Health Services Research 2010; 10: 286.			
54	Jimenez-Rubio et al. Decentralization of health care systems and health outcomes: Evidence from a natural experiment. Social Science and Medicine 2017; 188: 69-81.	Jat et al. Socio-cultural and service delivery dimensions of maternal mortality in rural central India: a qualitative exploration using a human rights lens. Global Health Action 2015; 8: 24976.	Gopichandran et al. Conditional cash transfer to promote institutional deliveries in India: toward a sustainable ethical model to achieve MDG 5A. Public Health Ethics 2012; 5(2): 173-180.	Kruk et al. Mortality due to low-quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries. Lancet 2018; 392 (10160): 2203-2212			
55	Kabubo-Mariara et al. Child survival	Jou et al. Paid Maternity Leave	Gosain et al. Reduction of	Krupp et al. Leveraging human capital to reduce			

	and policy options in Kenya: evidence from demographic and health surveys. Journal of Reviews on Global Economics 2012; 1: 13-26.	in the United States: Associations with Maternal and Infant Health. Maternal and Child Health Journal. 2018;22(2):216-25.	Neonatal Mortality Requires Strengthening of the Health System: A Situational Analysis of Neonatal Care Services in Ballabgarh. Journal of Tropical Pediatrics 2017; 63(5): 365-373	maternal mortality in India: enhanced public health system or public-private partnership? Human Resources for Health 2009; 7: 18.			
56	Karra et al. Facility distance and child mortality: a multi-country study of health facility access, service utilization, and child health outcomes. International Journal of Epidemiology 2017; 46 (3): 817-826.	Kaestner. Health insurance, the quantity and quality of prenatal care, and infant health. Inquiry 1999; 36(2): 162-175.	Grzybowski et al. Rural maternity care services under stress: the experiences of providers. Canadian Journal of Rural Medicine 2007; 12 (2): 89-94.	Kung'u et al. Design and implementation of a health systems strengthening approach to improve health and nutrition of pregnant women and newborns in Ethiopia, Kenya, Niger, and Senegal. Maternal and Child Nutrition 2018; 14 (1): 2.			
57	Kassebaum et al. Global, regional, and national levels and causes of maternal mortality during 1990-2013: A systematic analysis for the Global Burden of Disease Study 2013. The Lancet. 2014;384(9947):980-1004	Kamranpour et al. A qualitative study exploring the needs related to the health system in women with experience of pregnancy termination due to fetal anomalies in Iran. BMC Pregnancy and	Guindon. The impact of health insurance on health services utilization and health outcomes in Vietnam. Health economics, policy and law 2014; 9(4): 359-382.	Lassi et al. Community-based intervention packages for reducing maternal and neonatal morbidity and mortality and improving neonatal outcomes. Cochrane Database of Systematic Reviews 2015; 3: CD007754.			

		Childbirth 2020; 20(1): 573.					
58	Kim et al. Does quality of government matter in public health?: comparing the role of quality and quantity of government at the national level. Sustainability 2019; 11 (11).	Kath. Inter-sectoral cooperation, political will and health outcomes: a study of Cuba's Maternal–Infant Health Programme. Policy and Politics 2007; 35 (1): 45-64.	Gutierrez. The Institutional Determinants of Health Insurance: Moving Away from Labor Market, Marriage, and Family Attachments under the ACA. American Sociological Review 2018; 83(6): 1144-1170.	Lassi et al. Impact of service provision platforms on maternal and newborn health in conflict areas and their acceptability in Pakistan: a systematic review. Conflict and Health 2015; 9:25.			
59	Klomp and de Haan. Effects of governance on health: A cross-national analysis of 101 countries. Kyklos. 2008;61(4):599-614	Kayode et al. Risk factors and a predictive model for under-five mortality in Nigeria: evidence from Nigeria demographic and health survey. BMC Pregnancy and Childbirth 2012; 12:10.	Ha et al. Health policy processes in Vietnam: a comparison of three maternal health case studies. Health Policy 2010; 98 (2-3): 178-185.	Leandro et al. Barriers and enablers that influence overweight/obesity/obesogenic behavior in adolescents from lower-middle income countries: a systematic review. Food and Nutrition Bulletin 2019; 40(4): 562-571.			
60	Klomp and de Haan. Is the political system really related to health? Social Science and Medicine 2009; 69(1): 36-46.	Keats et al. Assessment of Inequalities in Coverage of Essential Reproductive, Maternal, Newborn, Child, and Adolescent Health Interventions in Kenya. JAMA	Hallerod et al. Bad Governance and Poor Children: A Comparative Analysis of Government Efficiency and Severe Child Deprivation in 68 Low- and Middle-income Countries. World Development 2013;48:19-31	Lyons et al. The U.S. child welfare system: a de facto public behavioral health care system. Journal of the American Academy of Child & Adolescent Psychiatry. 2004; 43(8):971-973.			

		Network Open 2018; 1(8): e185152.					
61	Lena and London. The political and economic determinants of health outcomes: a cross-national analysis. International Journal of Health Services 1993; 23(3): 585-602.	Kibusi et al. Health insurance is important in improving maternal health service utilization in Tanzania-analysis of the 2011/2012 Tanzania HIV/AIDS and malaria indicator survey. BMC Health Services Research 2018; 18(1): 112	Hallum-Montes et al. Barriers and Facilitators to Health Center Implementation of Evidence-Based Clinical Practices in Adolescent Reproductive Health Services. Journal of Adolescent Health 2016; 58 (3): 276-283.	Mac-Seing et al. Pro-equity legislation, health policy and utilisation of sexual and reproductive health services by vulnerable populations in sub-Saharan Africa: a systematic review. Global Health Promotion 2020; 27(4): 97-106.			
62	Li et al. Analysis of the maternal and child health care status in Suizhou City, Hubei Province, China, from 2005 to 2011. PLoS ONE 2013; 8(8): e72649.	Kim et al. Health systems performance in managing tuberculosis: analysis of tuberculosis care cascades among high-burden and non-high-burden countries. Journal of Global Health 2019; 9(1): 10423.	Hamid et al. Responsiveness of the urban primary health care delivery system in Bangladesh: A comparative analysis. International Journal of Health Planning & Management 2019; 34(1): 251-262.	Main. Reducing Maternal Mortality and Severe Maternal Morbidity Through State-based Quality Improvement Initiatives. Clinical Obstetrics & Gynecology 2018; 61(2): 319-331			
63	Li et al. Opportunities to improve vaccination	Kruk et al. 'Big push' to reduce maternal mortality in	Hanson et al. Health system support for childbirth care in Southern Tanzania:	Malqvist et al. Targeted interventions for improved equity in maternal and child health in low- and middle-			

	coverage in a country with a fledgling health system: Findings from an assessment of missed opportunities for vaccination among health center attendees-Timor Leste, 2016. Vaccine 2019; 37(31): 4281-4290.	Uganda and Zambia enhanced health systems but lacked a sustainability plan. Health Affairs 2014; 33 (6): 1058-1066.	results from a health facility census. BMC Research Notes 2013; 6: 435.	income settings: a systematic review and meta-analysis. PLoS ONE 2013; 8(6): e66453.			
64	Liang et al. The impact of the health care workforce on under-five mortality in rural China. Human Resources for Health 2019; 17(1): 21.	Kuwuwenaruwa et al. Implementation and effectiveness of free health insurance for the poor pregnant women in Tanzania: A mixed methods evaluation. Social Science and Medicine 2019; 225: 17-25.	Hitiris et al. The determinants and effects of health expenditure in developed-countries. Journal of Health Economics. 1992;11(2):173-81.	Mangham-Jefferies et al. Cost-effectiveness of strategies to improve the utilization and provision of maternal and newborn health care in low-income and lower-middle-income countries: a systematic review. BMC Pregnancy and Childbirth 2014; 14: 243.			
65	Liljestrand et al. Trends in maternal health/healthcare in low-income countries and the implications on neonatal health. Seminars in Fetal and Neonatal Medicine 2006; 11(1): 3-6.	Kuwuwenaruwa et al. The effects of MCH insurance cards on improving equity in access and use of maternal and child health care services in Tanzania: a	Huicho et al. Enabling reproductive, maternal, neonatal and child health interventions: time trends and driving factors of health expenditure in the successful story of Peru. PLoS ONE	Mavalankar et al. Maternal mortality in resource-poor settings: policy barriers to care. American Journal of Public Health 2005; 95(2): 200-203.			

		mixed methods analysis. Journal of Health, Population and Nutrition 2016; 35: 37	2018; 13(10): e0206455.				
66	Lin. Economic fluctuations and health outcome: a panel analysis of Asia-Pacific countries. Applied Economics 2009; 41 (4): 519-530.	Leslie et al. Association between infrastructure and observed quality of care in 4 healthcare services: A cross-sectional study of 4,300 facilities in 8 countries. PLoS Medicine 2017; 14(12): e1002464	Jat et al. Technical efficiency of public district hospitals in Madhya Pradesh, India: a data envelopment analysis. Global Health Action 2013; 6: 21742.	Meneses Navarro et al. Maternal mortality and the coverage, availability of resources, and access to women's health services in three indigenous regions of Mexico: Guerrero Mountains, Tarahumara Sierra, and Nayar. In: Schwartz (Ed). Maternal death and pregnancy related morbidity among indigenous women of Mexico and Central America. An anthropological, epidemiological, and biomedical approach. Cham: Springer, 2018. Article type.			
67	Liu et al. Global, regional, and national causes of child mortality: An updated systematic analysis for 2010 with time trends since 2000. Lancet. 2012;6736(12):1-11.	Li et al. Qualitative insights into reasons for missed opportunities for vaccination in Kenyan health facilities. PLoS ONE 2020; 15(3): e0230783.	Jiang et al. Towards universal access to skilled birth attendance: the process of transforming the role of traditional birth attendants in Rural China. BMC Pregnancy and Childbirth 2016; 16: 58	Mukherjee et al. Global Cash Flows for Sustainable Development: A Case Study of Accountability and Health Systems Strengthening in Lesotho. Journal of Health Care for the Poor & Underserved 2020; 31(1): 56-74.			
68	Liu et al. Global, regional, and national causes of under-5 mortality	McNaughton et al. Acceptability of financial incentives or	Jigjidsuren et al. Free and universal access to primary healthcare in Mongolia: the	Nair et al. Facilitators and barriers to quality of care in maternal, newborn and child health: a global situational			

	in 2000–15: an updated systematic analysis with implications for the Sustainable Development Goals. The Lancet. 2016;388(10063):3027-35.	quasi-mandatory schemes to increase uptake of immunisations in preschool children in the United Kingdom: qualitative study with parents and service delivery staff. Vaccine 2016; 34(19): 2259-2266.	service availability and readiness assessment. BMC Health Services Research 2019; 19: 129.	analysis through metareview. BMJ Open 2014; 4(5): e004749.			
69	Lykens et al. Social, economic, and political factors in progress towards improving child survival in developing nations. Journal of Health Care for the Poor & Underserved 2009; 20 (4 Suppl): 137-148	Morris et al. Conditional cash transfers are associated with a small reduction in the rate of weight gain of preschool children in Northeast Brazil. Journal of Nutrition. 2004;134(9):2336-41.	Jimenez-Soto et al. Developing and costing local strategies to improve maternal and child health: the investment case framework. PLoS Medicine 2012; 9(8): e1001282	Nair et al. Impact of non-health policies on infant mortality through the social determinants pathway. Bulletin of the World Health Organization 2-11; 89(11): 778			
70	Macinko et al. Wage inequality, the health system, and infant mortality in wealthy industrialized countries, 1970-1996. Soc Sci Med 2004; 58 (2): 279-292.	Muldoon et al. Health system determinants of infant, child and maternal mortality: A cross-sectional study of UN member countries. Global	Jimenez-Soto et al. Investment case for improving maternal and child health: results from four countries. BMC Public Health 2013; 13: 601.	Nair et al. Quality of maternal healthcare in India: Has the National Rural Health Mission made a difference? Journal of Global Health 2011; 1(1): 79-86.			

		Health 2011; 7: 42					
71	Mackenbach et al. Government, politics and health policy: A quantitative analysis of 30 European countries. Health Policy. 2015;119(10):1298-308.	Nachinab et al. Exploring the Determinants of Antenatal Care Services Uptake: A Qualitative Study among Women in a Rural Community in Northern Ghana. Journal of Pregnancy 2019; 2019: 3532749.	Jiwani et al. Timing and number of antenatal care contacts in low- and middle-income countries: analysis in the countdown to 2030 priority countries. Journal of Global Health 2020; 10 (1): 10502.	Nanyonjo et al. Institutionalization of integrated community case management into national health systems in low- and middle-income countries: a scoping review of the literature. Global Health Action 2019; 12:1			
72	Manang et al. The impact of access to health facilities on maternal care use, travel patterns, and health status: evidence from longitudinal data from Uganda. Economic Development and Cultural Change 2020; 69(1): 405-451.	Naimoli et al. Toward a grounded theory of why some immunization programmes in sub-Saharan Africa are more successful than others: a descriptive and exploratory assessment in six countries. Health Policy and Planning 2008; 23(6): 379-389.	Josif et al. The quality of health services provided to remote dwelling aboriginal infants in the top end of northern Australia following health system changes: a qualitative analysis. BMC Pediatrics 2017; 17(1): 93.	Nyamtema et al. Maternal health interventions in resource limited countries: a systematic review of packages, impacts and factors for change. BMC Pregnancy and Childbirth 2011; 11:30.			
73	Manzi et al. Improving Newborn Survival in Southern Tanzania (INSIST) trial; community-	Pandya et al. Health system factors affecting implementation of integrated management of	Kozhimannil et al. The population-level impacts of a national health insurance program and franchise midwife	Owusu-Addo et al. The impact of cash transfers on social determinants of health and health inequalities in sub-Saharan Africa: a systematic review. Health Policy and			

	based maternal and newborn care economic analysis. Health Policy and Planning 2017; 32(Suppl 1): i33-i41.	childhood illness (IMCI): qualitative insights from a South African province. Health Policy and Planning 2018; 33(2): 171-182.	clinics on achievement of prenatal and delivery care standards in the Philippines. Health Policy 2009; 92(1): 55-64.	Planning 2018; 33(5): 675-696			
74	Mapira et al. The contribution of church health services to maternal health care provision in Papua New Guinea. Papua New Guinea Medical Journal 2011; 54 (3-4): 139-146.	Paudel et al. Health system barriers influencing perinatal survival in mountain villages of Nepal: implications for future policies and practices. Journal of Health, Population & Nutrition 2018; 37(1): 16.	Kung'u et al. Integrating nutrition into health systems at community level: Impact evaluation of the community-based maternal and neonatal health and nutrition projects in Ethiopia, Kenya, and Senegal. Maternal and Child Nutrition 2018; 14(S1): e12577.	Owusu-Addo et al. The impact of conditional cash transfers on child health in low- and middle-income countries: a systematic review. International Journal of Public Health 2014; 59: 609-618			
75	Matsuura et al. Exploring the association between the constitutional right to health and reproductive health outcomes in 157 countries. Reproductive Health Matters 2019; 27 (1): 168-180.	Penalba et al. Exploring the health outcomes of conditional cash transfer program in rural Philippines. Journal of Social Work Education and Practice 2019; 4(3): 37-51.	LeFevre et al. Forecasting the Value for Money of Mobile Maternal Health Information Messages on Improving Utilization of Maternal and Child Health Services in Gauteng, South Africa: Cost-Effectiveness Analysis. JMIR	Powell-Jackson et al. Health-system determinants of declines in maternal mortality in China between 1996 and 2013: a provincial econometric analysis. Lancet 2015; 38 (Suppl 1).			

			MHealth and UHealth 2018; 6 (7): e153.				
76	Mbizvo et al. Maternal mortality in rural and urban Zimbabwe: Social and reproductive factors in an incident case-referent study. Social Science and Medicine 1993; 36(9): 1197.	Rajeev et al. Implementation of "health systems approach" to improve vaccination at birth in institutional deliveries at public health facilities; experience from six states of India. Journal of Family Medicine and Primary Care 2019; 8(5): 1630-1636.	Leslie et al. Assessing health system performance: effective coverage at the Mexican Institute of Social Security. Health Policy and Planning 2019; 34 (Suppl 2): ii67-ii76.	Prasad et al. Addressing the social determinants of health through health system strengthening and inter-sectoral convergence: the case of the Indian National Rural Health Mission. Global Health Action 2013; 6: 1-11.			
77	McKinnon et al. Do socioeconomic inequalities in neonatal mortality reflect inequalities in coverage of maternal health services? Evidence from 48 low- and middle-income countries. Child and Maternal Health Journal 2016; 20(2): 434-446.	Ramos et al. Conditional cash transfer program and child mortality: A cross-sectional analysis nested within the 100 Million Brazilian Cohort. PLoS Medicine. 2021;18(9); e1003509.	Levine et al. The impact of cash transfers on household welfare in Namibia. Development Southern Africa 2011; 28(1): 39-59.	Qirbi et al. Health system functionality in a low-income country in the midst of conflict: the case of Yemen. Health Policy and Planning 2017; 32(6): 911-922.			
78	Menard et al. Neonatal mortality for very low birth	Ranabhat et al. The Influence of Universal Health	Liao et al. The impact of the public insurance expansions	Rajmil et al. Austerity policy and child health in European countries: a systematic			

	weight deliveries in South Carolina by level of hospital perinatal service. American Journal of Obstetrics & Gynecology 1998; 179(2): 374-381.	Coverage on Life Expectancy at Birth (LEAB) and Healthy Life Expectancy (HALE): A Multi-Country Cross-Sectional Study. Frontiers in Pharmacology 2018; 9: 960.	on children's use of preventive dental care. Maternal and Child Health Journal 2010; 14(1): 58-66.	literature review. BMC Public Health 2020; 20(1): 564.			
79	Mesenburg et al. Ethnic group inequalities in coverage with reproductive, maternal and child health interventions: cross-sectional analyses of national surveys in 16 Latin American and Caribbean countries. Lancet Global Health 2018; 6(8): e902-e913.	Rao et al. Not just money: what mothers value in conditional cash transfer programs in India. BMJ Global Health 2020; 5: e003033.	Libby et al. Child welfare systems policies and practices affecting Medicaid health insurance for children: A national study. Journal of Social Science Research 2007; 33(2): 39-49.	Rawlings et al. Evaluating the Impact of Conditional Cash Transfer Programs. The World Bank Research Observer 2005;20(1): 29.			
80	Mohan et al. Determinants of postnatal care use at health facilities in rural Tanzania: multilevel analysis of a household survey. BMC Pregnancy and Childbirth 2015; 15: 282.	Rasmussen et al. Political instability and supply-side barriers undermine the potential for high participation in HIV testing for the prevention of	Liu et al. Strengthening the maternal and child health system in remote and low-income areas through multilevel governmental collaboration: a case study from Nujiang Prefecture in China.	Roberts et al. A Qualitative Comparative Analysis of Combined State Health Policies Related to Human Papillomavirus Vaccine Uptake in the United States. American Journal of Public Health 2018; 108(4): 493-499.			

		mother-to-child transmission in Guinea-Bissau: A retrospective cross-sectional study. PLoS ONE 2018; 13(8): e0199819	Public Health 2020; 178: 23-30.				
81	Mullany et al. Impact of community-based maternal health workers on coverage of essential maternal health interventions among internally displaced communities in eastern Burma: the MOM project. PLoS Medicine 2010; 7(8): e1000317.	Sami et al. Understanding health systems to improve community and facility level newborn care among displaced populations in South Sudan: a mixed methods case study. BMC Pregnancy and Childbirth 2018; 18: 325	Lobao et al. Public Employment, Welfare Transfers, and Economic Well-Being across Local Populations: Does a Lean and Mean Government Benefit the Masses? Social Forces 2003; 82(2): 519-556.	Salgado-Vega et al. Health expenditure: Short and long-term relations in Latin America, 1995-2010. Health Economics and Healthcare Reform: Breakthroughs in Research and Practice: IGI Global; 2017. p. 268-92			
82	Narain et al. The impact of welfare reform on the health insurance coverage, utilization and health of low education single mothers. Social Science and Medicine 2017; 180: 28	Samuelson et al. Do health systems delay the treatment of poor children? A qualitative study of child deaths in rural Tanzania. BMC Health Services Research 2013; 13: 67.	Lovero et al. Mixed-methods evaluation of mental healthcare integration into tuberculosis and maternal-child healthcare services of four South African districts. BMC Health Services Research 2019; 19: 83.	Schroders et al. Millennium development goal four and child health inequities in Indonesia: a systematic review of the literature. PLoS ONE 2015; 10(5): e0123629.			
83	Newland et al. Multilevel Analysis of Child and	Santos et al. Mortality among children under	Machnes et al. The provision of oral care by local government	Segura-Perez et al. Conditional cash transfer programs and the health and			

	Adolescent Subjective Well-Being Across 14 Countries: Child- and Country-Level Predictors. Child Development 2019; 90(2): 395-413.	the age of one: analysis of cases after discharge from maternity. Revista Da Escola de Enfermagem Da Usp 2016; 50(3): 390-398.	authorities in Israel: policy issues and empirical evidence. Health Policy 2009; 89(1): 107-114.	nutrition of Latin American children. Revista Panamericana De Salud Publica-Pan American Journal of Public Health 2016; 40(2): 124-137.			
84	Ogundipe et al. Health aid and child mortality in Africa: evidence from disaggregated analysis. African Population Studies 2018; 32 (1 Suppl):4043-4056.	Shangani et al. Unconditional government cash transfers in support of orphaned and vulnerable adolescents in western Kenya: Is there an association with psychological wellbeing? PLoS ONE 2017; 12(5): e0178076.	MacTaggart et al. Policy and system strategies in promoting child health information systems, including the role of Medicaid, the state children's health insurance program, and public financing. Pediatrics 2009; 123 (Suppl): S111-115.	Segura-Perez et al. Conditional cash transfer programs and the health and nutrition of Latin American children. Revista Panamericana de Salud Publica/Pan American Journal of Public Health. 2016;40(2):124-37			
85	Okwuwa et al. Infant Mortality, Access to Primary Health Care and Prospects for Socio-Economic Development in Bwari Area Council of Niger State, Nigeria. Journal of International Women's Studies 2020; 21(1): 289-308.	Singh et al. Ghana's National Health insurance scheme and maternal and child health: a mixed methods study. BMC Health Services Research 2015; 15: 108.	Magnani et al. Impact of an integrated adolescent reproductive health program in Brazil. Studies in Family Planning 2001; 32(3): 230-243.	Snyder. United States paid parental leave and infant mortality. International Journal of Sociology and Social Policy. 2020;40(1-2):145-53.			

86	Owusu-Addo et al. Perceived impact of Ghana's conditional cash transfer on child health. Health Promotion International 2016; 31(1): 33-43.	Skovdal et al. Social acceptability and perceived impact of a community-led cash transfer programme in Zimbabwe. BMC Public Health 2013: 13: 342.	Malajovic et al. Budget transparency on maternal health spending: a case study in five Latin American countries. Reproductive Health Matters 2012; 20(39): 185-195.	Sugiyama et al. Do Conditional Cash Transfers Empower Women? Insights from Brazil's Bolsa Familia. Latin American Politics and Society 2020; 62(2): 53-74.			
87	Patterson et al. Not all built the same? A comparative study of electoral systems and population health. Health and Place 2017; 47: 90-99.	Streuli et al. Child protection: a role for conditional cash transfer programmes? Development in Practice 2012; 22(4): 588-599.	Malhotra et al. Public health expenditure and health system responsiveness for low-income individuals: results from 63 countries. Health Policy and Planning 2017; 32(3): 314-319.	Tabbush et al. Latin American women's protection after adjustment: a feminist critique of conditional cash transfers in Chile and Argentina. Oxford Development Studies 2010; 38(4): 437-459.			
88	Patton et al. State policy and health disparities: an examination of the impact of state offices of minority health. Journal of Health Care for the Poor & Underserved 2014; 25(4): 1982-2002.	Struthers et al. Understanding the Particularities of an Unconditional Prenatal Cash Benefit for Low-Income Women: A Case Study Approach. Inquiry 2019; 56: 46958019 870967	Malik et al. Expenditure tracking and review of reproductive maternal, newborn and child health policy in Pakistan. Health Policy and Planning 2017; 32(6): 781-790.	Tambo et al. Strengthening national immunization coverage capacity and effectiveness strategies in vaccine preventable diseases in rural and urban settings in sub-Saharan Africa. Journal of Vaccines and Vaccination 2016; 7:1.			
89	Paula et al. The influence of oral health conditions, socioeconomic status and home	Sumankuuro et al. Maternal health care initiatives: causes of	Mandel et al. A welfare state paradox: state interventions and women's employment	Tamrat et al. Special Delivery: An Analysis of mHealth in Maternal and Newborn Health Programs and Their Outcomes Around			

	environment factors on schoolchildren's self-perception of quality of life. Health & Quality of Life Outcomes 2012; 10: 6.	morbidities and mortalities in two rural districts of Upper West Region, Ghana. PLoS ONE 2017; 12(8): e0183644.	opportunities in 22 countries. American Journal of Sociology 2006; 111(6): 1910-1949.	the World. Maternal and Child Health Journal 2012; 16 (5): 1092-1101.			
90	Popham et al. Are health inequalities really not the smallest in the Nordic welfare states? A comparison of mortality inequality in 37 countries. Journal of Epidemiology & Community Health 2013; 67(5): 412-418.	Sumankuuro et al. Perceived barriers to maternal and newborn health services delivery: a qualitative study of health workers and community members in low and middle-income settings. BMJ Open 2018; 8(11): e021223.	Marchant et al. Individual, facility and policy level influences on national coverage estimates for intermittent preventive treatment of malaria in pregnancy in Tanzania. Malaria Journal 2008; 7: 260.	Tangcharoensathien et al. Monitoring and evaluating progress towards universal health coverage in Thailand. PLoS Medicine 2014; 11 (9): e1001726.			
91	Poppel et al. Differential infant and child mortality in three Dutch regions, 1812-1909. Economic history review 2005; LVIII (2): 272-309.	Tama et al. Examining the Implementation of the Free Maternity Services Policy in Kenya: A Mixed Methods Process Evaluation. International Journal of Health Policy and Management	Margolis et al. Associations between state economic and health systems capacities and service use by children with special health care needs. Maternal and Child Health Journal 2011; 15(6): 713-721.	Taylor. When the Family Becomes the State: Child Welfare and Foster Care Policies Affecting Family Health and Weil-Being. Social work practice with children and families: A family health approach 2005; 183-198			

		2018; 7(7): 603-613.					
92	Rajaratnam et al. Neonatal, postneonatal, childhood, and under-5 mortality for 187 countries, 1970-2010: a systematic analysis of progress towards Millennium Development Goal 4. The Lancet. 2010;375(9730):1988-2008.	Theodros et al. Child health service provision in Ethiopia: outpatient, growth monitoring and immunization. Ethiopian Journal of Health Development 2017; 31(2): 67-74.	Mayora et al. Incremental cost of increasing access to maternal health care services: perspectives from a demand and supply side intervention in Eastern Uganda. Cost Effectiveness & Resource Allocation 2014; 12:14.	Thompson et al. Facilitators of Well-functioning Consortia: National Healthy Start Program Lessons. Health and Social Work 2003; 28(3):185-195			
93	Rasooly et al. Success in reducing maternal and child mortality in Afghanistan. Global Public Health 2014; 9 (Suppl 1): S29-S42.	Thomas. Conditional cash transfers to improve education and health: An ex ante evaluation of red de protección social, Nicaragua. Health Economics (United Kingdom). 2012;21(10):1136-54	Munoz et al. Matching comprehensive health insurance reimbursements to their real costs: the case of antenatal care visits in a region of Peru. Cost Effectiveness and Resource Allocation 2015; 13: 16.	Van Niel et al. The Impact of Paid Maternity Leave on the Mental and Physical Health of Mothers and Children: A Review of the Literature and Policy Implications. Harvard Review of Psychiatry 2020; 28 (2): 113-126.			
94	Rathmann et al. Macro-level determinants of young people's subjective health and health	Thomsen et al. Health workers' experiences with the Safe Delivery App in West Wollega	Murphy et al. Assessing systemic barriers to permanency achievement for children in out-of-	Webster et al. Which delivery systems reach the poor? A review of equity of coverage of ever-treated nets, never-treated nets, and immunisation to reduce child			

	inequalities: a multilevel analysis in 27 welfare states. Maturitas 2015; 80(4): 414-420.	Zone, Ethiopia: a qualitative study. Reproductive Health 2019; 16(1): 50.	home care: development of the child permanency barriers scale. Child welfare 2012; 91(5): 37-71.	mortality in Africa. The Lancet Infectious Diseases 2005; 5(11): 709-717			
95	Regidor et al. The role of political and welfare state characteristics in infant mortality: a comparative study in wealthy countries since the late 19th century. International Journal of Epidemiology 2011; 40(5): 1187-1195.	Tirukoti et al. Health system in Andhra Pradesh: a district-level analysis. Journal of Health Management 2018; 20(1): 15-27.	Nader et al. An analysis of government immunization program expenditures in lower and lower middle income countries 2006-12. Health Policy and Planning 2015; 30(3): 281-288.	Wubegzier et al. Causes of maternal death in Ethiopia between 1990 and 2016: systematic review with meta-analysis. Ethiopian Journal of Health Development 2018; 32(4): 225-242			
96	Reibling. The international performance of healthcare systems in population health: capabilities of pooled cross-sectional time series methods. Health Policy 2013; 112(1-2): 122-132	Uny et al. Weighing the options for delivery care in rural Malawi: community perceptions of a policy promoting exclusive skilled birth attendance and banning traditional birth attendants. Health Policy & Planning 2019; 34(3): 161-169.	Namazzi et al. Strengthening health facilities for maternal and newborn care: experiences from rural eastern Uganda. Global Health Action 2015; 8: 24271.	Yelland et al. Bridging the Gap: using an interrupted time series design to evaluate systems reform addressing refugee maternal and child health inequalities. Implementation Science 2015; 10;62			
97	Richter et al. Welfare state regimes, health and	Vallieres et al. Can Sierra Leone maintain	Nandi et al. The unintended effects of cash transfers on	Yerger et al. Barriers to maternal health services during the Ebola outbreak in			

	health inequalities in adolescence: a multilevel study in 32 countries. Sociology of Health and Illness 2012; 34(6):858-879.	the equitable delivery of their Free Health Care Initiative? The case for more contextualised interventions: results of a cross-sectional survey. BMC Health Services Research 2016; 16: 258	fertility: evidence from the Safe Motherhood Scheme in India. Journal of Population Economics 2016; 29(2): 457-491.	three West African countries: a literature review. BMJ Global Health 2020; 5(9): 9.			
98	Rieger et al. Universal health coverage at the macro level: Synthetic control evidence from Thailand. Social Science and Medicine 2017; 172: 46-55	Wamalwa et al. Implementation challenges of free maternity services policy in Kenya: the health workers' perspective. The Pan African medical journal 2015; 22: 375.	Nanyonjo et al. District Health Teams' Readiness to Institutionalize Integrated Community Case Management in the Uganda Local Health Systems: A Repeated Qualitative Study. Global Health-Science and Practice 2020; 8(2): 190-204.				
99	Roberts et al. Benchmarking health system performance across regions in Uganda: a systematic analysis of levels and trends in key maternal and child health interventions, 1990-2011. BMC	Westgard et al. Health service utilization, perspectives, and health-seeking behavior for maternal and child health services in the Amazon of Peru, a mixed-methods study. International	Nasution et al. Can a National Health Insurance policy increase equity in the utilization of skilled birth attendants in Indonesia? A secondary analysis of the 2012 to 2016 National Socio-Economic Survey of Indonesia. Asia Pacific Journal of				

	Medicine 2015; 13: 285.	Journal for Equity in Health 2019; 18(1): 155.	Public Health 2020; 32(1): 19-26.				
100	Ronsmans et al. Use of hospital data for Safe Motherhood programmes in south Kalimantan, Indonesia. Tropical Medicine & International Health 1999; 4(7): 514-521.	Zafar et al. 'Only systems thinking can improve family planning program in Pakistan': A descriptive qualitative study. International Journal of Health Policy & Management 2014; 3 (7): 393-398	Ndyomugyenyi et al. The use of formal and informal services for antenatal care and malaria treatment in rural Uganda. Health Policy and Planning 1998; 13(1): 94-102.				
101	Rutstein. Factors associated with trends in infant and child mortality in developing countries during the 1990s. Bulletin of the World Health Organization 2000; 78(10): 1256-1270	Zembe-Mkabile et al. The dynamic relationship between cash transfers and child health: can the child support grant in South Africa make a difference to child nutrition? Public Health Nutrition 2016; 19(2): 356-362.	Ng'anjo Phiri et al. Factors associated with health facility childbirth in districts of Kenya, Tanzania and Zambia: a population based survey. BMC Pregnancy & Childbirth 2014; 14: 219.				
102	Rutter et al. Infant mortality inequities for Maori in New Zealand: a tale of three policies. International	Zhou et al. Conditional cash transfers, uptake of maternal and child health services, and	Nicklett et al. Laws and policies to support the wellbeing of children: an international comparative analysis.				

	Journal for Equity in Health 2021; 20: 10.	health outcomes in western rural China. BMC Public Health. 2020;20(1): 870.	International Journal of Social Welfare 2010; 19(1): 3-7				
103	Sagynbekov. Maternal mortality and its correlates: practical implications of data analysis across multiple countries. Journal of Obstetrics & Gynaecology Canada: JOGC 2013; 35 (7): 612-619		Onwujekwe et al. Was the Maternal Health Cash Transfer Programme in Nigeria Sustainable and Cost-Effective? Frontiers in Public Health 2020; 8: 582072.				
104	Saikia et al. Trends and geographic differentials in mortality under age 69 in India. Population Studies 2011; 65(1): 73.		Owolabi et al. Health systems' capacity to provide post-abortion care: a multicountry analysis using signal functions. Lancet Global Health 2019; 7(1): e110-e118.				
105	Samuel Abera et al. Spatial analysis of child mortality and welfare differentials in South Africa: evidences from the 2011 Census. African Population Studies 2018; 32(2): 4376-4395.		Owour et al. Interrupted time series analysis of free maternity services policy in Nyamira County, Western Kenya. PLoS ONE 2019; 14(5): e0216158.				

106	Sandhu et al. Maternal mortality in Bahrain 1987-2004: an audit of causes of avoidable death. Eastern Mediterranean Health Journal 2008; 14(3): 720-730.		Parchment et al. Is the lack of health insurance the major barrier to early prenatal care at an inner-city hospital? Womens Health Issues 1996; 6(2): 97-105.				
107	Sarnquist et al. The effectiveness of state and national policy on the implementation of perinatal HIV prevention interventions. American Journal of Public Health 2007; 97(6): 1041-1046		Parish et al. State Medicaid policies and the health care access of low-income children with special health care needs living in the American South. North Carolina Medical Journal 2012; 73(1): 15-23				
108	Sayinzoga et al. Maternal death audit in Rwanda 2009-2013: a nationwide facility-based retrospective cohort study. BMJ Open 2016; 6(1): e009734.		Parker et al. Novel Service Delivery Approach to Address Reproductive Health Disparities within Immigrant Latino Communities in Geographic Hot Spots: An Implementation Study. Health and Social Work 2020; 45(3): 155-163.				
109	Schell et al. Socioeconomic determinants of infant mortality: a		Paxman et al. The India Local Initiatives Program: A Model for Expanding				

	worldwide study of 152 low-, middle-, and high-income countries. Scandinavian Journal of Public Health 2007; 35(3): 288-297.		Reproductive and Child Health Services. Studies in Family Planning 2005; 36 (3): 203-220				
110	Schnohr et al. The role of national policies intended to regulate adolescent smoking in explaining the prevalence of daily smoking: a study of adolescents from 27 European countries: (Alcoholism and Drug Addiction). Addiction 2008; 103(5): 824-831		Peruffo et al. The long-term effects of conditional cash transfers on child labor and school enrollment. Economic Inquiry 2017; 55(4): 2008-2030.				
111	Shaikh et al. Health system barriers and levers in implementation of the Expanded Program on Immunization (EPI) in Pakistan: an evidence informed situation analysis. Public Health Reviews 2018; 39: 24.		Popova et al. Distributional impact of taxes and social transfers in Russia over the downturn. Journal of European Social Policy 2018; 28(5): 535-548.				
112	Shandra et al. Do non-governmental organizations		Psaila et al. A qualitative study of innovations				

	impact health? A cross-national analysis of infant mortality. International journal of comparative sociology 2010; 51 (1-2): 137-164.		implemented to improve transition of care from maternity to child and family health (CFH) services in Australia. Women and Birth 2014; 27(4): e51-60				
113	Sharma et al. Causal pathways to infant mortality: linking social variables to infant mortality through intermediate variables. Journal of Health and Social Policy 1998; 9(3): 15-28		Psaila et al. Smoothing out the transition of care between maternity and child and family health services: perspectives of child and family health nurses and midwives'. BMC Pregnancy & Childbirth 2014; 14: 151.				
114	Sieber et al. Do Welfare Regimes Moderate Cumulative Dis/advantages Over the Life Course? Cross-National Evidence from Longitudinal SHARE Data. Journals of Gerontology Series B-Psychological Sciences and Social Sciences 2020; 75 (6): 1312-1325.		Purohit. Efficiency of health care system at the sub-state level in Madhya Pradesh, India. Social Work in Public Health 2010; 25(1): 42-58.				
115	Singh et al. What explains the decline		Rahman et al. Trends in, and projections of,				

	in neonatal mortality in India in the last three decades? Evidence from three rounds of NFHS surveys. Studies in Family Planning 2019; 50 (4): 337-355.		indicators of universal health coverage in Bangladesh, 1995-2030: a Bayesian analysis of population-based household data. Lancet Global Health 2018; 6(1): e84-e94.				
116	Stenberg et al. Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries. Lancet Global Health 2017; 5 (9): e875-e887		Rai et al. District level coverage gap in Maternal, Newborn and Child Health care services in India. Journal of Epidemiology and Global Health 2012; 2(4): 221-224.				
117	Sun et al. Evaluation of the performance of national health systems in 2004-2011: an analysis of 173 countries. PLoS ONE 2017; 12 (3): e0173346.		Ravangaard et al. Factors affecting the technical efficiency of health systems: A case study of Economic Cooperation Organization (ECO) countries (2004-10). International Journal of Health Policy &				

			Management 2014; 3(2): 63-69.				
118	Tabutin et al. Mortality Inequalities and Trends in Low- and Middle-Income Countries,1990-2015. Population 2017; 72(2): 220-295.		Reid et al. Achieving universal health coverage (UHC): dominance analysis across 183 countries highlights importance of strengthening health workforce. PLoS ONE 2020; 15(3): e0229666.				
119	Tappis et al. Reproductive, maternal, newborn and child health service delivery during conflict in Yemen: a case study. Conflict and Health 2020; 14: 30.		Rosa Daiger et al. Varieties of liberalism: A comparative analysis of family policy and poverty outcomes across the 50 United States. Social Policy and Administration 2020; 54(6): 933-951.				
120	Thakrar et al. Child Mortality In The US And 19 OECD Comparator Nations: A 50-Year Time-Trend Analysis. Health Affairs. 2018;37(1):140-9.		Rougeaux et al. Have health inequalities changed during childhood in the New Labour generation? Findings from the UK Millennium Cohort Study. BMJ Open 2017; 7(1): e012868.				
121	Thapa et al. Equity and Coverage in the Continuum of Reproductive, Maternal, Newborn and Child Health Services in Nepal-		Ruiz Gomez. Colombian health care system: results on equity for five health dimensions, 2003-2008. Pan American Journal of				

	Projecting the Estimates on Death Averted Using the LiST Tool. Maternal & Child Health Journal 2020; 24 (Suppl 1): 22-30.		Public Health 2013; 33(2): 107-115.				
122	Thomson et al. Were NZ's structural changes to the welfare state in the early 1990s associated with a measurable increase in oral health inequalities among children? Australian & New Zealand Journal of Public Health 2002; 26(6): 525-530		Sanneving et al. Health system capacity: maternal health policy implementation in the state of Gujarat, India. Global Health Action 2013; 6: 1-8				
123	Thornton et al. Does extending health insurance coverage to the uninsured improve population health outcomes? Applied Health Economics & Health Policy 2008; 6(4): 217-230.		Santas et al. Do health care reforms in Turkey have a significant effect in equal access to maternal and child health services in Turkey: An evidence from 20 years. International Journal of Health Planning & Management 2018; 33(1): e344-e356				
124	Tran et al. Child care effects in context: quality,		Sen et al. Teen families, welfare transfers, and the				

	stability, and multiplicity in non-maternal child care arrangements during the first 15 months of life. Developmental Psychology 2006; 42(3):566-582		minimum wage: evidence from Canada. Canadian Journal of Economics 2013; 46(1): 338-360				
125	Ukachukwu et al. Maternal morbidity and mortality in peri-urban Kenya--assessing progress in improving maternal healthcare. East African Journal of Public Health 2009; 6(2): 112-118.		Sequeira Dmello et al. Learning from changes concurrent with implementing a complex and dynamic intervention to improve urban maternal and perinatal health in Dar es Salaam, Tanzania, 2011-2019. BMJ Global Health 2021; 6(1): e004022				
126	Valentine et al. Exploring models for the roles of health systems' responsiveness and social determinants in explaining universal health coverage and health outcomes. Global Health Action 2016; 9: 29329.		Servan-Mori et al. Improving the effective maternal-child health care coverage through synergies between supply and demand-side interventions: evidence from Mexico. Journal of Global Health 2019; 9(2): 020433.				
127	Van der Heuvel et al. A comparative analysis of early child health and		Shantharam Baliga et al. Scaling up of facility-based neonatal care: a				

	development services and outcomes in countries with different redistributive policies. BMC Public Health 2013; 13: 1049.		district health system experience. Journal of Tropical Pediatrics 2007; 53 (2): 107-112.				
128	Volpe et al. The impact of changing health indicators on infant mortality rates in Brazil, 2000 and 2005. Pan American Journal of Public Health 2009; 26 (6): 478-484.		Shukla. Impact of a Health Governance Intervention on Provincial Health System Performance in Afghanistan: A Quasi-Experimental Study. Health Systems & Reform 2018; 4(3): 249-266.				
129	Weldeareawi et al. Infant mortality and causes of infant deaths in rural Ethiopia: a population-based cohort of 3684 births. BMC Public Health 2015;15: 770.		Sidney et al. India's JSY cash transfer program for maternal health: who participates and who doesn't--a report from Ujjain district. Reproductive Health 2012; 9:2.				
130	Xiang et al. Injury-related mortality among children younger than 5 years in China during 2009-2016: an analysis from national surveillance system. Injury		Sprague et al. Health system weaknesses constrain access to PMTCT and maternal HIV services in South Africa: a qualitative enquiry. AIDS Research & Therapy 2011; 8:10.				

	Prevention 2019; 25(1): 60-66.						
131	Zambon et al. Do welfare regimes mediate the effect of socioeconomic position on health in adolescence? A Cross-national comparison in Europe, North America, and Israel. International Journal of Health Services 2006; 36(2):309-329		Srinivasan et al. Influence of publicly funded conditional cash transfer programmes on utilization patterns of healthcare services for acute childhood illness. International Health 2020; 12(4): 339-343.				
132			Steinhardt et al. Removing user fees for basic health services: a pilot study and national roll-out in Afghanistan. Health Policy and Planning 2011; 26 (Suppl 2): ii92-103				
133			Studlar et al. Multilevel governance, public health and the regulation of food: is tobacco control policy a model? Journal of Public Health Policy 2019; 40(2): 147-165.				
134			Sutherland et al. Social Inequalities in the Organization of				

			Pregnancy Care in a Universally Funded Public Health Care System. Maternal and Child Health Journal 2012; 16 (2): 288-296				
135			Tabatabai et al. Public and private maternal health service capacity and patient flows in southern Tanzania: using a geographic information system to link hospital and national census data. Global Health Action 2014; 7(1): 22883.				
136			Tahsina et al. Out-of-pocket expenditure for seeking health care for sick children younger than 5 years of age in Bangladesh: Findings from cross-sectional surveys, 2009 and 2012. Journal of Health, Population and Nutrition. 2017;36(1): 33.				
137			Thenevon. Family policies in OECD countries: a comparative analysis. Population & Development Review 2011; 37(1): 57-87.				

138			Thomas et al. Making systems work: the hard part of improving maternal health services in South Africa. Reproductive Health Matters 2007; 15 (30): 38-49.				
139			Tobe et al. Strengthening the Community Support Group to improve maternal and neonatal health seeking behaviors: a cluster-randomized controlled trial in Satkhira District, Bangladesh. PLoS ONE 2019; 14(2): e0212847				
140			Toffolutti et al. Austerity, measles and mandatory vaccination: cross-regional analysis of vaccination in Italy 2000-14. European Journal of Public Health 2019; 29(1): 123-127.				
141			Udenigwe et al. Perspectives of policymakers and health providers on barriers and facilitators to skilled pregnancy care:				

			findings from a qualitative study in rural Nigeria. BMC Pregnancy and Childbirth 2021; 21:20.				
142			Wagenaar et al. Effects of a health information system data quality intervention on concordance in Mozambique: time-series analyses from 2009-2012. Population Health Metrics 2015; 13: 9				
143			Wang et al. Effects of Financial Incentives on Saving Outcomes and Material Well-Being: Evidence From a Randomized Controlled Trial in Uganda. Journal of Policy Analysis and Management 2018; 37 (3): 602-629.				
144			Wang et al. Evaluation of performance and impacts of maternal and child health hospital services using Data Envelopment Analysis in Guangxi Zhuang Autonomous Region, China: a				

			comparison study among poverty and non-poverty county level hospitals. International Journal for Equity in Health 2016; 15(1): 131.				
145			Wang et al. Health insurance coverage and its impact on maternal health care utilization in low- and middle-income countries. DHS Analytical Studies 2014; 45: 66.				
146			Wennemo et al. The development of family policy - a comparison of family benefits and tax reductions for families in 18 OECD countries. Acta Sociologica 1992; 35(3): 201-217.				
147			Winters et al. Implementation of system-wide change in child welfare and behavioral health: the role of capacity, collaboration, and readiness for change. Children and Youth Services Review 2020; 108: 104580.				

148			Wood et al. A comparison of child health programmes recommended for preschool children in selected high-income countries. Child: Care, Health and Development 2014; 40 (5): 640-653.				
149			Wood et al. Moving from a universal to targeted child health programme: which children receive enhanced care? A population-based study using routinely available data. Child: Care, Health & Development 2013; 39(6): 772-781.				
150			Yelland et al. Evaluation of systems reform in public hospitals, Victoria, Australia, to improve access to antenatal care for women of refugee background: An interrupted time series design. PLoS Medicine 2020; 17(7): e1003089.				
151			Zhao et al. The new rural social pension program in rural China: participation and its correlates.				

			China Agricultural Economic Review 2016; 8(4): 647-661.				

Appendix C: Data extraction – study characteristics

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
1	Abdulahi et al	2021	Ethiopia	Cluster-randomised trial	36 clusters (intervention n=249, control n=219)	Purposive sampling	2017-Not stated (6 month follow-up)	Breastfeeding education and support intervention	Infant growth, child morbidity
2	Acuin et al	2011	Southeast Asia	Not stated (quantitative – ecological)	10 countries	Established data sources were searched using a systematic search string	1990-2008	Policies to improve health coverage	Maternal mortality, child mortality
3	Adubra et al	2019	Mali	Cluster-randomised controlled trial	76 community health centres, 5046 mother-child pairs (at baseline)	Random sampling within community health centre areas	2011-Not stated (1000 day follow-up from 2014 phase)	Conditional cash transfer and/or lipid-based nutrient supplement intervention	Mean height-for-age Z scores, stunting
4	Ahammer et al	2020	Austria	Not stated (quantitative – ecological)	1 country	Administrative data sources	1974- Not stated (long-term health data only from 1998)	Prenatal maternity leave extension from 6 to 8 weeks	Length, birth weight, premature birth, long-term health outcome at age 25 and 40 (outpatient expenses and hospital days)
5	Alexiou et al	2021	15 G20 countries	Panel quantile methodology	15 G20 countries	Not stated	2000-2018	Governmental health expenditure	Infant mortality
6	Alexiou et al	2021	England	Longitudinal ecological study	1 OECD country (England)	Annual data from Ministry of Housing, Communities and Local Government	2013-2017	Local government funding	Life expectancy at birth

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
7	Andersen et al	2015	Peru	Cohort study	20 sampling sites	Sites reflected diversity in region, ethnicity and religion	2001- Not stated	Juntos conditional cash transfer programme	Anthropometric status, language development
8	Aquino et al	2009	Brazil	Ecological and longitudinal approach using a panel data or longitudinal data model	771 municipalities	Databases from Brazilian Ministry of Health	1996-2004	Family Health Program – a strategy for reorganisation of primary care	Infant mortality
9	Arifeen et al	2009	Bangladesh	Cluster-randomised study	20 clusters (average cluster size for intervention arm: 14,529; average cluster size for control arm: 18,285)	Random sampling	2002-2007	Integrated Management of Childhood Illness Strategy	Under-5 mortality
10	Armstrong-Schellenberg et al	2004	Tanzania	Non-randomised study	4 neighbouring districts	Purposive sampling	1997-2002	Facility-based Integrated Management of Childhood Illness (IMCI)	Under-5 mortality
11	Ashiabi et al	2016	Sub-Saharan Africa	Panel data	40 countries in Sub-Saharan Africa	Established databases, based on data availability	2000-2010	Public health expenditure, private health expenditure	Infant mortality, under-5 mortality, maternal mortality
12	Bang et al	2005	India	Field trial	39 intervention villages (population 39,312) and 47 control villages (population 42,617)	Adjacent blocks of villages with similar socioeconomic conditions	1993-1995	Home-based neonatal care intervention	Neonatal mortality, infant mortality, perinatal mortality

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
13	Barber et al	2008	Mexico	Retrospective reports from women who participated in a randomised effectiveness trial	840 women (174 non-beneficiary and 666 beneficiary births)	Targeted samples from a larger clustered RCT	1998-1999	Conditional cash transfer programme, Oportunidades	Birth weight
14	Barenberg et al	2017	India	Unbalanced panel data set	31 Indian states	Not stated	1983-2012	Public health expenditure	Infant mortality
15	Barham et al	2011	Mexico	Randomised experiment	4311 municipalities in rural Mexico	Administrative databases	1992-2001	Progresa conditional cash transfer program	Infant mortality, neonatal mortality
16	Behera et al	2020	Southeast Asia	Panel dynamic generalized method of moment techniques	10 countries	Administrative databases with country selection based on data availability	2000-2014	Health expenditure, categorised as per Ssozi and Amlani (2015)	Infant mortality, immunization coverage
17	Bhardwaj et al	2018	South Africa	Case studies (quantitative)	1 country	Initiatives led by the National Department of Health over the preceding 5 years to address maternal and child mortality	2011-2016	Essential Steps In Managing Obstetric Emergencies, undernutrition in young children and breastfeeding interventions	Child mortality, maternal mortality
18	Bhatt et al	2018	United States	Not stated (quantitative – ecological)	31 states that accepted Medicaid expansion, 19 states that declined to participate	Publicly available datasets	2010-2016	Medicaid programme expansion	Infant mortality
19	Biadgilign et al	2019	Ethiopia	Ecological analysis	1 country	Publicly available datasets	2000-2016	Governance, public health expenditure	Childhood undernutrition

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
20	Bishai et al	2016	146 low- and middle-income countries	Not stated (quantitative – ecological)	146 low- and middle-income countries	All countries classified as low- or middle-income in 2000 with available data	1990-2010	Health service coverage and infrastructure	Maternal mortality, child mortality
21	Bitler et al	2005	United States	Not stated (quantitative – ecological)	60,731 observations from 19 states	Women whose deliveries were paid by Medicaid and had information about WIC use	1992-1999	Special Supplemental Nutrition Program for Women, Infants and Children (WIC)	Gestational weight gain, gestation, premature birth, birth weight, weight for gestation
22	Blake-Lamb et al	2020	United States	Quasi-experimental trial	643 women prior to First 1,000 Days program introduction and 928 women after program introduction	Two community health centres serving predominantly low-income, racial and ethnic minority populations in Revere and Chelsea, MA.	2015-2018	First 1,000 Days system-change program	Maternal gestational weight gain
23	Blakeney et al	2020	United States	Pooled cross-sectional time series analysis	226,835 of both Medicaid and uninsured births from Florida and Washington states before and during recession.	Not specified	2005-2009	Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program	Birth weight

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
24	Bradley et al	2011	30 OECD countries	Pooled cross-sectional analysis	30 OECD countries	Data availability	1995-2005	Health expenditure, social services expenditure	Life expectancy at birth, infant mortality, low birth weight, maternal mortality
25	Brault et al	2018	Liberia	Mixed methods country case study	1 country	Monrovia (Montserrado County) and the Gbarnga area (Bong County, North Central region)	2000-2013	National prioritisation of maternal and child health after the civil war, through integrated service packages, and use of outreach campaigns, community health workers and trained traditional midwives	Under-5 mortality
26	Brault et al	2017	Kenya	Country case study (qualitative)	1 country (country-level analysis)	Purposive sampling	2000-2013	Removal of user fees, the Kenya Essential Package for Health, and the Community Health Strategy.	Under-5 mortality, infant mortality, neonatal mortality, provision of immunizations, malaria prevention, and Prevention of Mother-to-Child Transmission of HIV.
27	Bugelli et al	2021	Brazil	Multilevel panel data with fixed	26 Brazilian states	Distributed across the 5	2004-2015	Bolsa Familia programme coverage, number	Infant mortality

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
				effect nested within-clusters		socio-economic macro regions		of health professionals per 1000 inhabitants	
28	Cahyadi et al	2020	Indonesia	Not stated (quantitative – ecological)	180 intervention sub-districts and 180 control sub-districts	Random selection of sub-districts	2007-2013	Program Keluarga Harapan conditional cash transfer	Stunting
29	Chen et al	2005	Taiwan	Birth cohorts (quantitative – ecological)	Birth cohorts from 1989 (n=1398) and 1996 (n=3185) respectively	2-stage sampling (birth cohorts of 1989 and 1996)	1989-1996	National Health Insurance Program	Childhood immunization
30	Choudhury et al	2021	United States	Natural experiment	14,732 observations in the experimental group (California). Number of control observations not stated.	Data from National Immunization Survey	2000-2010	Paid Family Leave program in California	Infant vaccination
31	Cluver et al	2013	South Africa	Propensity-score-matched case-control study	3515 participants (of whom 3401 were followed-up)	Randomly selected census areas in two urban and two rural districts in two provinces	2009-2012	Child-focused state cash transfers	Adolescent risk of HIV infection
32	Crea et al	2015	Zimbabwe	Cluster-randomised controlled trial	5,331 children from 1,697 households	Vulnerable households in Manicaland province, Eastern Zimbabwe,	2009-2010	Unconditional and conditional cash transfer programs	Chronic childhood illness and disability

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
						identified by a rapid baseline census survey			
33	Cremieux et al	1999	Canada	Not stated (quantitative – ecological)	10 Canadian provinces	Province-specific administrative data	1978-1992	Health care expenditure	Life expectancy at birth, infant mortality
34	De Andrade et al	2018	Brazil	Mixed ecological study	1,120 Brazilian municipalities	High risk clusters for leprosy detection	2004-2015	Bolsa Familia conditional cash transfer program	New case detection of leprosy in children under 15 years
35	Drewry et al	2015	United States	Quasi-experimental retrospective observational cohort design	583,917 live births to foreign-born Latinas from sixteen states	Census-based	2000- 2007	State Children's Health Insurance Program	Pre-term birth and birth weight
36	Factor et al	2015	133 low-, middle- and high-income countries	Not stated (quantitative – ecological)	133 countries	Data availability	2003-2009	Corruption, health expenditures	Life expectancy at birth, infant mortality, diphtheria, pertussis and tetanus vaccination
37	Farag et al	2013	133 low and middle-income countries	Not stated (quantitative – ecological)	133 countries	Data availability	1995-2006	Governance, health expenditure	Infant mortality, under-5 mortality
38	Feng et al	2012	China	Systematic analysis	30 Chinese provinces	All provinces under direct jurisdiction.	1990-2006	Health expenditure, health workers and beds per capita, safe motherhood program	Under-5 mortality
39	Fernald et al	2008/ 2009	Mexico	Clustered randomised controlled trial	320 intervention villages and 186	Step-wedge design	1998-2007	Conditional cash transfer	Height-for-age Z score, BMI, gross motor

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
					control or late intervention villages			programme, Oportunidade	development, cognitive development, language development
40	Fernandes et al	2014	Mozambique	Provincial-level time-series analysis	Provincial-level	Publicly available data	2000-2010	Health-system strengthening intervention	Under-5 mortality, infant mortality, neonatal mortality
41	Findley et al	2016/ 2013	Nigeria	Quasi-experimental design	2129 women (baseline), 2310 women (follow-up)	Stratified sampling	2009-2013	Integrated maternal, newborn, and child health program	Vaccination, infant mortality, maternal mortality
42	Gabbe et al	2017	United States	Not stated (quantitative – individual)	195 pregnant women	African-American community in Weiland Park – selected based on need and proximity	2011-2014	Moms2B Ohio community-based pregnancy support group intervention	Infant mortality
43	Garchitorena et al	2020/ 2018	Madagascar	Longitudinal cohort study	1600 households	2-stage stratified sampling	2014-2016	Integrated health (district level health system strengthening) system intervention	Child mortality, under-5 mortality, neonatal mortality
44	Ghosh et al	2018	India	Not stated (quantitative – individual)	5446 children from 2769 households (1443 treatment and 1326 control)	Northern Indian state of Bihar – selection of districts by level of deprivation. Random selection of blocks within district and of households	Not stated (Years of marriage 2005-2014)	Maternity support program (Indira Gandhi Matritya Sahayog Yojana)	Child malnutrition, stunting, weight-for-age, height-for-age

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
45	Gitobu et al	2018/ 2017	Kenya	Time series analysis	77 health facilities	1st stage: Cluster sampling (to select counties) ; 2nd stage: simple random sampling (to select facilities)	2011-2015	Free Maternal Health Care Policies	Maternal mortality, neonatal mortality
46	Goldstein et al	2020	United States	Longitudinal repeated-measures study	50 states	Census-based	2000-2016	State and local government expenditures on non-healthcare services (education, social services, and environment and housing)	Infant mortality rate
47	Goncalves	2014	Brazil	Not stated (quantitative – ecological)	3250 municipalities	Census-based (Dataset created from several administrative sources)	1990-2004	Participatory budgeting on municipal expenditures	Infant mortality
48	Gram et al/ Saville et al	2019/ 2018	Nepal	Cluster-randomised trial, plus embedded process evaluation using semi-structured interviews, informed by grounded theory	Trial: 20 clusters averaging 6,150 people per each of 4 arms. Process evaluation: 22 beneficiary women, 15 mothers-in-law, 3 elder sisters-in-law and 20 husbands, plus	Dhanusha and Mahottari districts of the Plains of Nepal, bordering Bihar state in India. Cluster sampling.	2015	Participatory Action and Learning women's groups with and without transfers of food or cash	Low birthweight, child growth

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
					a focus group with 7 supervisors of the intervention				
49	Grellety et al	2017	D.R. Congo	Cluster-randomised trial	Children with uncomplicated severe acute malnutrition	Cluster sampling	2015 (6 month follow-up from up to July enrolment)	Counselling with or without unconditional cash supplement	Outcome of treatment for severe acute malnutrition
50	Hajizadeh et al	2015	20 low- and middle-income countries	Longitudinal study	258,769 live births in 20 low- and middle-income countries	Multistage sampling	2001-2008	Paid maternity leave	Childhood vaccination
51	Hall et al	2021	191 low-, middle- and high-income countries	Panel data analysis	191 countries	Established databases	1980-2016	Government revenue per capita (marker of expenditure capability)	Under-5, maternal mortality
52	Houngbe et al	2017	Burkina Faso	Cluster-randomised controlled trial	32 villages in rural Burkina Faso	North of Tapoa province, in rural eastern Burkina Faso, characterised by 'inappropriate child feeding practices' and insufficient access to sanitation and safe water	2013-2014	Unconditional cash transfer program	Wasting (weight-for-height, mid-upper arm circumference), stunting (height-for-age), child morbidity
53	Huang et al	2017	Kenya	Longitudinal cluster-	28 clusters (households as unit of analysis)	Random sampling of census	2007-2009	Unconditional cash transfer (the Kenyan Cash	Incidence of illness (malaria and

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
				randomised program data		enumeration areas		Transfer for Orphan and Vulnerable Children)	pneumonia)
54	Huicho et al	2016	Peru	Country case study (mixed methods)	1 (single country case study)	Not stated	2000-2013	Antipoverty political agenda and associated programmes; decentralisation of public health in 2000s; health insurance reforms; implementation of Health Sector Reform Support Programme	Under-5 mortality, neonatal mortality, and prevalence of under-5 stunting
55	Ibukun et al	2021	Western Africa	Instrumental variable approach on a panel of countries	15 western African countries	Not stated	2000-2018	Governance, health expenditure	Infant mortality, under-5 mortality, life expectancy at birth
56	Irish et al	2021	United States	Quasi-experimental study	28,638 adults and 15,987 children. Adults included fathers, but we extracted results only for mothers.	California and New Jersey selected as experimental states due to introduction of a paid family leave policy. Control states had not implemented such a policy.	1997-2016	Paid family leave policy	Maternal psychological distress

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
57	Jahagirdar et al	2017	37 low- and middle-income countries	Quasi-experimental study	583,227 children	Two-stage cluster sampling	2000-2014	Increase in paid maternity leave (implemented in 5 of the countries, Uganda, Zambia, Zimbabwe, Bangladesh and Lesotho)	Height-for-age Z score
58	Jo et al	2018	United States	Natural experiment	19,262 child-year observations	Not specified	1987-2001	Earned Income Tax Credit	Obesity
59	Johnson et al	2013	Mali	Repeated cross-sectional survey	400 households	Cluster-based, population-weighted sampling	2008-2011	Health system strengthening interventions (Community Health Worker active case finding, user fee removal, infrastructure development, community mobilization, and prevention programming)	% of children initiating an effective antimalarial within 24 hours of symptom onset, the percentage of children reported to be febrile within the previous two weeks, and under-five child mortality rate.
60	Kamiya et al	2011	141 developing countries	Econometric analysis on health production function using pooled cross-sectional specification	141 countries	Not stated	1990-2008	Access to improved sanitation, governance, government health expenditures as a share of total government expenditure,	Under-five mortality

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
								human resources for health	
61	Katahoire et al	2015	Uganda	Thematic analysis (qualitative)	38 interviews with members of District Health teams and implementing partners, followed and supplemented by observations during implementation and document review	Five pilot districts with high child mortality rates and the representation of both old and new districts	2012-2013	Community and District Empowerment for Scale-up (CODES) comprehensive district management and community empowerment intervention	Child survival
62	Kayode et al	2016	Ghana	Longitudinal study	1 country	Nationally representative datasets with weighting where appropriate	1988-2008	Implementation of policies and programs to target Millennium Development Goal 4	Neonatal mortality, infant mortality, under-five mortality
63	Khan et al	2012	Pakistan	Not stated (quantitative – ecological)	1 country	Not stated	1990-2010	Health systems capacity building efforts	Neonatal mortality rate, under-5 mortality rate.
64	Kim et al	2013	17 OECD countries	Cross-country panel data, using a mixed-effect model	17 OECD countries	Not stated	1973 to 2000	Government health expenditure	Life expectancy at birth, infant mortality
65	Klein et al	1998	United States	Not stated (quantitative – individual)	570 pregnant women	Obstetrics and family practice clinics in two	Not stated (1 year follow-up)	Maternity leave	Maternal mental health

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
						Midwestern cities			
66	Kumar et al	2017	India	Pooled time series analysis, using difference in differences method	474,463 women in round one (1998-1999); 643,944 women in round three (2007-2008)	A treated state (Bihar) vs a control state (Jharkhand)	1998-2008	Political decentralization	Neonatal mortality, infant mortality, child mortality
67	Kusuma et al	2017/ 2016	Indonesia	Cluster-randomised trial	Up to 5705 women at baseline for maternal mortality, and 4,245 children for child vaccination	Stratified sampling of sub-districts, with random sampling of villages and wards within sub-districts	2007-2009	Conditional cash transfers (Program Keluarga Harapan)	Maternal mortality, child vaccination
68	Kuunibe et al	2020	Burkina Faso	Interrupted time-series analysis	838 primary-level health facilities across 24 districts	Not stated	2013-2017	Performance-based financing policy	Child immunization
69	Labrecque et al	2018	Brazil	Cohort study	1703 children, eligible for bolsa familia, from the Pelotas Birth Cohort	The Pelotas Birth Cohort, which recorded 99% of all births in Pelotas city in 2004	2004-2006	Bolsa familia conditional cash transfer program	Length-for-age, weight-for-age
70	Langnel et al	2020	Sub-Saharan Africa	Panel data analysis	32 Sub-Saharan African countries	Not stated	2000-2015	Governance, health expenditure	Infant mortality
71	Leal et al	2018	Brazil	Not stated (quantitative – ecological)	1 country	Not stated	1990-2015	Unified Health System policy	Preterm birth, under-5 mortality,

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
									maternal mortality
72	Leroy et al	2008	Mexico	Quasi-experimental study	733 households in 149 manzanas (small administrative areas) in 17 Mexican states	Probabilistic stratified sampling	2002-2004	Oportunidades conditional cash transfer program	Linear child growth
73	Lessaris et al	2002	United States	Cohort study	520 infants, over two funding periods	The sole provider of level III services in coastal southern South Carolina	1990-1996	Change of health care financial policy	Proportion of very low birthweight infants
74	Liljestrand et al	2012	Cambodia	Not stated (quantitative – ecological)	1 country	National reports, local studies and administrative data	2000-2010	Health system strengthening of maternity care	Maternal mortality
75	Lindsay et al	2002	Brazil	Mixed methods study	140 municipalities	State of Ceara, Northeast Brazil	1994-1996 (1991 census data used for missing 1994 data)	Ceara Health Workers' Program	Infant mortality, inadequate child weight gain, verbal autopsy data regarding infant deaths
76	Lopez-Arana et al	2016	Colombia	Quasi-experimental study	1,290 children from 31 treatment municipalities and 1584 children from 62 control municipalities	Population of less than 100,000 inhabitants, plus health, education, and financial infrastructure requirements. Up-to-date	2002-2006	Familias en accion conditional cash transfer program	Child malnutrition

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
						census, welfare and service infrastructure data.			
77	Makela et al	2013	India	State-level analysis	20 major states and union territories of India	Randomly selected enumeration areas	1997-2009	Social sector expenditure, public expenditure on health	Infant mortality, age 1-4 mortality
78	Makuta et al	2015	Sub-Saharan Africa	Panel data regression analysis	43 Sub-Saharan African countries	Data availability	1996-2011	Governance, public spending on health	Under-5 mortality, life expectancy at birth
79	Margolis et al	1995	United States	Mixed methods	7 US states that participated in the block grant and Healthy Futures and Healthy Generations programs	Participation in relevant programs	1990-1992	Maternal and Child Health Services Block Grant	Infant mortality
80	Markowitz et al	2017	United States	Ecological study, using multi-year difference-in-differences analysis	State-level analysis in the US	Not stated	1994-2013	State-level earned income tax credit laws	Gestation weeks, birth weight
81	Marathappu et al	2015	176 countries	Panel-data analysis	176 countries	Data availability	1981-2010	Government health care spending	Neonatal mortality, post-neonatal mortality, 1-5 year mortality, under-5 mortality
82	Mascie-Taylor et al	2010	Bangladesh	Panel study	895 households in the cash-for-work	Random sampling	2007-Not stated	Cash-for-work programme	Nutritional health for mothers and children

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
					programme and 921 similar control households				
83	Mayer et al	1999	United States	Not stated (quantitative - individual)	9953 children	National sample. African Americans and low birthweight children were oversampled	1988-1991	State policies and programmes	Childhood immunisation
84	Meda et al	2018	Burkina Faso	Quasi-experimental study	32,102 live-born infants to 12,474 women	Not stated	2007-2010	Fee subsidy policy	Neonatal mortality
85	Meghea et al	2013	United States	Randomised controlled trial	613 women	Consecutively sampled Medicaid-insured pregnant women in Kent county, Michigan	12 month follow-up (dates not stated)	Nurse-community health worker home visitation programme	Overall child health, mother-reported asthma/wheezing/ croup diagnostics, immunisations, hospitalisations, ear infections
86	Memon et al	2015	Pakistan	Quasi-experimental design	A population of 283,324 comprising 35,641 households in the Gilgit district of remote mountainous northern Pakistan	Random for formative stage, but geographic for intervention or control	18 month implementation, years and follow-up dates not stated	Community-based perinatal and newborn preventive care package	Perinatal mortality, neonatal mortality

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
87	Muruka et al	2019	Kenya	Interrupted time series design	Gem Sub-county, Siaya county, western Kenya	Routinely collected data	2011-2015	Free maternity policy	Neonatal mortality, maternal mortality
88	Naderimagham et al	2017	Iran	Time-series study	Rural areas of Iran	Not stated	1995-2011	Rural family physician programme	Neonatal mortality, infant mortality, under-5 mortality
89	Narwal et al	2013	India	Analysis of time trends	1.5 million households with 7.1 million people	Randomly selected villages and urban blocks spread across all Indian states. As the programme was implemented in all states, no control states were available, so a before-after comparison was made	2000-2009	Launch of the National Rural Health Mission	Infant mortality
90	Norr et al	2003	United States	Randomised clinical trial	588 pregnant women (406 African American and 182 Mexican Americans)	Low-income inner-city women who lived in community areas with high infant mortality	1 year follow-up (dates not stated)	Nurse-health advocate home visiting programme	Mother-reported infant health problems, completion of recommended immunizations, infant development
91	Nyamurunga et al	2019	Southern Africa (region of interest)	Panel data analysis	Panel data from 98 developing countries, including 15	Choice of sample countries based on World Bank classification of	2000-2013	Public health expenditure	Infant mortality, under-5 mortality

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
					Southern African Development Community countries	developing countries			
92	Okafor et al	2011	Nigeria	Retrospective comparative study	759 pregnant women attending ante-natal clinics in Enugu state	Retrospective review of clinic attendees	2008	Free Maternal and Child Health programme	Maternal mortality, perinatal mortality
93	Onofrei et al	2021	EU developing countries	Comparative study using regression analysis and factor analysis	EU developing countries (specific countries not stated)	Not stated	2000-2019	Government health expenditure, governance	Life expectancy at birth, infant mortality
94	Patel el al	2001	United States	Retrospective 3-time period cohort design	636, 429 birth records	High-risk neonates in Illinois	1985-1995	Statewide neonatal resuscitation program	Apgar scores (general assessment of neonatal health)
95	Paxson et al	2010	Ecuador	Experimental study (non-randomised)	3,426 families containing 5,547 children	Random sampling from a common sampling frame (for treatment and control)	2003-2006	Bono de desarrollo humano unconditional cash transfer programme	Child haemoglobin level, height-for-age, child fine motor control, child cognition
96	Perez-Lu et al	2017	Peru	Serial cross-sectional surveys	481 Peruvian districts	Districts where Juntos programme was introduced	2009-2012	Juntos conditional cash transfer programme	Anaemia in women and children, acute malnutrition in children, post-partum complications in mothers, underweight and

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
									overweight in mothers
97	Perez-Perez et al	2019	Mexico	Spatial-econometric analysis	2357 Mexican municipalities	All municipalities in Mexico	2000-2015	Government expenditure on health	Maternal mortality
98	Perin et al	2020	Nigeria	Multistage sample survey	19, 685 live births and 538 neonatal deaths	Multistage sampling	2013-2014	18 maternal and neonatal health resources and interventions	Neonatal mortality
99	Perks et al	2006	Laos	Case study (quantitative)	Sayaboury province	Not stated	1996-2003	District health programmes and health-sector reform	Infant mortality, under-5 mortality, maternal mortality
100	Powell-Jackson et al	2016	India	Quasi-experimental study	Uttar Pradesh	Six districts – all households in selected villages were enumerated	2015 onwards (follow-up period not stated)	Janani Suraksha Yojana one-off cash transfer programme to women who give birth in a health facility	Maternal depression, maternal emotional well-being
101	Rad et al	2013	20 Eastern Mediterranean countries	Panel data analysis	20 Eastern Mediterranean countries	Data availability	1995-2010	Public health expenditure, private health expenditure	Infant mortality
102	Raeesi et al	2018	25 countries with different health care systems	Panel data analysis	25 countries with different health care systems	Different health care systems (purposive)	2000-2014	Health expenditures, health care system (National health insurance, traditional sickness insurance, national health services, mixed systems)	Infant mortality, under-5 mortality, life expectancy at birth

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
103	Rahman et al	2018	15 South Asian (SAARC) and South East Asian (ASEAN) countries	Panel data analysis	15 South Asian (SAARC) and South East Asian (ASEAN) countries	Not stated	1995-2014	Total health expenditure, public health expenditure, private health expenditure	Infant mortality
104	Rajmil et al	2018	16 European OECD countries	Repeat cross-sectional analysis	16 European OECD countries	Routinely available data	2005-2015	Level of austerity imposed by governments	Low birth weight, infant mortality
105	Randive et al	2014	India	Ecological study	9 states in India	Large cross-sectional surveys at different time points by the Government of India	2007-2012	Janani Suraksha Yojana cash incentive program	Maternal mortality
106	Rasella et al	2013	Brazil	Mixed ecological design	2853 Brazilian municipalities	Death and livebirth statistics of adequate quality	2004-2009	Bolsa Familia conditional cash transfer programme	All-cause under-5 mortality, cause-specific under-5 mortality
107	Reeves et al	2015	89 low-and middle-income countries	Cross-national longitudinal fixed effects modelling	89 low-and middle-income countries	Not stated	1995-2011	Alternative tax structures	Post-neonatal mortality, infant mortality, under-5 mortality
108	Renzaho et al	2019	Nepal	Trend analysis	5 districts in the Karnali Zone	Two-stage cluster sampling of households	2009-2015	Unconditional child cash transfer grant	Infant and young child feeding, household food security, child infection
109	Renzaho et al	2017	Nepal	Repeat cross-sectional quasi-experimental design	One intervention district (Kalikot) and one control district (Bajhang)	Not stated	2009-2015	Cash transfers for families, child sensitive social protection programmes, capacity building	Childhood nutrition

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
								for effective social protection	
110	Robertson et al	2013	Zimbabwe	Cluster-randomised trial	Control (474 households), unconditional cash transfer (590 households), conditional cash transfer (510 households)	10 sites, representing all 4 socioeconomic strata. Random assignment	2009-2011	Unconditional and conditional cash transfer programmes	Child vaccination uptake
111	Robinson et al	2019	England	Time-trend analysis	323 lower tier local authorities	Excluding Isles of Scilly, City of London, and Rutland due to small population size	1983-2017	New Labour's English health inequalities strategy	Infant mortality
112	Rocha et al	2016	Brazil	Not stated (quantitative – ecological)	Brazilian local municipality data	Complete data availability	2000-2007	Health spending autonomy	Infant mortality
113	Root et al	2020	Honduras	Difference-in-difference analysis	Honduras Demographic and Health Surveys with post-implementation data from ENSAGO survey of around 9000 households in 65 municipalities	Data from three household surveys – population-based (Honduras Demographic and Health Surveys) and randomly sampled (ENSAGO)	2005-2016	Health sector decentralisation policy	Childhood vaccination, weight-for-length z scores

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
114	Rossin	2011	United States	Difference-in-difference-in-difference methodology	5,806,669 cells with an average of 6.2 births per cell	Not stated	1989-1998	Maternity leave policies	Infant mortality, birth weight, premature birth
115	Ruhm	2000	16 European countries	Not stated (quantitative – ecological)	16 European countries	Not stated	1969-1994	Generosity of parental leave	Post-neonatal mortality, child mortality, perinatal mortality, neonatal mortality, low birth weight
116	Ruiz-Rodriguez et al	2009	Chile and Colombia	Case studies (quantitative)	2 country case studies in Latin America	Not stated	1960-1999	Health systems reform (geographical planning of service availability, existence of trained personnel, and comprehensiveness of strategies for service delivery)	Maternal mortality
117	Sanchez et al	2020	Peru	Cohort study	1,952 children born in 2001 or 2002	Paired-siblings sampling	2002-2013	Juntos conditional cash transfer program	Nutrition, cognitive outcomes
118	Serbanescu et al	2019	Uganda and Zambia	Not stated (quantitative – ecological)	4 contiguous and densely populated districts in Uganda (total population 1.75 million) and 4 dispersed and	Designated pilot districts	2012-2017	Saving Mothers, Giving Life program – district system strengthening, integrated services and community engagement interventions	Maternal mortality, perinatal mortality

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
					sparsely populated districts in Zambia				
119	Servan-Mori et al	2016	Mexico	Performance analysis of public expenditure	31 Federal States and 1 Federal District	All Federal States and Districts	2003-2011	Public expenditure on maternal health	Maternal mortality
120	Shaefer et al	2020	United States	Not stated (quantitative – ecological)	Current Population Survey, a monthly survey of around 60,000 households	Nationally representative, multistage, stratified sample	2001-2015	Decline of traditional cash welfare	Household food insecurity
121	Shim et al	2016	19 OECD countries	Not stated (quantitative – ecological)	19 OECD countries	Not stated	1969-2010	Family leave policy	Infant mortality, perinatal mortality, neonatal mortality, post-neonatal mortality, child mortality
122	Singh et al	2013	Ghana	Multivariable interrupted time series analysis	27 facilities	4 largely rural districts/dioceses in Northern Ghana – an even mix of Government and Catholic facilities	2008-2009	Quality improvement intervention on health-care staff (Project Fives Alive!)	Underweight infants, neonatal mortality, infant mortality
123	Susan Marquis et al	2002	United States	Not stated (quantitative – ecological)	One state (Florida)	Administrative databases	1989-1994	Public insurance, public delivery system	Birth weight

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
124	Tanaka et al	2005	18 OECD countries	Not stated (quantitative – ecological)	18 OECD countries	Established databases	1969-2000	Job-protected paid parental leave and other leave policies (non-job-protected paid leave and unpaid leave)	Infant mortality, low birth weight, child immunisation coverage
125	Tarverdi et al	2017	79 countries, of which 50 were low- or middle-income	Cross-country analysis	79 countries	Not stated	Not stated	Governance, health aid	Under-5 mortality
126	Taylor et al	2020	United States	Retrospective cohort study	9,613 women	Deliveries at six hospitals in North Carolina associated with a large vertically integrated health care system	2014-2015	Health insurance status at delivery	Preterm birth, low birth weight, preeclampsia, gestational diabetes
127	Thomson et al	2018	Rwanda	Not stated (quantitative – individual)	21,338 women living in Kirehe, South Kayonza and Other Rural Areas in Rwanda	Nationally and sub-nationally representative two-stage cluster sampling	2005-2010	Health system strengthening intervention	Under-5 mortality, infant mortality
128	Tiwari et al	2016	Sub-Saharan Africa	Cross-country analysis	Ghana, Kenya, Lesotho and Zambia	Not stated	2007-2013	Government-run cash transfer programmes	Nutrition, food insecurity
129	Tsai-Ching et al	2002	Taiwan	Not stated (quantitative – ecological)	23 administrative districts of Taiwan	All administrative districts of Taiwan	1989-1996	National Health Insurance	Childhood vaccination
130	Urquieta-Salomon et al	2020	Mexico	Ecological approach to estimation	2457 municipalities of Mexico	All municipalities in Mexico	2006-2014	Seguro Medico Siglo XXI medical insurance programme	Neonatal mortality, infant mortality

#	Author	Year	Countries	Method	Sample size	Sampling frame	Years of study	Exposure measures	Outcome measures
131	Vos et al	2016	Netherlands	Retrospective data collection, using Policy Triangle framework (qualitative)	Document analysis (64 documents), stakeholder analysis and interviews (n=12)	Documents in the Dutch government database about perinatal mortality, identification of key stakeholders and informants within these	2004-2011	Actors, context and process factors that promoted or impeded agenda setting and implementation of perinatal health reform	Perinatal mortality
132	Wise et al	2015	Up to 100 countries	Not stated (quantitative – ecological)	Up to 100 countries	Not stated	1991-2013	Political instability, strategic governance	Neonatal mortality

'Method' shows the methodological label used in the paper if one is provided, or if not available an indication assessed by the review authors as to whether the method is 'quantitative – individual', 'quantitative – ecological', 'qualitative' or 'mixed methods'. 'Years of study' shows the first and last years of data collection which may be discontinuous. Life expectancy is an eligible child health outcome if it is specified as life expectancy at birth.

Appendix D: Data extraction – Results

#	#, Author	Year	Results
1	Abdulahi et al	2021	The breastfeeding education and support intervention was associated with an improvement in some but not all child growth and morbidity measures – effects were found for mid-upper-arm circumference and prevalence of respiratory infections.
2	Acuin et al	2011	Policies to improve health coverage have been associated with reductions in child and maternal mortality – patterns have differed between countries, and the ability to link coverage interventions to broader health-system investment has been identified as key.
3	Adubra et al	2019	Conditional cash transfer and lipid-based nutrient supplement interventions did not improve linear child growth.
4	Ahammer et al	2020	Extension of prenatal maternity leave was not associated with child health outcome.
5	Alexiou et al	2021 (G20)	Governmental health expenditure was an important determinant of infant mortality and mediated the effect of party political orientation on infant mortality.
6	Alexiou et al	2021 (England)	Funding cuts were associated with reduced life expectancy at birth and a widening of social inequality in life expectancy.
7	Andersen et al	2015	Participation in the Juntos conditional cash transfer programme was associated with child anthropometric outcomes but not language development.
8	Aquino et al	2009	The Family Health Program strategy was associated with reduced infant mortality.
9	Arifeen et al	2009	Mortality rates in children younger than 5 years fell rapidly in both the intervention areas and comparison areas in the first 2 years. In the last 2 years, mortality rate became significantly lower in IMCI areas as compared to comparison areas.
10	Armstrong-Schellenberg et al	2004	During phase-in period, mortality rates in children under 5 years old were almost identical in intervention and comparison districts. Over the next 2 years, the mortality rate was 13% lower in intervention than in comparison districts (95% CI –7 to 30 or 5 to 21, with the difference of 3·8 fewer deaths per 1000 child-years.
11	Ashiabi et al	2016	Public health expenditure was associated with reduced infant and under-5 but not maternal mortality, while private health expenditure did not have a significant association with child and maternal health outcomes.
12	Bang et al	2005	The home-based neonatal care intervention reduced neonatal and perinatal mortality by large margins, and this was sustained at the end of the 7-year intervention period and carried forward over the first year of life. Much of the reduction was attributed to sickness management.
13	Barber et al	2008	Oportunidades beneficiary status was associated with 127.3 g higher birthweight among participating women and a 4.6 percentage point reduction in low birthweight.
14	Barenberg et al	2017	Public expenditure on health care reduces infant mortality rate. The baseline specification shows that an increase in public health expenditure by 1 percent of state-level GDP is associated with a reduction in the infant mortality rate by about 8 infant deaths per 1000 live births.
15	Barham et al	2011	Participation in the Progresa conditional cash transfer programme was associated with a 17% decline in rural infant mortality, but was not a significant predictor of neonatal mortality.
16	Behera et al	2020	Health expenditure was associated with infant mortality and childhood immunization coverage.

#	#, Author	Year	Results
17	Bhardwaj et al	2018	Essential Steps In Managing Obstetric Emergencies, undernutrition in young children and breastfeeding interventions were associated with reduced child and maternal mortality. The case studies highlighted different parts of the framework, including improving healthcare workers' skills, ensuring implementation of standard protocols and strengthening management accountability.
18	Bhatt et al	2018	Medicaid programme expansion was associated with greater decline in infant mortality.
19	Biadgilign et al	2019	Government effectiveness, regulatory quality and control of corruption were negatively associated with stunting and underweight, but not wasting. Public health spending did not predict nutritional outcomes.
20	Bishai et al	2016	100% and 89% of the reductions in maternal and child mortality respectively were attributable to improvements in nationwide coverage of health determinants, about half due to health sector improvements and half due to gains outside the health sector.
21	Bitler et al	2005	WIC participation is associated with birth outcomes, controlling for observables and state-year interactions.
22	Blake-Lamb et al	2020	Participation in the First 1,000 Days system change program was associated with modest reduction in excess gestational weight gain among women who were overweight, but not obese, at the start of pregnancy.
23	Blakeney et al	2020	This study found beneficial WIC interaction effects on birth weight. For race, prenatal care, and maternal age. Besides, the study also found significantly better birth weight outcomes in the presence of WIC compared to those without WIC.
24	Bradley et al	2011	GDP-adjusted health expenditure was associated with better outcomes for life expectancy at birth and maternal mortality, but not infant mortality or low birth weight. GDP-adjusted social services expenditure was associated with better outcomes for life expectancy at birth and infant mortality, and with worse outcomes for low birth weight, with no significant effect on maternal mortality. Adjusting for GDP and level of health expenditures, the ratio of social services expenditures to health expenditures was associated with better outcomes in infant mortality and life expectancy at birth.
25	Brault et al	2018	Three prominent factors were shown to contribute to the reduction in under-5 mortality: national prioritisation of maternal and child health after the civil war, implementation of integrated packages of services that expanded access to key interventions and promoted intersectoral collaborations, and use of outreach campaigns, community health workers and trained traditional midwives to expand access to care and improve referrals.
26	Brault et al	2017	The Kenya Essential Package for Health Community Health Strategy appeared to be the most promising policy and improved provision of immunizations, malaria prevention, and prevention of Mother-to-Child Transmission of HIV.
27	Bugelli et al	2021	Bolsa familia conditional cash transfer programme coverage predicted infant mortality, but a wider range of factors were also relevant, including number of health professionals per 1000 inhabitants.
28	Cahyadi et al	2020	Conditional cash transfers were associated with a 23% reduction in stunting.
29	Chen et al	2005	Hospital-born infants were less likely to receive complete immunization than those born elsewhere before national health insurance was implemented (63.0% vs 67.8%) but were more likely to receive it after implementation (89.0% vs 86.1%).
30	Choudhury et al	2021	Paid family leave was associated with on-time vaccination of infants.
31	Cluver et al	2013	Child-focused state cash transfers were associated with lower HIV risk among adolescent girls (measured using behavioural proxy)

#	#, Author	Year	Results
32	Crea et al	2015	Unconditional and conditional cash transfers both produced direct effects on children's social protection (chronic illness and disability) that are not moderated by other child- or household-level risk factors.
33	Cremieux et al	1999	Health care expenditure was associated with greater life expectancy at birth and lower infant mortality.
34	De Andrade et al	2018	Bolsa familia conditional cash transfer programme was associated with reduced new case detection of leprosy among children under 15 years.
35	Drewry et al	2015	Foreign-born Latinas in expansion enacting states did not experience significantly different birth outcomes (pre-term birth and birth weight) than those in control states.
36	Factor et al	2015	Corruption predicted lower levels of health expenditure and poorer health outcomes. Health expenditure was not independently associated with outcomes (life expectancy at birth, infant mortality, diphtheria, pertussis and tetanus vaccination), controlling for other factors such as level of corruption.
37	Farag et al	2013	Government health expenditure had a significant impact on reducing infant and under-5 mortality. The magnitude of effect depended on the level of good governance achieved by the country.
38	Feng et al	2012	Following factor analysis, health programmes and interventions ($R^2 = 0.65$) was the second most influential of five components on under-5 mortality rate, while health system and policy determinants was the least influential ($R^2 = 0.26$).
39	Fernald et al	2008/ 2009	The intervention was associated with significantly better outcomes in the child's physical, cognitive and language development. The outcomes include increased height for age, decreased BMI for age percentile, decreased prevalence of stunting/ overweight, and increased performance on the scale of motor development, cognitive function scales and language development. Early enrolment reduced behavioural problems for all children in the early versus late treatment group (control), but there were no differences between groups for mean height-for-age Z scores, BMI-for-age Z scores, assessment scores for language, and cognition scores. an additional 18 months of inclusion in the Oportunidades programme in very early childhood reduced the number of socioemotional problems reported in children aged 8–10 years.
40	Fernandes et al	2014	The health-system strengthening intervention was associated with a reduction in infant mortality – the most influential intervention components appeared to be institutional birth attendance and population per health facility.
41	Findley et al	2016/ 2013	Anti-tetanus vaccination rates increased over the two years period and early breastfeeding increased. Infant and maternal mortality also decreased at a more rapid manner in the intervention communities as compared to the control communities.
42	Gabbe et al	2017	Moms2B Ohio community-based pregnancy support group intervention was associated with an approximately five-fold reduction in infant mortality.
43	Garchitorena et al	2020/ 2018	The intervention was associated with decreases in under-five and neonatal mortality, respectively, although these were not statistically significant. Child mortality rates decreased faster in the health system strengthening districts than in the control catchment.
44	Ghosh et al	2018	The maternity support programme was associated with associated with improved growth outcomes.
45	Gitobu et al	2018/ 2017	Free maternal health care policies were not associated with significant changes in rates of maternal and neonatal mortality. The pattern of causes of maternal death did not significantly change following the intervention.

#	#, Author	Year	Results
46	Goldstein et al	2020	Investment in non–health care services was associated with lower infant mortality rates among certain high- risk populations. A $0.30 per-person increase in environmental spending was associated with a decrease of 0.03 deaths per 1000 live births, and a $0.73 per-person increase in social services spending was associated with a decrease of 0.02 deaths per 1000 live births. Infants born to mothers aged <20 years had the single greatest benefit from an increase in expenditures compared with all other groups. Increased expenditures in public health, housing, parks and recreation, and solid waste management were associated with the greatest reduction in overall infant mortality rate.
47	Goncalves	2014	Participatory budgeting on municipal expenditures was associated with a reduction in infant mortality rates.
48	Gram et al/ Saville et al	2019/ 2018	Food supplements in pregnancy with participatory action and learning groups improved birth weight more than participatory action and learning groups alone or with cash transfers, but the effect was not sustained. Qualitative findings showed how facilitators, supervisors and community members developed a shared dynamic around persuading and compelling recipients of unconditional cash transfers to spend them according to criteria developed by the group. Agency was an important concept.
49	Grellety et al	2017	An unconditional cash supplement was shown to increase recovery and decrease default, non-response and relapse in severe acute malnutrition in children.
50	Hajizadeh et al	2015	Extending the duration of paid maternity leave had a positive effect on immunization rates for all three doses of the DTP vaccine.
51	Hall et al	2021	Government revenue per capita (a marker of expenditure capability) was associated with a significant decrease in under-5 and maternal mortality.
52	Houngbe et al	2017	An unconditional cash transfer program was associated with reduced respiratory infections, but not a reduction in wasting.
53	Huang et al	2017	The unconditional cash transfer program was associated with a decrease in illness (malaria and pneumonia) in children 0–7 years of age ($P<0.05$) but found no effects on a stratified sample of under-5 children.
54	Huicho et al	2016	From 2000 to 2013, under-5 mortality fell by 58% from 39·8 deaths per 1000 livebirths to 16·7; Neonatal mortality fell by 51% from 16·2 deaths per 1000 livebirths to 8·0. Stunting prevalence remained stable at around 30% until 2007, decreasing to 17·5% by 2013.
55	Ibukun et al	2021	All forms of health expenditures significantly influenced health outcomes (infant mortality, under-5 mortality and life expectancy at birth). However, this effect was subject to the level of governance, with countries with better governance benefitting more from health expenditures.
56	Irish et al	2021	The paid family leave policy was associated with better maternal mental health.
57	Jahagirdar et al	2017	An increase in paid maternity leave was associated with height-for-age Z scores.
58	Jo et al	2018	The earned income tax credit program increased the probability of obesity among children from families who experienced a larger income shock compared with children from families who experienced a smaller income shock
59	Johnson et al	2013	There was a statistically significant difference in under-five mortality between the 2008 and 2011 surveys; in 2011, the hazard of under-five mortality in the intervention area was one tenth that of baseline. After three years of the intervention, the prevalence of febrile illness among children under five was significantly lower, from 38.2% at baseline to 23.3% in 2011. The percentage of children starting an effective antimalarial within 24 hours of symptom onset was nearly twice that reported at baseline.

#	#, Author	Year	Results
60	Kamiya et al	2011	Access to improved sanitation predicted reduction in under-5 mortality. Health system factors, including expenditure and governance, were not identified as independent predictors of under-5 mortality.
61	Katahoire et al	2015	Community and District Empowerment for Scale-up (CODES) comprehensive district management and community empowerment intervention was shown to be adopted and generally well perceived, but barriers such as resources and fiscal decision space hindered implementation of prioritised activities and progress towards improved child survival.
62	Kayode et al	2016	Implementation of policies and programs to target Millennium Development Goal 4 was associated with declines in neonatal, infant and under-5 mortality, but only under-5 mortality was statistically significant. There has been less focus on neonatal mortality, leading to an increase in the proportion of infant and under-5 mortality attributable to neonatal mortality.
63	Khan et al	2012	Health systems capacity building efforts resulted in significant reductions in both neonatal mortality rate and under-5 mortality rate in two decades (1990 to 2010). For instance, both indicators reduced between 1.1 to 1.8% between 1990 to 2000; and between 0.9 to 1.5% between the same period.
64	Kim et al	2013	Government health expenditure was associated with life expectancy at birth and infant mortality.
65	Klein et al	1998	There was no main effect of maternity leave duration on maternal mental health at 1 year. However, depression was highest among women relatively high in work salience when leaves were long.
66	Kumar et al	2017	Political decentralisation may lead to reduced child mortality, through increased female leadership and a consequent focus on policies that promote institutional delivery.
67	Kusuma et al	2017/ 2016	Conditional cash transfers were associated with a reduction in maternal mortality (assessed by proxy using marker determinants) and an increase in child vaccination.
68	Kuunibe et al	2020	Performance-based pricing policy was associated with a reduction in child vaccination coverage (although an overall increase in health service provision) before the introduction of the free healthcare policy, but after the introduction of the free healthcare policy did not affect service provision, potentially reflecting a saturation effect.
69	Labrecque et al	2018	The Bolsa familia conditional cash transfer programme was associated with a reduction in length-for-age and weight-for-age Z scores.
70	Langnel et al	2020	Health expenditure and governance showed no direct effect on infant mortality. However, there was a significant interaction between health expenditure and governance, and this was negatively associated with infant mortality, implying that the effectiveness of health expenditure may be explained by the administrative capacity of countries.
71	Leal et al	2018	Following the introduction of the Unified Health System Policy, pre term births remained excessive but there was a reduction in child mortality (2/3 reduction for under-5 mortality, but less pronounced for the neonatal component.)
72	Leroy et al	2008	Participation in the Oportunidades conditional cash transfer programme was associated with significant improvement in linear child growth – it was suggested that the substantial nutritional component of the programme played an important role.
73	Lessaris et al	2002	Change of health care financial policy in Medicaid was associated with a decrease in non-white very low birthweight infants.
74	Liljestrand et al	2012	Health system strengthening of maternity care was associated with reduced maternal mortality.
75	Lindsay et al	2002	The findings from the verbal autopsy study suggested that government efforts to further reduce infant mortality in Ceara should focus on health education interventions that address quality of home care, recognition of signs of severity and danger, the

#	#, Author	Year	Results
			importance of seeking timely medical care, and improving the quality of care provided at community health centres and hospitals. The results of the infant mortality study suggested that promotion of exclusive breast-feeding and increased prenatal care utilization, as well as investments in female education, might have substantial positive effects in further reducing infant mortality rates in the state of Ceara whereas the findings from the diarrhoea-specific mortality study suggested that community-based promotion of exclusive breast-feeding in the first 4 months of life and caregiving behaviours that prevent weight faltering, including weaning practices and feeding during and following diarrhoea episodes, may further reduce municipality-level diarrhoea-specific mortality.
76	Lopez-Arana et al	2016	Familias en accion conditional cash transfer program participation was associated with reduced thinness, but had no significant impact on stunting, overweight or obesity.
77	Makela et al	2013	Social sector expenditure was associated with reduced mortality among 1 to 4 year olds (for boys and girls), although health-specific was not associated with reduced infant mortality or mortality among 1 to 4 year olds across genders, an effect only being found for 1 to 4 year old boys.
78	Makuta et al	2015	Public expenditure on health was significantly associated with reduced under-5 mortality and increased life expectancy at birth. This impact is mediated by level of governance.
79	Margolis et al	1995	The Maternal and Child Health Services Block Grant was 45% sensitive to infant mortality outcomes.
80	Markowitz et al	2017	State-level earned income tax credit laws were associated with small improvements in birth weight and gestation weeks.
81	Marathappu et al	2015	Reductions in government health care spending were associated with increases in child mortality outcomes, with the impact being greatest in low-income countries.
82	Mascie-Taylor et al	2010	The cash-for-work programme was associated with improved maternal and child nutritional outcomes, potentially driven by greater household food expenditure and consumption.
83	Mayer et al	1999	More widespread Medicaid coverage was associated with more up-to-date vaccination. Up-to-dateness was more likely for poor children with public rather than private sources of routine paediatric care. Overall, children living in states where most vaccinations were delivered in the public sector were less likely to be up-to-date. Poor children in states with partial vaccine replacement programmes were less likely to be up-to-date than those in free-market purchase states. While state policies can enhance immunization delivery for poor children, heavy reliance on public sector immunization does not ensure timely vaccine receipt, emphasising the importance of public-private collaboration.
84	Meda et al	2018	The fee subsidy programme was not associated with a significant reduction in neonatal mortality.
85	Meghea et al	2013	The nurse-community health worker home visitation programme, on top of standard community care, was generally not associated with better child health outcomes, but was associated with fewer mother-reported asthma/wheezing/croup diagnostics among infants whose mothers have low psychosocial resources.
86	Memon et al	2015	The community-based perinatal and newborn preventive care package was associated with a significant reduction in perinatal and neonatal mortality.

#	#, Author	Year	Results
87	Muruka et al	2019	Following the introduction of the free maternity policy, there was a 10% reduction in maternal deaths, although this was not statistically significant. The reduction in neonatal mortality was only 0.1%, and was not statistically significant.
88	Naderimagham et al	2017	The rural family physician programme was significantly associated with reductions in neonatal and infant mortality, although the reduction in under-5 mortality did not reach statistical significance.
89	Narwal et al	2013	The launch of the National Rural Health Mission was not associated with a significant increase in the rate of infant mortality reduction.
90	Norr et al	2003	A nurse-health advocate home visiting programme can improve maternal and child health outcomes even for inner-city, low-income and minority families, although the results of the intervention differed by ethnicity.
91	Nyamurunga et al	2019	Public health expenditure was significantly associated with infant and under-5 mortality.
92	Okafor et al	2011	The Free Maternal and Child Health programme was associated with reductions in maternal (16%) and perinatal (34%) mortality.
93	Onofrei et al	2021	Health expenditure was shown to be a predictor of infant mortality and life expectancy at birth. This relationship was conditioned by good governance.
94	Patel el al	2001	A statewide neonatal resuscitation program was associated with improvement in Apgar scores.
95	Paxson et al	2010	Bono de desarrollo humano unconditional cash transfer programme was not associated with outcomes (Child haemoglobin level, height-for-age, child fine motor control, child cognition) for the sample as a whole, but modest improvements were found for poor children.
96	Perez-Lu et al	2017	Juntos conditional cash transfer programme participation was associated with reduced underweight in women and anaemia in children in the individual analysis and with reduction in overweight in women and acute malnutrition in children, but an increase in anaemia in children, in the district level analysis.
97	Perez-Perez et al	2019	The incidence of maternal mortality was independent of government expenditure on health.
98	Perin et al	2020	Of ten interventions that met criteria for balance of confounders, only early breastfeeding was related to reduced all-cause neonatal mortality.
99	Perks et al	2006	In areas that underwent district health management strengthening, by 2003, infant and child mortality rates were less than one-third of the national rates, and the maternal mortality ratio fell by 50% despite comprehensive emergency obstetric care not being available in most district hospitals.
100	Powell-Jackson et al	2016	Janani Suraksha Yojana one-off cash transfer programme to women who give birth in a health facility was associated with a 8.5% reduction in the continuous measure of maternal depression and a 36% reduction in moderate maternal depression, but there was no significant association with measures of emotional well-being (happiness and worry).
101	Rad et al	2013	Public health expenditures had a strong statistically significant relationship with infant mortality. Private health expenditures had a positive relationship with infant mortality, but it was not statistically significant.
102	Raeesi et al	2018	Health expenditure was associated with outcomes (infant mortality, under-5 mortality, life expectancy at birth). In countries with mixed health financing systems and traditional sickness fund insurance, the effect of private health expenditure on outcomes was

#	#, Author	Year	Results
			greater than the effect of public health expenditures. The effect of health expenditures was greater in countries with a national health system than countries with other health care systems.
103	Rahman et al	2018	Total health expenditure, public health expenditure and private health expenditure significantly reduced infant mortality rates, and the effect of private health expenditure was greater than the effect of public health expenditure.
104	Rajmil et al	2018	Countries with higher levels of austerity had worse outcomes for low birth weight, especially at the last study period. Infant mortality declined in all three austerity groups.
105	Randive et al	2014	Janani Suraksha Yojana cash incentive program participation was associated with reduced maternal mortality, however the effect was not of the same magnitude in all states – decline has been fastest in richer areas, suggesting the importance of high quality service provision to support the cash incentive.
106	Rasella et al	2013	The Bolsa familia conditional cash transfer programme was associated with reduced all-cause and poverty-specific under-5 mortality.
107	Reeves et al	2015	Consumption taxes, which are considered a regressive form of taxation, were associated with increased rates of post-neonatal, infant and under-5 mortality.
108	Renzaho et al	2019	The unconditional child cash transfer grant was associated with improved linear growth, stunting, underweight, wasting, and food availability.
109	Renzaho et al	2017	A synergetic effect of cash transfers, child sensitive social protection programmes and capacity building for effective social protection was found on childhood nutritional status.
110	Robertson et al	2013	Both conditional and unconditional cash transfers were associated with increased child vaccination uptake.
111	Robinson et al	2019	New Labour's English health inequalities strategy was associated with a decline in geographical inequalities in infant mortality.
112	Rocha et al	2016	The Family Health Program only improved infant mortality outcomes in efficient municipalities, reflecting an impact of health spending autonomy on health inequalities.
113	Root et al	2020	Health sector decentralisation policy was not systematically associated with a reduction in health outcomes (vaccination and linear growth)
114	Rossin	2011	The maternity leave intervention was associated with a small increase in birth weight, with the likelihood of a premature birth, and a substantial decrease in infant mortality for children of college-educated and married mothers, who were most able to take advantage of unpaid leave.
115	Ruhm	2000	Generosity of parental leave was associated with more positive child health outcomes, although a stronger effect was found for post-neonatal and child mortality than for perinatal and neonatal mortality and low birth weight.
116	Ruiz-Rodriguez et al	2009	Reduction in maternal mortality was seen as an effect of operationalising health systems reform strategies.
117	Sanchez et al	2020	Participation in the Juntos conditional cash transfer programme was associated with better nutritional and cognitive outcomes.
118	Serbanescu et al	2019	The Saving Mothers, Giving Life program – district system strengthening, integrated services and community engagement interventions was associated with significant reductions in intrapartum stillborn rate and maternal mortality.

#	#, Author	Year	Results
119	Servan-Mori et al	2016	Public expenditure on maternal health was associated with maternal mortality, but depends on resource allocation and health service coverage.
120	Shaefer et al	2020	The decline of traditional cash welfare was associated with increased household food insecurity.
121	Shim et al	2016	Job-protected paid leave was associated with significantly reduced infant mortality and post-neonatal mortality. Other forms of leave policy had no significant effect on outcome indicators.
122	Singh et al	2013	The quality improvement intervention on health-care staff (Project Fives Alive!) was associated with decreased neonatal and infant mortality, although statistical significance was not reached. There was a slight increase in underweight infants attending clinics.
123	Susan Marquis et al	2002	Public insurance improves access to services, but it was the public delivery system that was shown to improve birth weight outcomes.
124	Tanaka et al	2005	Job-protected paid leave was significantly associated with reduced infant mortality, but other types of leave had no significant effect. The same pattern was found for the low birth weight outcome, but the effect on infant mortality remained, following controlling for low birth weight. There were no significant relationships between leave policies and immunisation coverage outcomes.
125	Tarverdi et al	2017	A negative association was found between governance and under-5 mortality. The role of health aid on outcomes was ambiguous.
126	Taylor et al	2020	Although Medicaid as opposite to commercial insurance was a predictor of poorer care, there were no statistically significant differences in adverse pregnancy outcomes (preterm birth, low birth weight, preeclampsia, gestational diabetes), following control for patient characteristics.
127	Thomson et al	2018	The health system strengthening intervention was associated with more rapid improvements infant and under-5 mortality, although these improved nationwide over the time period.
128	Tiwari et al	2016	A relatively generous and regular and predictable transfer is beneficial for food security and nutritional outcomes.
129	Tsai-Ching et al	2002	National Health Insurance was associated with a 9% increase in vaccination coverage.
130	Urquieta-Salomon et al	2020	The Seguro Medico Siglo XXI medical insurance programme was associated with an avoidance of 11,358 infant deaths, of which 48% were neonatal.
131	Vos et al	2016	Important process factors relating to perinatal mortality were the perinatal mortality problem, the openness of debate and the nature of the topic. The main policy theme was that change was required across the spectrum of perinatal healthcare.
132	Wise et al	2015	Political instability and poor governance were associated with neonatal mortality.

Appendix E: List of 88 candidate CMOs following dimensionalisation

#1. Increased public expenditure on health especially in LMICs with sufficient governance to facilitate administrative capacity led to lower child mortality rates through an improvement in health service provision and access. **TREASURE**

#2. Participation in a cash transfer programme in LMICs led to improved child growth and anthropometric outcomes and reduced infant mortality rates through empowering people to access health services and especially when there is a strong nutritional component. **TREASURE**

#3. Focused maternal and neonatal care programmes in LMICs led to reduced perinatal and maternal mortality through improved sickness management. **ORGANISATION**

#4. Job-protected paid maternity leave in developed countries led to reduced infant and post-neonatal mortality through an influence on parents' activities and involvement in infant care. **TREASURE**

#5. C: Favourable health system development (with universal obstetric care (basic and comprehensive obstetric care extended to low-income and rural popuations) and interventions directed towards infectious diseases such as diarrhoea and pneumonia) with modest levels of economic growth (as illustrated by the case of Thailand). M: Demographically responsive health systems. O: Rapid decline in maternal and child mortalities (infant and under-5) (1990-2008). Country/region: Comparison of ASEAN countries. **ORGANISATION**

#6. C: Health expenditure (Fiscal instrument). M: Improved government effectiveness to expand the healthcare service coverage and access to healthcare facilities. O: Public health expenditure shows positive effects on reduction of infant mortality. Region: Southeast Asian countries (2000-2014). **TREASURE**

#7. C: Health system capacity strengthening (Changes in health system factors). M: Improvements in the public-sector health workforce (increased in health workforce density at the provincial level), institutional birth coverage, and government health financing (increased in government budgetary resources to support salaries and other health-facility running costs). O: Decreases in child mortality (2000-2010). Country: Mozambique. **TREASURE, ORGANISATION**

#8. C: Integrated health system strengthening based on the 6 WHO Health System Strengthening building blocks (service delivery, health workforce, health information systems, medicines and supplies, financing, and leadership and governance). M: Removal of out-of-pocket payments at all levels of the health system, improved facility infrastructure and equipment, trained health workers (community health workers and volunteers) and implemented several clinical programmes to increase the quality of care (eg, IMCI, malnutrition). O: Significant decrease in under-5 and neonatal mortalities (2013-2016). Country: Madagascar. **TREASURE, ORGANISATION, AUTHORITY**

#9. C: Paid maternity leave. M: O: Childhood vaccination uptake (2001-2008). Country/region: 20 LMICs. **TREASURE**

#10. C: Health expenditure. M: Countries with better quality of governance benefit from more public health spending. O: All forms of health expenditure had significant influences on reducing infant and under-5 mortalities, and increasing life expectancy at birth. Region: 15 West African countries (2000-2018). **TREASURE, ORGANISATION, AUTHORITY**

#11. C: Earned income tax credit (financial instrument). M: Income shocks induced by incentivising unemployed low-income mothers to enter the workforce. O: Increased in probability of being obese (3 percentage points). (1979) In other words, a $1,000 increase in income leads to a 0.2 percentage point increase in obesity rates and a 0.2 percentage point decline in the prevalence of underweight children from EITC-eligible families. Country: US. **TREASURE**

#12. C: Adoption of MDG4 by increasing and strengthening cost-effective and neonatal-specific interventions such as Safe Motherhood Program (SMP) and Community-Based Health Planning and Services (CHPS) Program. M: Policies and interventions well-accepted among the health providers and patients, improved utilisation rates. O: Decreased in childhood mortality (neonatal, infant and under-5 mortalities (1988-2008). Observed reduction is only statistical significant for under-5 mortalities. Country: Ghana. **ORGANISATION.**

#13. C: Integration of newborn care in Pakistan's health policies and programmes. M: The National Maternal, Newborn and Child Health Programme catalyzed newborn services at both facility and community levels. Civil society and academics with linked to the government have been highly influential to increase advocacy efforts to incorporate the strengthening of neonatal care into the national health agenda. Informal advocacy efforts for newborn survival by civil society, academics and donors became a more formalized advocacy coalition known as the 'Advocacy and Advisory Network for Newborns' helped to champion this agenda at the national level. O: Reduction in neonatal mortality (2000-2010). Country: Pakistan. **ORGANISATION.**

#14. C: Conditional Cash Transfer Program (Financial instrument). M: O: The study found a negative association between participation in the CCT program and a child's nutritional status (measured as length-for-age and weight-for-age). Nevertheless, it was surmised that this result was likely due to low participation rates for the CCT program. Despite this, there has been evidence on the decreased in child stunting rates in Brazil, especially among the poor families. (2004-2006). Country: Brazil. **TREASURE**

#15. C: Health System Strengthening (Safe Motherhood Program), incorporation of maternal health into the national health agenda. M: Country-level factors such as peace and stability, economic growth and poverty reduction, improved primary education, especially for girls, improved roads, improved access to information on health and health services via TV, radio and cellphones, and increased ability to communicate with and within the health system. Specific health system improvements include a rapid increase in facility-based births and skilled birth attendance, notably investment in midwifery training and numbers of midwives providing antenatal care and deliveries within an expanding primary health care network, a monetary incentive for facility-based midwives for every live birth conducted, and an expanding system of health equity funds, making health care free of cost for poor people. O: Reduction in maternal mortality rates (2000-2010). Country: Cambodia. **ORGANISATION.**

#16. C: Conditional cash transfer. M: It was postulated that CCT programme might have improved the quality of home diet, which led to improve in nutritional statuses (or reduce the risk of under nutrition). O: CCT programme in Colombia reduced the odds of thinness, but had no effect on stunting, a more prevalent outcome. There were no significant changes in wight even though children in treated zones had higher BMI z-scores as compared to those in the control zones. Country: Columbia. **TREASURE**

#17. C: Earned Income Tax Credit (Financial instrument). M: Incentivising behavourial change (employment) and induce income shocks. O: Improved child health outcomes for states with more generous EITC (birth weight and gestation weeks). Country: US. **TREASURE**

#18. C: Fee subsidy policy for deliveries and emergency obstetric and neonatal care (Financial instrument). M: Reduced financial barriers to maternal and neonatal care. There was no interaction between this policy and household wealth which suggests that this policy has benefited both the rich and the poor. O: Increases in institutional deliveries in both urban and rural areas. No evidence of decrease in neonatal mortality rates. Country: Burkina Faso (2007). **TREASURE**

#19. C: Free maternity services (Expansion of subsidies- financial instrument). M: Rapid implementation led to inadequate stakeholder engagement and confusion about the free maternity policy.26 While the free maternity policy was meant to cover antenatal care visits, deliveries, and post- delivery care, it was observed that in practice the policy only covered deliveries.26 Given the poor public engagement by policymakers and implementers, this might explain why the intervention did not have a significant influence on 4th ANC visits. O: 4th ANC visits decreased by 13.3% immediately after the introduction of free maternity services and thereafter by .6% in the two- year post-intervention period (insignificant). However, there was a significant uptake in post-abortion care. Country/region: Western Kenya (2003-2008). **TREASURE**

#20. C: Increased public health expenditure (Financial instrument). M: Immunization, female literacy, improved water sources and the reduction in the prevalence of HIV. O: Significant reduction in infant and under-5 mortalities. Country/region: LMICs (2000-2013). **TREASURE**

#21. C: Comprehensive health programmes at the district level (Strengthening district health management, improving access to health facilities, responding to the most common causes of mortalities among women and children). M: Increased health utilisations among the population, i.e. threefold increase in all outpatient cases (from 1997-2003). O: Reduction in child and infant mortality rates. Country: Lao PDR (1991-2003). **ORGANISATION**

#22. C: Level of austerity implemented by national governments (large budget cuts in education, heath and other public services). M: Weakened social protection (?). O: Adverse trends in perinatal outcomes (low birth weight, infant mortality) and social determinants of health (child poverty rates; severe material deprivation in families with primary education). Region: Europe (2005-2015). **TREASURE**

#23. C: Conditional Cash Transfer Program (Financial instrument). M: an increased income can increase access to food and other health-related goods, and health-related conditions can improve access to health services. O: Reduction in childhood mortality (under-5 mortality). Country: Brazilian municipalities (2004-2009). **TREASURE**

#24. C: Decline of cash assistance. M: Many women were worse-off financially, especially those at the bottom of the bottom of distribution. Stagnation in maternal employment (Decline to the cash assistance rolls were no longer matched by increased in maternal employment). O: Increased in household food insecurity and public school child homelessness. Country: US – state-level analysis(2001-2015). **TREASURE**

#25. C: Expansions of public insurance on access to maternal care (Fiscal/financial instrument). M: Improved access to services. O: Women enrolled in Medicaid have more prenatal care visits than the uninsured. Outcomes for those on Medicaid and the uninsured are significantly better if

they receive care in the public health system than if they receive care in the private system. Country: Florida (US) (1989-1994). **TREASURE**

#26. C: Conditional Cash Transfer Program + lipid-based nutrient supplement. M: Weakness in intervention design and suboptimal implementation (short duration of the intervention, suboptimal coverage of intervention activities, i.e. >34% of women failed to receive cash). O: Antagonistic effects on stunting, increased knowledge on growth monitoring among mothers, increased school attendance. Country: Mali. **ORGANISATION**

#27. C: Medicaid expansion (Financial/fiscal instrument). M: Mechanisms were unclear, but it was surmised that reductions in unintended pregnancies and improved preconception, prenatal and maternal chronic disease, and mental health management for mothers throughout their child's infancy could have contributed to this reduction. O: Infant mortality (Mean infant mortality rate in non–Medicaid expansion states rose (6.4 to 6.5) from 2014 to 2016 but declined in Medicaid expansion states (5.9 to 5.6). The decline among the African American infants in Medicaid expansion states were more than twice as compared to the non-Medicaid expansion states. Country: US (2014-2016). **TREASURE**

#28. C: Health and social service expenditures (Fiscal instrument). M: O: The ratio of social expenditures to health expenditures was significantly associated with better outcomes in infant mortality, life expectancy and increased potential life years lost, after adjusting for the level of health expenditures and GDP. Region: OECD Countries (1995-2005). **TREASURE**

#29. C: Major policy reforms (removal of user fees, the Kenya Essential Package for Health, and the Community Health Strategy). M: Increased availability, awareness and utilisation of heath services which led to improved health behaviours. O: While the removal of user fees has been unevenly implemented, the Community Health Strategy appears to have had the most impact among all the reform strategies, improving referrals from the community and provision of immunizations, malaria prevention, and Prevention of Mother-to-Child Transmission of HIV. Country: Kenya (2000-2013). **NODALITY, ORGANISATION**

#30. C: Conditional Cash Transfer Program (Financial instrument). M: Cash transfers (a form of social protection) may have contributed to enhancing early detection and prompt treatment of cases, which reduces the transmission, occurrence of disabilities and negative social consequences due to this disease. O: A decreasing trend in new case detection rates of Leprosy among individuals under 15 years old. Country: Brazil (2004-2015). **TREASURE**

#31. C: Expansion of the State Children's Health Insurance Program to cover prenatal care for low-income women without health insurance (policy expansion of public insurance eligibility that resulted from unborn child). M: O: Increased prenatal are utilisation in states that enacted the policy, no change in birth outcomes. Country: US (2000-2007). **TREASURE**

#32. C: Countries' health spending. M: Level of good governance (government's effectiveness). O: Government health spending has a significant effect on reducing infant and child mortality. Countries: 133 LMICs (1995-2006). **TREASURE, AUTHORITY. WE SAID WE NEED TO DISCUSS THIS ONE IN NEXT GROUP DISCUSSION TO SEE IF ORGANISATION AS WELL OR INSTEAD.**

#33. C: Government health expenditures (Fiscal instrument). M: O: Better health outcomes (infant mortality rate and life expectancy at birth). Countries: 17 countries (1973-2000). **TREASURE**

#34. C: Quality of governance (legislator effectiveness, control of corruption, law and order, bureaucratic quality, legal system/property rights, regulation). M: Improved health sector performance and increased income levels amongst the populations. O: Better health outcomes (Under 5 and infant mortality rates). Countries: 101 countries (2000-2005). **AUTHORITY, ORGANISATION**

#35. C: Mater and child health services block grant (financial instrument) M:. O: Increased in infant mortality reduction strategies. Country: US (7 states). **TREASURE**

#36. C: Cash-for-work programme. M: Intervention households spent more on food and consumed more protein-rich food. O: Nutritional statuses of the children (height, weight, mid-upper arm circumference, height-for-age, weight-for-age, weight-for-height). Country: Bangladesh. **TREASURE**

#37. C: State policies to enhance immunization delivery. M: O: Immunization statuses of 2-year-old children. Country: US (1988-1991). **AUTHORITY, ORGANISATION**

#38. C: Maternity leave policies are designed to safeguard the health of pregnant workers and their unborn children. Analyzed the impact of a reform of the Austrian ML legislation in the year 1974, which has increased the compulsory prenatal ML duration from 6 to 8 weeks. M: The political justification for this reform was to improve the health of pregnant workers and their unborn children. O: no evidence for significant effects of this extension on children's health at birth or long-term health and labor market outcomes. Subsequent maternal health and fertility are also unaffected. Employment during the 33rd and 34th week of gestation is not harmful for expecting mothers (without major problems in pregnancy) and their unborn children. Region: Austria. **TREASURE, AUTHORITY.**

#39. C: Since 2010, large reductions in funding for local government services have been introduced in England. These reductions in funding have potentially led to reduced provision of health-promoting public services. M: Investigate whether areas that showed a greater decline in funding also had more adverse trends in life expectancy and premature mortality. Cuts in funding for local government might in part explain adverse trends in life expectancy. Given that more deprived areas showed greater reductions in funding, our analysis suggests that inequalities have widened. Since the pandemic, strategies to address these adverse trends in life expectancy and reduce health inequalities could prioritise reinvestment in funding for local government services, particularly within the most deprived areas of England. O: Funding reductions were greater in more deprived areas and these areas had the worst changes in life expectancy. We estimated that cuts in funding were associated with an increase in the gap in life expectancy between the most and least deprived quintiles by 3% for men and 4% for women. Overall reductions in funding during this period were associated with an additional 9600 deaths in people younger than 75 years in England (3800–15 400), an increase of 1·25%. Region: England. **TREASURE**

#40. C: We evaluated the effects of the Family Health Program (FHP), a strategy for reorganization of primary health care at a nationwide level in Brazil, on infant mortality at a municipality level. M: We collected data on FHP coverage and infant mortality rates for 771 of 5561 Brazilian municipalities from 1996 to 2004. We performed a multivariable regression analysis for panel data with a negative binomial response by using fixed-effects models that controlled for demographic, social, and economic variables. We observed a statistically significant negative association between FHP coverage and infant mortality rate. After we

controlled for potential confounders, the reduction in the infant mortality rate was 13.0%, 16.0%, and 22.0%, respectively for the 3 levels of FHP coverage. The effect of the FHP was greater in municipalities with a higher infant mortality rate and lower human development index at the beginning of the study period. O: The FHP had an important effect on reducing the infant mortality rate in Brazilian municipalities from 1996 to 2004. The FHP may also contribute toward reducing health inequalities. Region: Brazilian Municipalities. **ORGANISATION**

#41. C: The Integrated Management of Childhood Illness (IMCI) strategy is designed to address major causes of child mortality at the levels of community, health facility, and health system. We assessed the effectiveness of facility based IMCI in rural Tanzania. M: facility-based IMCI is good value for money, and support widespread implementation in the context of health-sector reform, basket funding, good facility access, and high utilisation of health facilities. We compared two districts with facility-based IMCI and two neighbouring comparison districts without IMCI, from 1997 to 2002, in a non-randomised study. We assessed quality of case-management for children's illness, drug and vaccine availability, and supervision involving case-management, through a health-facility survey in 2000. O: During the IMCI phase-in period, mortality rates in children under 5 years old were almost identical in IMCI and comparison districts. Over the next 2 years, the mortality rate was 13% lower in IMCI than in comparison districts (95% CI –7 to 30 or 5 to 21, depending on how adjustment is made for district-level clustering), with a rate difference of 3 8 fewer deaths per 1000 child-years. Contextual factors, such as use of mosquito nets, all favoured the comparison districts. Costs of children's health care with IMCI were similar to or lower than those for case management without IMCI Region: Tanzania. **ORGANISATION**

#42. C: The Special Supplemental Nutrition Program for Woman, Infants, and Children (WIC) was established in 1972 in order to enhance the nutritional status of these vulnerable groups. WIC provides participants with healthy foods (generally in the form of vouchers) and nutritional counseling. This paper evaluates the selection problem using rich data from the national Pregnancy Risk Assessment Monitoring System. We show that relative to Medicaid mothers, all of whom are eligible for WIC, WIC participants are negatively selected on a wide array of observable dimensions. M: Support for WIC, the Special Supplemental Nutrition Program for Women, Infants, and Children works. O: our estimates show that WIC does work. This does not mean that it could not be improved, perhaps by improving the nutrition education component as Besharov and Germanis suggest, or by trying to target larger benefits more specifically to the neediest women. WIC participation is associated with improved birth outcomes, even after controlling for observables and for a full set of state-year interactions intended to capture unobservables that vary at the state-year level. The positive impacts of WIC are larger among subsets of even more disadvantaged women, such as those who received public assistance last year, single high school dropouts, and teen mothers. Region: US. **ORGANISATION**

#43. C: a four-country mixed methods study was undertaken to examine barriers and facilitators of child survival prior to 2015. Liberia was selected for an in-depth case study due to its success in reducing under-five mortality by 73% and thus successfully meeting MDG 4. Liberia's success was particularly notable given the civil war that ended in 2003. M: We examined some factors contributing to their reductions in under-five mortality. A case study mixed methods approach drawing on data from quantitative indicators, national documents and qualitative interviews was used to describe factors that enabled Liberia to rebuild their maternal, neonatal and child health (MNCH) programmes and reduce under-five mortality following the country's civil war + interviews. O: Three prominent factors contributed to the reduction in under-five mortality:

national prioritisation of MNCH after the civil war; implementation of integrated packages of services that expanded access to key interventions and promoted intersectoral collaborations; and use of outreach campaigns, community health workers and trained traditional midwives to expand access to care and improve referrals. Region: Liberia. **ORGANISATION**

#44. C: We compared hospital-born infants and well-baby care use associated with complete immunizations in Taiwan before and after institution of National Health Insurance (NHI). M: We used logistic regression to analyze data from 1989 and 1996 National Maternal and Infant Health Surveys of 1398 and 3185 1-year-old infants, respectively. we hypothesize a model to demonstrate a difference in vaccination facility preference between pre- and post-NHI periods and to indicate a correlation between increasing the use of well-baby care and the completion of the full course of child vaccinations. we reveal in this article that the policy of including hospitals in the immunization program and the free well-baby care program has had a major impact on immunization coverage. O: The NHI policy of including hospitals as immunization providers facilitates access to immunization services for children born in those facilities. Through NHI provision of free well-baby care, health planners have stimulated the demand for immunization. Region: Taiwan. **TREASURE**

#45. C: Time constraints parents face can affect whether infant children are vaccinated on time. M: Using the National Immunization Survey, we employ a synthetic control difference-in-difference estimation technique to establish a causal relationship arising from California's implementation of Paid Parental Leave Program as a natural experiment. O: We find California Paid Family Leave reduced late vaccinations by up to 5 percentage points or approximately 10% for children born to parents in California after the policy was implemented. Further, the policy had a stronger impact on families below the poverty line. Thus access to paid family leave can improve on-time immunization of infants. Region: California, US. **TREASURE**

#46. C: Effective and scalable HIV prevention for adolescents in sub-Saharan Africa is needed. Cash transfers can reduce HIV incidence through reducing risk behaviours. However, questions remain about their effectiveness within national poverty-alleviation programmes, and their effects on different behaviours in boys and girls. M: National, child-focused cash transfers to alleviate poverty for households in sub-Saharan Africa can substantially reduce unsafe partner selection by adolescent girls. Child-focused cash transfers are of potential importance for effective combination strategies for prevention of HIV. O: For adolescent girls (n=1926), receipt of a cash transfer was associated with reduced incidence of transactional sex (odds ratio [OR] 0-49, 95% Cl 0-26-0-93; p=0-028), and age-disparate sex (OR 0-29, 95% Cl 0 13-0-67; p=0-004), with similar associations for prevalence (for transactional sex, OR 0-47, 95% Cl O • 26-0 • 86; p=0-015; for age-disparate sex, OR O • 37, 95% Cl O -18-0 • 77; p=O • 003). No significant effects were shown for other risk behaviours. For boys (n=1475), no consistent effects were shown for any of the behaviours. Region: South Africa. **TREASURE.**

#47. C: develop a theoretical framework for understanding the antecedents of corruption and the effects of corruption on various health indicators. M: Using structural equation models, we analyzed a multinational dataset of 133 countries that included three main groups of variables—antecedents of corruption, corruption measures, and health indicators. There is no direct relationship between health expenditures and health outcomes after controlling for the other factors in the model. O: Corruption rises as GDP per capita falls and as the regime becomes more autocratic. Higher corruption is associated with lower levels of health expenditure as a percentage of GDP per capita, and with poorer health outcomes. Countries with higher GDP per

capita and better education for women have better health outcomes regardless of health expenditures and regime type. Region:133 countries. **TREASURE, AUTHORITY**

#48. C: This paper describes early results of an integrated maternal, newborn, and child health (MNCH) program in Northern Nigeria where child mortality rates are two to three times higher than in the southern states. The intervention model integrated critical health systems changes needed to reinvigorate MNCH health services, together with community-based activities aimed at mobilizing and enabling women to make changes in their MNCH practices. Control Local Government Areas received less-intense statewide policy changes. M: context of ongoing improvements to the primary health care system, the participatory and community-based interventions focusing on improved newborn and infant care were effective at changing infant care practices and outcomes in the intervention communities. The impact of the intervention was assessed using a quasi-experimental design, comparing MNCH behaviors and outcomes in the intervention and control areas, before and after implementation of the systems and community activities. O: Between baseline and follow-up, anti-tetanus vaccination rates increased from 69.0% to 85.0%, and early breastfeeding also increased, from 42.9% to 57.5%. More newborns were checked by trained health workers (39.2% to 75.5%), and women were performing more of the critical newborn care activities at follow-up. Fewer women relied on the traditional birth attendant for health advice (48.4% to 11.0%, with corresponding increases in advice from trained health workers. At follow-up, most of these improvements were greater in the intervention than control communities. In the intervention communities, there was less use of anti-malarials for all symptoms, coupled with more use of other medications and traditional, herbal remedies. Infant and child mortality declined in both intervention and control communities, with the greatest declines in intervention communities. In the intervention communities, infant mortality rate declined from 90 at baseline to 59 at follow-up, while child mortality declined from 160 to 84. Region: Nigeria. **ORGANISATION**

#49. C: Low-status women typically have poorer maternal and child health outcomes. In northern Nigeria, we piloted alternative models for engaging vulnerable women and facilitating an improvement in their maternal health outcomes. M: We assess the net impact of an integrated health system improvement model focusing on ensuring emergency obstetrical services for clusters of affiliated primary health care clinics, on the relative additional impact of alternative community engagement (CE) strategies. Efforts to increase participation in CE activities can further enhance outcomes for the vulnerable women. O: Analysis of baseline to endline survey data (2009-2013) showed that proportions of women making antenatal care (ANC) visits and who delivered with a skilled birth attendant doubled. Maternal and infant mortality also declined. Greater improvements with more ANC visits and skilled birth attendance were associated with being non-poor, owning a cell-phone, being less socially excluded, being satisfied with improvements in the clinic, and participating more in CE activities. Region: Nigeria. **ORGANISATION**

#50. C: To describe temporal changes in maternal and child health outcomes in an impoverished urban community after the implementation of an innovative community-based pregnancy support program, named Moms2B. Beginning in 2011, pregnant women in an urban impoverished community were recruited for participation in a community-based pregnancy support program focused on improving nutrition coupled with increasing social and medical support. The comprehensive program targeting pregnancy through the infants' first year of life was developed and staffed by a multidisciplinary team from an academic health system. As a preliminary effort to assess the effectiveness of Moms2B, we examined maternal and infant

health characteristics in the community before and after implementation of the program. M: Implementation of an innovative community-based pregnancy support program was associated with important improvements in maternal and infant health in an impoverished neighborhood. O: From 2011 to 2014, 195 pregnant women attended one or more Moms2B sessions at the Weinland Park (WP) location. Most (75%) were African American (AA) with incomes below $800 per month and significant medical and social stressors. Outcomes from the two WP census tracts before and after implementation of the Moms2B program were studied. From 2007 to 2010, there were 442 births in WP and 6 infant deaths for an infant mortality rate of 14.2/1000. In 2011–2014, the first four years of the Moms2B program there were 339 births and one infant death giving an IMR of 2.9/1000, nearly a five-fold reduction in the rate of an infant death. Among pregnant women in WP who were covered by Medicaid, the breastfeeding initiation rate improved from 37.9 to 75.5% ($p < .01$) after the introduction of Moms2B. There were no infant deaths among Moms2B participants at the WP location in the first four years of the program. Region: Ohio, US. **NODALITY, ORGANISATION**

#51. C: Reduction of pregnancy related mortalities remains one of the greatest health challenges globally. For a long time, low utilization of maternal health care services has been attributed to the unaffordability of services. The government of Kenya waived delivery charges in public health facilities through a free maternal health care policy in June 2013 with an aim of encouraging facility based deliveries and subsequently reducing maternal deaths. M: implementation of the free maternal health care policy on the causes of maternal mortality To describe the causes of maternal mortality 2 years before the implementation of the free maternal health care policy in Kenya (June 2011- May 2013) and 2 years after the policy intervention (June 2013-May 2015). Quasi-experimental design. O: The implementation of the free maternal health care policy has not influenced the causes of maternal mortality in Kenyan public health facilities. The largest proportion of deaths was as a result of direct causes, 79.1% before the policy 74.9% after the policy intervention. Haemorrhage, hypertensive disorders, complications of abortion and sepsis/infections were the most common direct causes of maternal mortality pre and post policy intervention. There were no significant changes in the causes of maternal following the free maternal health care policy implementation ($P>0.05$). The free maternal health care policy has not improved the chances of survival for mothers delivering in the 77 public health facilities (odds ratio=0.9722). Region: Kenya. **TREASURE, AUTHORITY (NEED TO DISCUSS AT NEXT ROUND)**

#52. C: Kenya abolished delivery fees in all public health facilities through a presidential directive effective on June 1, 2013 with an aim of promoting health facility delivery service utilization and reducing pregnancy-related mortality in the country. This paper aims to provide a brief overview of this policy's effect on health facility delivery service utilization and maternal mortality ratio and neonatal mortality rate in Kenyan public health facilities. M: cost is a deterrent to health facility delivery service utilization in Kenya and thus free delivery services are an important strategy to promote utilization of health facility delivery services. A time series analysis was conducted on health facility delivery services utilization, maternal and neonatal mortality 2 years before and after the policy intervention in 77 health facilities across 14 counties in Kenya. O: A statistically significant increase in the number of facility-based deliveries was identified with no significant changes in the ratio of maternal mortality and the rate of neonatal mortality. Region: Kenya. **TREASURE, AUTHORITY**

#53. C: whether the use of participatory budgeting in Brazilian municipalities during 1990–2004 affected the pattern of municipal expenditures and had any impact on living conditions. M: This

suggests that promoting a more direct interaction between service users and elected officials in budgetary policy can affect both how local resources are spent and living standard outcomes. O: It shows that municipalities using participatory budgeting favored an allocation of public expenditures that closely matched popular preferences and channeled a larger fraction of their budgets to investments in sanitation and health services. This change is accompanied by a reduction in infant mortality rates. Region: Brazil. **TREASURE**

#54. C: Cash transfer programmes as an integral part of nutrition, health and social protection policies. M: process evaluation of a combined participatory women's group and cash transfer programme to improve low birth weight in rural Nepal. We explored context, implementation and mechanism of intervention affected beneficiary womens agency over cash transfer. O: how women groups facilitators, their supervisors and community members developed a shared dynamic around persuading and compelling recipients of unconditional cash transfer into spending according to criteria defined by the group. There is no point giving cash to women who don't spend it the way they are told to spend it. Region: Nepal. **TREASURE, ORGANISATION.**

#55. C: Undernutrition during pregnancy leads to low birthweight, poor growth and inter-generational undernutrition. We did a non-blinded cluster-randomised controlled trial in the plains districts of Dhanusha and Mahottari, Nepal to assess the impact on birthweight and weight-for-age z-scores among children aged 0-16 months of community-based participatory learning and action (PLA) women's groups, with and without food or cash transfers to pregnant women. M: community based participatory learning + food supplement works better. O: Food supplements in pregnancy with PLA women's groups increased birthweight more than PLA plus cash or PLA alone but differences were not sustained. Nutrition interventions throughout the thousand-day period are recommended. Region: Nepal. **ORGANISATION, TREASURE, NODALITY**

#56. C: Cash transfer programs (CTPs) aim to strengthen financial security for vulnerable households. This potentially enables improvements in diet, hygiene, health service access and investment in food production or income generation. The effect of CTPs on the outcome of children already severely malnourished is not well delineated. The objective of this study was to test whether CTPs will improve the outcome of children treated for severe acute malnutrition (SAM) in the Democratic Republic of the Congo over 6 months. M: CTPs can increase recovery from SAM and decrease default, non-response and relapse rates during and following treatment. Household developmental support is critical in food insecure areas to maximise the efficiency of SAM treatment programs. We conducted a cluster-randomised controlled trial in children with uncomplicated SAM who received treatment according to the national protocol and counselling with or without a cash supplement of US$40 monthly for 6 months. Analyses were by intention to treat. O: The hazard ratio of reaching full recovery from SAM was 35% higher in the intervention group than the control group (adjusted hazard ratio, 1.35, 95% confidence interval (CI) = 1.10 to 1.69, P = 0.007). The adjusted hazard ratios in the intervention group for relapse to moderate acute malnutrition (MAM) and SAM were 0.21 (95% CI = 0.11 to 0.41, P = 0.001) and 0.30 (95% CI = 0.16 to 0.58, P = 0.001) respectively. Non-response and defaulting were lower when the households received cash. All the nutritional outcomes in the intervention group were significantly better than those in the control group. After 6 months, 80% of cash-intervened children had re-gained their mid-upper arm circumference measurements and weight-for-height/length Z-scores and showed evidence of catch-up. Less than 40% of the control group had a fully successful outcome, with many deteriorating after discharge. There was a significant increase in diet diversity and food consumption scores for both groups from baseline; the

increase was significantly greater in the intervention group than the control group. Region: Congo. **TREASURE**

#57. C: Despite numerous international and national efforts, only 12 countries in the World Health Organization's African Region met the Millennium Development Goal #4 (MDG#4) to reduce underfive mortality by two-thirds by 2015. M: Three main aspects of successful health governance and leadership effecting improved child survival identified in this study were (1) establishing child survival as a top national priority backed by a comprehensive policy and strategy framework and sufficient human, financial and material resources; (2) bringing together donors, strategic partners, health and non-health stakeholders and beneficiaries to collaborate in strategic planning, decision-making, resource-allocation and coordination of services; and (3) maintaining accountability through a 'monitor-review-act' approach to improve MNCH. O: Stable and consistent health governance and leadership was a key factor contributing to the variable progress towards the Millennium Development Goal Four (MDG#4) target of reducing under-five mortality by two-thirds by 2015. Region: Four African countries (Liberia, Zambia, Kenya, and Zimbabwe). **NODALITY, AUTHORITY, ORGANISATION**

#58. C: Despite recent improvements, low height for-age, a key indicator of inadequate child nutrition, is an ongoing public health issue in low-income and middle income countries. Paid maternity leave has the potential to improve child nutrition, but few studies have estimated its impact. M: A quasi-experimental difference-in-difference design involving a linear regression of height-for-age z score on the number of weeks of legislated paid maternity leave was used. O: little evidence that recent changes in legislated paid maternity leave have been sufficient to affect child height-for-age z scores. The relatively short durations of leave, the potential for low coverage and the strong increasing trend in children's growth may explain our **findings**. Region: data from 5 countries compared to 32 others (37 low- and middle-income countries). **TREASURE, AUTHORITY**

#59. C: investigate the impacts of political decentralization and women reservation in local governance on institutional births and child mortality in the state of Bihar, India. M: significant positive association between political decentralization and institutional births. Increased participation of women at local governance led to and increased survival rate of children belonging to richer households. O: We argue that our results are consistent with female leaders having policy preference for women and child well-being. Region: rural bihar India. **AUTHORITY, ORGANISATION**

#60. C: Proportion of women giving birth in health institutions has increased sharply in India since the introduction of cash incentive program, Janani Suraksha Yojana (JSY) in 2005. JSY was intended to benefit disadvantaged population who had poor access to institutional care for childbirth and who bore the brunt of maternal deaths. Increase in institutional deliveries following the implementation of JSY needs to be analysed from an equity perspective. M: in order for the cash incentive to succeed in reducing the inequalities in maternal health outcomes, it needs to be supported by the provision of quality health care services including EmOC. Improved targeting of disadvantaged populations for the cash incentive program could be considered. O: Results shows that although inequality in access to institutional delivery care persists, it has reduced since the introduction of JSY. Nearly 70% of the present inequality was explained by differences in male literacy, EmOC availability in public facilities and poverty. EmOC in public facilities was grossly unavailable. Compared to richest division in nine states, poorest division has 135 more maternal deaths per 100,000 live births in 2010. While MMR has decreased in all areas since JSY, it has declined four times faster in richest areas compared to the

poorest, resulting in increased inequalities. Region:nine states in India. **TREASURE, ORGANISATION**

#61. C: This article describes an outcome evaluation of a community health workers program that integrated quantitative and qualitative methods to assess the impact of child survival interventions in reducing infant mortality and inadequate weight gain in children among municipalities in the state of Ceara, Northeast Brazil. M: to understand the determinants and circumstances of infant mortality and inadequate weight gain among municipalities. O: The results generated by the quantitative methodology (i.e., ecological studies) have allowed government health officials and decision makers to establish the relative importance of selected factors and set priorities according to appropriateness and impact levels, taking into consideration not only the strength of the association between selected risk factors and infant mortality rates and prevalence of inadequate weight gain but also the prevalence of the condition being considered in their municipalities. On the other hand, the results from the qualitative research have provided baseline information for program managers and health officials to develop interventions aimed at changing risky behaviors or conferring protection. Region: Ceara, Northeast Brazil. **NODALITY, ORGANISATION**

#62. C: Government health care spending (GHS) is of increasing importance to child health. Our study determined the relationship between reductions in GHS and child mortality rates in high- and low-income countries. M: Reductions in GHS are associated with significant increases in child mortality, with the largest increases occurring in low-income countries. O: The authors used comparative country-level data for 176 countries covering the years 1981 to 2010, obtained from the World Bank and the Institute for Health Metrics and Evaluation. Multivariate regression analysis was used to determine the association between changes in GHS and child mortality, controlling for differences in infrastructure and demographics. Region: 176 countries. **TREASURE**

#63. C: Home visiting is supported as a way to improve child health and development. Home visiting has been usually provided by nurses or community health workers (CHWs). Few studies compared the child health advantages of a nurse–CHW team approach over nurse prenatal and postnatal home visiting. M: no strong evidence that infant health was improved by the addition of CHWs to a programme of CC that included nurse home visitation. Targeting such interventions at common health problems of infancy and childhood or at diagnosed chronic conditions may prove more successful. O: There were no differences in overall child health between the nurse–CHW intervention and the CC arm over the first year of life. There were fewer mother-reported asthma/wheezing/ croup diagnostics in the team intervention group among infants whose mothers have low psychosocial resources (13% vs. 27%, P = 0.01; adjusted OR = 0.4, P = 0.01). There were no differences in diagnosed asthma/wheezing/croup documented by medical claims. There were no differences in immunizations, hospitalizations and ear infections. Region: Michigan, US. **ORGANISATION**

#64. C: National Rural Health Mission (NRHM) - India was launched in 2005 to tackle urban-rural health inequalities, especially in maternal and child health. We examined national and state level trends in Infant Mortality Rates (IMR) from 2000 through 2009 to: 1) assess whether the NRHM had increased the average annual reduction rate (AARR) of IMR 2) evaluate state-wise progress towards Millennium Development Goals (MDG4) and estimate required AARRs for 'off track' states. M: no evidence that the rate of reduction in infant mortality has increased in rural India post NRHM introduction. O: Despite a narrowing urban-rural gap and high AARRs in some states, there was no evidence that the rate of reduction in infant mortality has increased in rural India

post NRHM introduction. India appears unlikely to achieve child survival-related NRHM and millennium development goals. Government should revisit the child survival related NRHM strategies and ensure equitable access to health services. More robust monitoring and evaluation mechanisms must be inbuilt for following years. Region: India. **ORGANISATION.**

#65. C: Maternal and infant outcomes at one year for a nurse-health advocate home visiting programme for African American and Mexican Americans. M: home visit by a nurse-health advocate team can improve maternal and infant outcomes even for inner-city low income minority families. O: For African Americans, the program was associated with better maternal documentation of infant immunizations, more developmentally appropriate parenting expectations, and higher 12-month infant mental development scores. For Mexican Americans, the program had positive effects on maternal daily living skills and on the play materials subscale of the Home Observation for the Measurement of the Environment assessment. Effective programmes must be culturally sensitive, intensive and adequately staffed and financed. Region:US. **NODALITY, ORGANISATION**

#66. C: Nigeria is the largest country in sub-Saharan Africa, with one of the highest neonatal mortality rates and the second highest number of neonatal deaths in the world. There is broad international consensus on which interventions can most effectively reduce neonatal mortality, however, there is little direct evidence on what interventions are effective in the Nigerian setting. M: Access to immediate postnatal care and women's autonomous decision-making have been among the most effective interventions for reducing neonatal mortality in Nigeria. As neonatal mortality increases relative to overall child mortality, accessible interventions are necessary to make further progress for neonatal survival in Nigeria and other low resource settings. O: Among 19,685 livebirths and 538 neonatal deaths, we achieved adequate balance for population characteristics and maternal and neonatal health care received for 10 of 18 resources and interventions, although inference for most antenatal interventions was not possible. Of ten resources and interventions that met our criteria for balance of potential confounders, only early breastfeeding was related to decreased all-cause neonatal mortality (relative risk 0.42, 95% CI 0.32–0.52, $p < 0.001$). Maternal decision making and postnatal health care reduced mortality due to infectious causes, with relative risks of 0.29 (95% CI 0.09–0.88; 0.030) and 0.46 (0.22–0.95; 0.037), respectively. Early breastfeeding and delayed bathing were related to decreased mortality due to intrapartum events, although these are not likely to be causal associations. Region: Nigeria. **AUTHORITY**

#67. C: This study investigates whether rights to parental leave improve pediatric health. Aggregate data are used for 16 European countries over the 1969 through 1994 period. M: More generous paid leave is found to reduce deaths of infants and young children. The magnitudes of the estimated effects are substantial, especially where a causal effect of leave is most plausible. In particular, there is a much stronger negative relationship between leave durations and post-neonatal or child fatalities than for perinatal mortality, neonatal deaths, or low birth weight. O: The evidence further suggests that parental leave may be a cost-effective method of bettering child health. Region: 16 European countries. **TREASURE**

#68. C: Impact of the Juntos Conditional Cash Transfer Program on Nutritional and Cognitive Outcomes. M: we find that Juntos beneficiaries improved their nutritional status and cognitive achievement. We also find that the nutritional impact was larger for those exposed during the first 4 years of life. In addition, cognitive gains were observed exclusively among those treated since the early childhood period. O: we are unable to identify the specific mechanism by which children initially exposed during the first 4 years of life accumulated more human capital, our

results are informative of the substantial benefits that Juntos is bringing to Peruvian children benefited by this program since birth and reinforce the notion that the earlier children are targeted by social protection schemes such as CCT programs, the larger the long-term benefits are likely to be. Region: Peru. **TREASURE**

#69. C: To understand the relationship between parental leave and child health better, this study examines the aggregate effects of parental leave policies on child health outcomes using data from 18 OECD countries1 from 1969–2000. M: effects of both job-protected paid leave and other leave – including non-job-protected paid leave and unpaid leave – on child health outcomes, more specifically, infant mortality rates, low birth weight and child immunisation coverage. O: This study explores the effects of other social policies related to families and young children, such as public expenditures on family cash benefits, family allowances, and family services per child, on child health outcomes. Comparing the effects of job-protected paid leave and other leave (non job-protected paid leave, unpaid leave, or leave provided at a flat rate without clear job protection), paid leave significantly decreases infant mortality, while other leave has no significant effect. This suggests that if leave is provided without adequate payment and job protection, parental leave-taking behaviour may not be very responsive and may result in mothers' early return to work. As a result, other leave does not have a significant effect on improving infant health. The results indicate a significant relationship between paid leave and low birth weight, an important factor for infant health. Low birth weight has strong effects on most forms of infant mortality, yet controlling for low birth weight does not eradicate the effects of parental leave on infant mortality. This suggests that a reduction in low birth weight does not fully explain the effects of parental leave on infant mortality, therefore, other mechanisms, which may include prenatal care, breast-feeding, leave coverage, and length of leave taken by mothers and fathers, need to be examined. The final model analysed the effects of leave on post-neonatal mortality rates, controlling for the social policy variables of public expenditures on family cash benefits, expenditures on maternity and parental leave, and expenditures on family services. I found that public expenditures on maternity and parental leave and expenditures on family services have significant effects on decreasing postneonatal mortality rates, yet, controlling for these social policy variables, the effects of parental leave on post-neonatal mortality are not eliminated. Therefore, the results indicate parental leave has positive effects on reducing post-neonatal mortality rates, even after controlling for the generosity of social expenditure components. Region: 18 OECD countries. **TREASURE, AUTHORITY**

#70. C: Lack of quality preventive care has been associated with poorer outcomes for pregnant women with low incomes. Health policy changes implemented with the Affordable Care Act (ACA) were designed to improve access to care. However, insurance coverage remains lower among women in Medicaid nonexpansion states. We compared health care use and adverse birth outcomes by insurance status among women giving birth in a large health system in a Medicaid nonexpansion state. M: Findings suggest that large gaps exist in use of preventive care between Medicaid/uninsured and commercially insured women. Policymakers should consider ways to improve potential and realized access to care. O: Having Medicaid at delivery was associated with lower rates of well-woman visits (rate ratio [RR] 0.25, 95% CI 0.23–0.28), higher rates of ED visits (RR 2.93, 95% CI 2.64–3.25), and higher odds of late prenatal care (odds ratio [OR] 1.18, 95% CI 1.03–1.34) compared to adverse pregnancy outcomes were not statistically significant after adjusting for patient characteristics. Region: US. **TREASURE, AUTHORITY.**

#71. CHWs are key--suggesting value of ORGANISATION as a policy instrument. **ORGANISATION**

#72. This intervention was primarily structural, drawing on NODALITY as a tool to induce change... note as well that impacts on system solidarity are key to understanding effectiveness. **NODALITY, ORGANISATION.**

#73. As with all CCTs! Note importance of system coordination across policy instruments. **TREASURE, ORGANISATION.**

#74. NATO all over the place--note in particular first diagram (refers to Bhardwaj et al, 2018). **NODALITY, AUTHORITY, TREASURE, ORGANISATION.**

#75. Context is key: where poor progress on SDOH, policy instruments may not have the desired impact in improving MCH due to low system capacitance for changes. **ORGANISATION**

#76. Increased spending on environmental, educational, social service (TREASURE) impacts infant mortality, greatest impacts in youngest mothers; mechanisms rather vague in this analysis. **TREASURE.**

#77. Especially in LIC contexts, changes to TREASURE are linked with rapid impacts on U5M/MMR via improvements in government spending on health and infrastructure and via improved household spending. Conversely, government debt refinancing/tax incentives may cause short-term worsening in health due to reduced spending ability at government/household levels. **TREASURE**

#78. Hard to say really! In HIC, AUTHORITY-based changes to parental leave are linked with diffuse parental and child outcomes; improved income and family bonding are mechanisms, but depending on family resilience/economic status (context). **AUTHORITY, TREASURE**

#79. Health system strengthening as a form of NATO (cross-cutting) is effective generally, given comprehensive/wraparound approach. **NODALITY, AUTHORITY, TREASURE, ORGANISATION**

#80. The quality of government as measured by democracy, but not power distribution/representation, impacted health outcomes through more comprehensive implementation of health policies targeting a range of health behaviours--possibly through NODALITY and ORGANISATION instruments. **AUTHORITY, NODALITY, ORGANISATION**

#81. ORGANISATION as a policy instrument is key to generate changes to MCH where trust in health services and social solidarity exist via credibility and diffusion. **ORGANISATION**

#82. Implementation of TREASURE and ORGANISATION-based CCTs led to improved MCH in an MIC due to coordinated implementation and coherent targeting. **TREASURE, ORGANISATION**

#83. Behaviour change communication requires NODALITY and ORGANISATION. **NODALITY, ORGANISATION**

#84. Note that TRTs/capacity-building also require coherent implementation (NODALITY). **NODALITY**

#85. Decentralisation (ORGANISATION policy instrument) can be inequality generating in contexts of starting inequality. **ORGANISATION**

#86. Via increased utilisation of health services and increase in health equality, AUTHORITY/TREASURE as in universal health insurance can improve MCH. **AUTHORITY, TREASURE**

#87. Main theme of policy was that change was required in the entire spectrum of perinatal healthcare. This ranged from care in the preconception phase through to the puerperium. Furthermore emphasis was placed on the importance of preventive measures and socio-environmental determinants of health. **NODALITY, AUTHORITY, TREASURE, ORGANISATION**

#88. Erratic and insufficient funding and lack of monitoring and evaluation caused derailment were reported as some of the biggest challenges during the implementation of policies and programs to strengthen maternal care and led to sub-optimal implementation. **TREASURE.**

Appendix F. References for all included studies

1. Abdulahi et al. Breastfeeding education and support to improve early initiation and exclusive breastfeeding practices and infant growth: A cluster randomized controlled trial from a rural Ethiopian setting. Nutrients. 2021;13(4): 1204.
2. Acuin et al. Maternal, neonatal, and child health in southeast Asia: towards greater regional collaboration. Lancet 2011; 377: 516-25.
3. Adubra et al. Conditional cash transfer and/or lipid-based nutrient supplement targeting the first 1000 d of life increased attendance at preventive care services but did not improve linear growth in young children in rural Mali: Results of a cluster-randomized controlled trial. American Journal of Clinical Nutrition. 2019;110(6):1476-90.
4. Ahammer et al. The effect of prenatal maternity leave on short and long-term child outcomes. Journal of Health Economics. 2020;70: 102250.
5. Alexiou et al. Politics, government health expenditure and infant mortality: does political party orientation matter? International Journal of Social Economics. 2021; 48(12): 1810-1825.
6. Alexiou et al. Local government funding and life expectancy in England: a longitudinal ecological study. Lancet Public Health 2021; 6: e641-7.
7. Andersen et al. Participation in the Juntos Conditional Cash Transfer Program in Peru Is Associated with Changes in Child Anthropometric Status but Not Language Development or School Achievement. Journal of Nutrition. 2015;145(10):2396-405.
8. Aquino et al. Impact of the Family Health Program on infant mortality in Brazilian municipalities. American Journal of Public Health. 2009;99(1):87-93.
9. Arifeen et al. Effect of the Integrated Management of Childhood Illness strategy on childhood mortality and nutrition in a rural area in Bangladesh: a cluster randomised trial. Lancet 2009; 374: 393-403.
10. Armstrong Schellenberg et al. Effectiveness and cost of facility-based Integrated Management of Childhood Illness (IMCI) in Tanzania. Lancet 2004; 364: 1583-1594.
11. Ashiabi et al. The effect of health expenditure on selected maternal and child health outcomes in Sub-Saharan Africa. International Journal of Social Economics. 2016;43(12):1386-99.
12. Bang et al. Neonatal and infant mortality in the ten years (1993 to 2003) of the Gadchiroli field trial: Effect of home-based neonatal care. Journal of Perinatology. 2005;25:S92-S107.
13. Barber et al. The impact of Mexico's conditional cash transfer programme, Oportunidades, on birthweight. Tropical Medicine and International Health 2008; 13: 1405-1414.
14. Barenberg et al. The Effect of Public Health Expenditure on Infant Mortality: Evidence from a Panel of Indian States, 1983–1984 to 2011–2012. Journal of Development Studies. 2017;53(10):1765-84.
15. Barham. A healthier start: The effect of conditional cash transfers on neonatal and infant mortality in rural Mexico. Journal of Development Economics. 2011;94(1):74-85.
16. Behera et al. Is health expenditure effective for achieving healthcare goals? Empirical evidence from South-East Asia Region. Asia-Pac J Reg Sci. 2020;4(2):593-618.
17. Bhardwaj et al. Implementation of strategies to improve programme effectiveness lead to an improvement in maternal and child health outcomes in South Africa. (On the path to reach SDG targets: decreasing maternal and child mortality in South Africa.). SAMJ South African Medical Journal 2018; 108 (3 S1): S44-49.

18. Bhatt et al. Medicaid expansion and infant mortality in the United States. American Journal of Public Health. 2018;108(4):565-7.
19. Biadgilign et al. Good governance, public health expenditures, urbanization and child undernutrition Nexus in Ethiopia: an ecological analysis. BMC Health Services Research 2019; 19: 40.
20. Bishai et al. Factors Contributing to Maternal and Child Mortality Reductions in 146 Low- and Middle-Income Countries between 1990 and 2010. PLoS ONE 2016; 11: e0144908.
21. Bitler et al. Does WIC work? The effects of WIC on pregnancy and birth outcomes. Journal of Policy Analysis and Management 2005; 24(1): 73-91.
22. Blake-Lamb et al. Association of the First 1,000 Days Systems-Change Intervention on Maternal Gestational Weight Gain. Obstetrics & Gynecology 2020; 135(5): 1047-1057.
23. Blakeney et al. The effect of women, infant, and children (WIC) services on birth weight before and during the 2007-2009 great recession in Washington state and Florida: a pooled cross-sectional time series analysis. BMC Pregnancy & Childbirth 2020; 20(1): 252.
24. Bradley et al. Health and social services expenditures: Associations with health outcomes. BMJ Quality and Safety. 2011;20(10):826-31.
25. Brault et al. Factors influencing rapid progress in child health in post-conflict Liberia: a mixed methods country case study on progress in child survival, 2000-2013. BMJ Open 2018; 8 (10): e0201879.
26. Brault et al. The introduction of new policies and strategies to reduce inequities and improve child health in Kenya: A country case study on progress in child survival, 2000-2013. PLoS ONE 2017; 12(8): e0181777.
27. Bugelli et al. Health capabilities and the determinants of infant mortality in Brazil, 2004–2015: an innovative methodological framework. BMC Public Health. 2021;21(1): 831.
28. Cahyadi et al. Cumulative Impacts of Conditional Cash Transfer Programs: Experimental Evidence from Indonesia. American Economic Journal: Economic Policy. 2020;12(4):88-110.
29. Chen et al. The Taiwan National Health Insurance program and full infant immunization coverage. American Journal of Public Health 2005; 95 (2): 305-311.
30. Choudhury et al. The impact of paid family leave on the timely vaccination of infants. Vaccine. 2021;39(21):2886-93.
31. Cluver et al. Child-focused state cash transfers and adolescent risk of HIV infection in South Africa: A propensity-score-matched case-control study. The Lancet Global Health. 2013;1(6):e362-e70.
32. Crea et al. Effects of cash transfers on Children's health and social protection in Sub-Saharan Africa: Differences in outcomes based on orphan status and household assets. BMC Public Health. 2015;15(1): 511.
33. Cremieux et al. Health care spending as determinants of health outcomes. Health Economics. 1999;8(7):627-39.
34. De Andrade et al. Effect of Brazil's Conditional Cash Transfer Programme on the new case detection rate of leprosy in children under 15 years old. Leprosy Review. 2018;89(1):13-24.
35. Drewry et al. The impact of the State Children's Health Insurance Program's unborn child ruling expansions on foreign-born Latina prenatal care and birth outcomes, 2000-2007. Maternal and Child Health Journal 2015; 19(7):1464-1471.

36. Factor et al. Corruption and population health outcomes: an analysis of data from 133 countries using structural equation modeling. International Journal of Public Health 2015; 60 (6): 633-641.
37. Farag et al. Health expenditures, health outcomes and the role of good governance. International Journal of Health Care Finance & Economics 2013; 13(1): 33-52.
38. Feng et al. Social, economic, political and health system and program determinants of child mortality reduction in China between 1990 and 2006: A systematic analysis. Journal of Global Health 2012; 2(1): 10405.
39. Fernald et al. 10-year effect of Oportunidades, Mexico's conditional cash transfer programme, on child growth, cognition, language, and behaviour: a longitudinal follow-up study. Lancet 2009; 374 (9706): 1997-2005.
40. Fernald et al. Role of cash in conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico's Oportunidades. Lancet 2008; 371 (9615): 828-837.
41. Fernandes et al. Effects of health-system strengthening on under-5, infant, and neonatal mortality: 11-year provincial-level time-series analyses in Mozambique. Lancet Global Health 2014; 2(8): e468-477.
42. Findley et al. Early results of an integrated maternal, newborn, and child health program, Northern Nigeria, 2009 to 2011. BMC Public Health 2013; 13: 1034.
43. Findley et al. Impact of alternative community engagement strategies on improved maternal and child health behaviours and outcomes among the most vulnerable in northern Nigeria. Etude de la Population Africaine 2016; 30: 25.
44. Gabbe et al. Improving Maternal and Infant Child Health Outcomes with Community-Based Pregnancy Support Groups: Outcomes from Moms2B Ohio. Maternal and Child Health Journal 2017; 21 (5): 1130-1138.
45. Garchitorena et al. District-level health system strengthening for universal health coverage: evidence from a longitudinal cohort study in rural Madagascar, 2014-2018. BMJ Global Health 2020; 5 (12): 12.
46. Garchitorena et al. Early changes in intervention coverage and mortality rates following the implementation of an integrated health system intervention in Madagascar. BMJ Global Health 2018; 3 (3): e000762.
47. Ghosh et al. Do welfare programs work in weak states? Why? Evidence from a maternity support program in India. Journal of Development Economics 2018; 134: 191-208.
48. Gitobu et al. Patterns in maternal mortality following the implementation of a free maternal health care policy in Kenyan public health facilities. East African Medical Journal 2017; 94 (6): 433-444.
49. Gitobu et al. The effect of Kenya's free maternal health care policy on the utilization of health facility delivery services and maternal and neonatal mortality in public health facilities. BMC Pregnancy and Childbirth 2018; 18 (1): 77.
50. Goldstein et al. State and Local Government Expenditures and Infant Mortality in the United States. Pediatrics 2020; 146 (5).
51. Goncalves. The Effects of Participatory Budgeting on Municipal Expenditures and Infant Mortality in Brazil. World Development 2014; 53: 94.
52. Gram et al. 'There is no point giving cash to women who don't spend it the way they are told to spend it' - Exploring women's agency over cash in a combined participatory women's groups and cash transfer programme to improve low birthweight in rural Nepal. Social Science and Medicine 2019; 221: 9-18.

53. Grellety et al. Effects of unconditional cash transfers on the outcome of treatment for severe acute malnutrition (SAM): A cluster-randomised trial in the Democratic Republic of the Congo. BMC Medicine. 2017;15(1): 87.
54. Hajizadeh et al. Paid maternity leave and childhood vaccination uptake: Longitudinal evidence from 20 low-and-middle-income countries. Social Science and Medicine 2015; 140: 104.
55. Hall et al. Government revenue, quality of governance and child and maternal survival. Appl Econ Lett. 2021; DOI: 10.1080/13504851.2021.1963408.
56. Houngbe et al. Unconditional cash transfers do not prevent children's undernutrition in themoderate acute malnutrition out (MAM'Out) cluster-randomized controlled trial in rural Burkina Faso. Journal of Nutrition. 2017;147(7):1410-7.
57. Huang et al. Investments in children's health and the Kenyan cash transfer for orphans and vulnerable children: evidence from an unconditional cash transfer scheme. Health Policy and Planning 2017; 32 (7): 943-955.
58. Huicho et al. Child health and nutrition in Peru within an antipoverty political agenda: a Countdown to 2015 country case study. The Lancet Global Health 2016; 4 (6): e414-426.
59. Ibukun et al. The role of governance in the health expenditure–health outcomes nexus: insights from West Africa. International Journal of Social Economics. 2021;48(4):557-70.
60. Irish et al. Paid Family Leave and Mental Health in the U.S.: A Quasi-Experimental Study of State Policies. American Journal of Preventive Medicine. 2021;61(2):182-91.
61. Jahagirdar et al. The effect of paid maternity leave on early childhood growth in low-income and middle-income countries. BMJ Global Health. 2017;2: e000294.
62. Jo. Does the earned income tax credit increase children's weight? The impact of policy-driven income on childhood obesity. Health Economics 2018; 27 (7): 1089-1102.
63. Johnson et al. Assessing early access to care and child survival during a health system strengthening intervention in Mali: a repeated cross sectional survey. PLoS ONE 2013; 8 (12): e81304.
64. Kamiya. Effects of health systems and socioeconomic factors in reducing child mortality in developing countries: empirical results from system generalised method of moments. Applied econometrics and international development 2011; 11 (2): 29-42.
65. Katahoire et al. Improving child survival through a district management strengthening and community empowerment intervention: early implementation experiences from Uganda. BMC Public Health 2015; 15: 797.
66. Kayode et al. Temporal trends in childhood mortality in Ghana: impacts and challenges of health policies and programs. Global Health Action 2016; 9(1).
67. Khan et al. Newborn survival in Pakistan: a decade of change and future implications. Health Policy and Planning 2012; 27 (S3).
68. Kim et al. Government health expenditure and public health outcomes: A comparative study among 17 countries and implications for US health care reform. American International Journal of Contemporary Research. 2013;3(9):8-13.
69. Klein et al. Maternity leave, role quality, work involvement, and mental health one year after delivery. Psychology of Women Quarterly. 1998;22(2):239-66.
70. Kumar et al. Effect of political decentralization and female leadership on institutional births and child mortality in rural Bihar, India. Social Science and Medicine 2017; 185: 171-178.
71. Kusuma et al. Can cash transfers improve determinants of maternal mortality? Evidence from the household and community programs in Indonesia. Social Science and Medicine 2016; 163: 10.

72. Kusuma et al. New evidence on the impact of large-scale Conditional Cash Transfers on child vaccination rates: the case of a clustered-randomized trial in Indonesia. World Development 2017; 98: 497-505.
73. Kuunibe et al. What happens when performance-based financing meets free healthcare? Evidence from an interrupted time-series analysis. Health Policy and Planning 2020; 35(8): 906-917.
74. Labrecque et al. Effect of a conditional cash transfer program on length-for-age and weight-for-age in Brazilian infants at 24 months using doubly-robust, targeted estimation. Social Science and Medicine 2018; 211: 9-15.
75. Langnel et al. Governance, health expenditure and infant mortality in sub-Saharan Africa. African Development Review 2020; 32 (4): 673-685.
76. Leal et al. Reproductive, maternal, neonatal and child health in the 30 years since the creation of the Unified Health System (SUS). Ciencia & Saude Coletiva 2018; 23 (6): 1915-1928.
77. Leroy et al. The Oportunidades program increases the linear growth of children enrolled at young ages in urban Mexico. Journal of Nutrition 2008; 138(4): 793-798.
78. Lessaris et al. Effects of changing health care financial policy on very low birthweight neonatal outcomes. Southern Medical Journal 2002; 95(4): 426-430.
79. Liljestrand et al. Socio-economic improvements and health system strengthening of maternity care are contributing to maternal mortality reduction in Cambodia. Reproductive Health Matters 2012; 20(39): 62-72.
80. Lindholm et al. Inequalities in institutional delivery uptake and maternal mortality reduction in the context of cash incentive program, Janani Suraksha Yojana: results from nine states in India. Social Science and Medicine 2014; 123: 1-6.
81. Lindsay. Integrating quantitative and qualitative methods to assess the impact of child survival programs in developing countries: the case of a program evaluation in Ceara, Northeast Brazil. Health Education and Behavior 2002; 29(5): 570-584.
82. Lopez-Arana et al. Conditional cash transfers and the double burden of malnutrition among children in Colombia: A quasi-experimental study. British Journal of Nutrition. 2016;115(10):1780-9.
83. Makela et al. Social sector expenditure and child mortality in India: a state-level analysis from 1997 to 2009. PLoS ONE 2013; 8(2): e56285.
84. Makuta et al. Quality of governance, public spending on health and health status in Sub Saharan Africa: A panel data regression analysis. BMC Public Health. 2015;15: 932.
85. Margolis et al. Validity of the Maternal and Child Health Services Block Grant as an indicator of state infant mortality reduction initiatives. American Journal of Preventive Medicine 1995; 11(1): 40-45.
86. Markowitz et al. Effects of state-level Earned Income Tax Credit laws in the U.S. on maternal health behaviors and infant health outcomes. Social Science and Medicine 2017; 194: 67-75.
87. Maruthappu et al. Government Health Care Spending and Child Mortality. Pediatrics. 2015;135(4):E887-E94.
88. Mascie-Taylor et al. Impact of a cash-for-work programme on food consumption and nutrition among women and children facing food insecurity in rural Bangladesh. Bulletin of the World Health Organization 2010; 88 (11): 854-860.
89. Mayer et al. The role of state policies and programs in buffering the effects of poverty on children's immunization receipt. American Journal of Public Health 1999; 89(2): 164-170.

90. Meda et al. Impact of fee subsidy policy on perinatal health in a low-resource setting: A quasi-experimental study. PLoS ONE 2018; 13 (11): e0206978.
91. Meghea et al. Infant health effects of a nurse-community health worker home visitation programme: a randomized controlled trial. Child: Care, Health & Development 2013; 39(1): 27-35.
92. Memon et al. Impact of a community-based perinatal and newborn preventive care package on perinatal and neonatal mortality in a remote mountainous district in Northern Pakistan. BMC Pregnancy and Childbirth 2015; 15: 106.
93. Muruka et al. Effect of Implementation of Free Maternity Policy on Selected Maternal and Newborn Health Indicators in Gem Sub-County, Siaya County, Western Kenya. Journal of Health Care for the Poor & Underserved 2019; 30(3): 1132-1150.
94. Naderimagham et al. Impact of rural family physician program on child mortality rates in Iran: a time-series study. Population Health Metrics 2017; 15: 21.
95. Narwal et al. Has the Rate of Reduction in Infant Mortality Increased in India Since the Launch of National Rural Health Mission? Analysis of Time Trends 2000-2009 with Projection to 2015. International Journal of MCH & AIDS 2013;2(1): 139-152.
96. Norr et al. Maternal and Infant Outcomes at One Year for a Nurse-Health Advocate Home Visiting Program Serving African Americans and Mexican Americans. Public Health Nursing. 2003;20(3):190-203
97. Nyamuranga et al. Public health expenditure and child mortality in Southern Africa. International Journal of Social Economics 2019; 46(9): 1137-1154.
98. Okafor et al. Impact of Free Maternal and Child Healthcare programme on maternal and neonatal healthcare outcome in Enugu State of Nigeria. Nigerian journal of medicine: Journal of the National Association of Resident Doctors of Nigeria. 2011;20(4):441-3.
99. Onofrei et al. Government health expenditure and public health outcomes: A comparative study among EU developing countries. International Journal of Environmental Research and Public Health. 2021;18(20): 10725.
100. Patel et al. Effect of a statewide neonatal resuscitation training program on Apgar scores among high-risk neonates in Illinois. Pediatrics 2001; 107 (4): 648-655.
101. Paxson et al. Does money matter? The effects of cash transfers on child development in rural Ecuador. Economic Development & Cultural Change 2010; 59(1): 187-229.
102. Perez-Lu et al. Health effects of 'Juntos', a conditional cash transfer programme in Peru. Maternal and Child Nutrition. 2017;13(3): e12348.
103. Perez-Perez et al. Government expenditure on health and maternal mortality in México: A spatial-econometric analysis. International Journal of Health Planning and Management 2019; 34(2): 619-635.
104. Perin et al. Using propensity scores to estimate the effectiveness of maternal and newborn interventions to reduce neonatal mortality in Nigeria. BMC Pregnancy and Childbirth. 2020;20(1): 534.
105. Perks et al. District health programmes and health-sector reform: case study in the Lao People's Democratic Republic. Bulletin of the World Health Organization 2006; 84(2): 132-138.
106. Powell-Jackson et al. Cash transfers, maternal depression and emotional well-being: Quasi-experimental evidence from India's Janani Suraksha Yojana programme. Social Science and Medicine 2016; 162; 210-218.

107. Rad et al. Comparison of the effects of public and private health expenditures on the health status: A panel data analysis in eastern Mediterranean countries. International Journal of Health Policy and Management. 2013;1(2):163-7.
108. Raeesi et al. Effects of private and public health expenditure on health outcomes among countries with different health care systems: 2000 and 2014. Medical Journal of the Islamic Republic of Iran 2018; 32: 35.
109. Rahman et al. Health care expenditure and health outcome nexus: new evidence from the SAARC-ASEAN region. Globalization and Health 2018; 14:113
110. Rajmil et al. Trends in social determinants of child health and perinatal outcomes in European countries 2005-2015 by level of austerity imposed by governments: a repeat cross-sectional analysis of routinely available data. BMJ Open 2018; 8(10): e022932.
111. Rasella et al. Effect of a conditional cash transfer programme on childhood mortality: a nationwide analysis of Brazilian municipalities. Lancet 2013; 382(9886): 57-64.
112. Reeves et al. Financing universal health coverage--effects of alternative tax structures on public health systems: cross-national modelling in 89 low-income and middle-income countries. Lancet 2015; 386 (9990): 274-280.
113. Renzaho et al. The impact of unconditional child cash grant on child malnutrition and its immediate and underlying causes in five districts of the Karnali Zone, Nepal - A trend analysis. Archives of Public Health. 2019;77: 24.
114. Renzaho et al. The synergetic effect of cash transfers for families, child sensitive social protection programs, and capacity building for effective social protection on children's nutritional status in Nepal. International Journal of Environmental Research and Public Health. 2017;14(12): 1502.
115. Robertson et al. Effects of unconditional and conditional cash transfers on child health and development in Zimbabwe: a cluster-randomised trial. Lancet 2013; 381(9874): 1283-1292.
116. Robinson et al. The impact of New Labour's English health inequalities strategy on geographical inequalities in infant mortality: a time-trend analysis. Journal of Epidemiology & Community Health 2019; 73 (6): 564-568.
117. Rocha et al. Health spending autonomy and infant mortality rates: a matter of local administrative capacity? The Journal of Developing Areas 2016; 50(2): 293-309.
118. Root et al. Organizations matter in local governance: evidence from health sector decentralization in Honduras. Health Policy and Planning 2020; 35(9): 1168-1179.
119. Rossin. The effects of maternity leave on children's birth and infant health outcomes in the United States. Journal of Health Economics 2011; 30(2): 221-239.
120. Ruhm. Parental leave and child health. Journal of Health Economics 2000; 19(6): 931-960.
121. Ruiz-Rodriguez et al. Organizational elements of health service related to a reduction in maternal mortality: the cases of Chile and Colombia. Health Policy 2009; 90(2-3): 149-155.
122. Sanchez et al. Impact of the Juntos conditional cash transfer program on nutritional and cognitive outcomes in Peru: Comparison between younger and older initial exposure. Economic Development and Cultural Change. 2020;68(3):865-97.
123. Saville et al. Impact on birth weight and child growth of participatory learning and action women's groups with and without transfers of food or cash during pregnancy: Findings of the low birth weight South Asia cluster-randomised controlled trial (LBWSAT) in Nepal. PLoS ONE. 2018;13(5): e0194064.

124. Serbanescu et al. Impact of the Saving Mothers, Giving Life Approach on Decreasing Maternal and Perinatal Deaths in Uganda and Zambia. Global Health Science & Practice 2019; 7 (Suppl 1): S27-S47.
125. Servan-Mori et al. A Performance Analysis of Public Expenditure on Maternal Health in Mexico. PLoS ONE 2016; 11(4): e0152635.
126. Shaefer et al. The Decline of Cash Assistance and the Well-Being of Poor Households with Children. Social Forces 2020; 98 (3): 1000-1025.
127. Shim et al. Family leave policy and child mortality: Evidence from 19 OECD countries from 1969 to 2010. International Journal of Social Welfare 2016; 25 (3): 215-221.
128. Singh et al. Impact evaluation of a quality improvement intervention on maternal and child health outcomes in Northern Ghana: early assessment of a national scale-up project. International Journal for Quality in Health Care 2013; 25 (5): 477-487.
129. Susan Marquis et al. The role of public insurance and the public delivery system in improving birth outcomes for low-income pregnant women. Medical Care 2002; 40(11): 1048-1059.
130. Tanaka. Parental leave and child health across OECD countries. Economic Journal 2005; 115 (501): 7-28.
131. Tarverdi et al. On the role of governance and health aid on child mortality: a cross-country analysis. Applied Economics 2017; 49(9): 845-859.
132. Taylor et al. Insurance Differences in Preventive Care Use and Adverse Birth Outcomes Among Pregnant Women in a Medicaid Nonexpansion State: A Retrospective Cohort Study. Journal of Women's Health 2020; 29(1): 29-37.
133. Thomson et al. Impact of a health system strengthening intervention on maternal and child health outputs and outcomes in rural Rwanda 2005-2010. BMJ Global Health. 2018;3(2): e000674.
134. Tiwari et al. Impact of cash transfer programs on food security and nutrition in sub-Saharan Africa: A cross-country analysis. Global Food Security. 2016;11:72-83.
135. Tsai-Ching et al. The impact of National Health Insurance on neonatal care use and childhood vaccination in Taiwan. Health Policy and Planning 2002; 17(4): 384.
136. Urquieta-Salomon et al. Impact of the 'Seguro Médico Siglo XXI' medical insurance programme on neonatal and infant mortality in Mexico, 2006–14: an ecological approach to estimation. Health Policy and Planning 2020; 35(5): 609-615.
137. Vos et al. Analysis of policy towards improvement of perinatal mortality in the Netherlands (2004-2011). Social Science & Medicine 2016; 157: 156-164.
138. Wise et al. Strategic governance: Addressing neonatal mortality in situations of political instability and weak governance. Seminars in Perinatology 2015; 39 (5): 387-392.

. Overall included records, grouped into studies

All included records represent a unique study, with the exception of:

1. Fernald et al 2009, 2008
    - Fernald et al. 10-year effect of Oportunidades, Mexico's conditional cash transfer programme, on child growth, cognition, language, and behaviour: a longitudinal follow-up study. Lancet 2009; 374 (9706): 1997-2005.

- Fernald et al. Role of cash in conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico's Oportunidades. Lancet 2008; 371 (9615): 828-837.

2. Findley et al 2016, 2013
    - Findley et al. Impact of alternative community engagement strategies on improved maternal and child health behaviours and outcomes among the most vulnerable in northern Nigeria. Etude de la Population Africaine 2016; 30 (2 Suppl): 2886-2897.
    - Findley et al. Early results of an integrated maternal, newborn, and child health program, Northern Nigeria, 2009 to 2011. BMC Public Health 2013; 13: 1034.
3. Garchitorena 2020, 2018
    - Garchitorena et al. District-level health system strengthening for universal health coverage: evidence from a longitudinal cohort study in rural Madagascar, 2014-2018. BMJ Global Health 2020; 5 (12): 12.
    - Garchitorena et al. Early changes in intervention coverage and mortality rates following the implementation of an integrated health system intervention in Madagascar. BMJ Global Health 2018; 3 (3): e000762.
4. Gitobu et al 2018, 2017
    - Gitobu et al. The effect of Kenya's free maternal health care policy on the utilization of health facility delivery services and maternal and neonatal mortality in public health facilities. BMC Pregnancy and Childbirth 2018; 18 (1): 77.
    - Gitobu et al. Patterns in maternal mortality following the implementation of a free maternal health care policy in Kenyan public health facilities. East African Medical Journal 2017; 94 (6): 433-444.
5. Gram et al 2019; Saville et al, 2018
    - Gram et al. 'There is no point giving cash to women who don't spend it the way they are told to spend it' - Exploring women's agency over cash in a combined participatory women's groups and cash transfer programme to improve low birthweight in rural Nepal. Social Science and Medicine 2019; 221: 9-18.
    - Saville et al. Impact on birth weight and child growth of participatory learning and action women’s groups with and without transfers of food or cash during pregnancy: Findings of the low birth weight South Asia cluster-randomised controlled trial (LBWSAT) in Nepal. PLoS ONE. 2018;13(5): e0194064.
6. Kusuma et al 2017, 2016
    - Kusuma et al. New evidence on the impact of large-scale Conditional Cash Transfers on child vaccination rates: the case of a clustered-randomized trial in Indonesia. World Development 2017; 98: 497-505.
    - Kusuma et al. Can cash transfers improve determinants of maternal mortality? Evidence from the household and community programs in Indonesia. Social Science and Medicine 2016; 163: 10.

Appendix G: Detailed results for studies underpinning final programme theories

Final programme theory 1: *Increased public expenditure especially in LMICs with sufficient governance to facilitate administrative capacity led to lower infant and under-5 mortality through improved government effectiveness in expanding health facilities and access*

Instrument type: treasure; authority-treasure.

Study	Country	Context	Exposure	Results by outcome
Ahammer et al, 2020	Austria	Developed	Prenatal maternity leave extension from 6 to 8 weeks	Length/Birth weight/Premature birth/Long-term health outcome at age 25 and 40 (outpatient expenses and hospital days): There was no evidence of a significant effect of the prenatal maternity leave extension on children's health at birth or long-term health and labour market outcomes.
Bradley et al, 2011	30 developed countries	Developed	Health expenditure, social services expenditure	Life expectancy at birth: Health expenditures (coefficient 0.28, SE 0.06, p<0.001), social expenditures (0.08, 0.02, p<0.001) and social/health ratio (0.40, 0.19, p=0.03) were positively associated with life expectancy at birth. Infant mortality: Social expenditures (-0.10, 0.01, p<0.001) and social/health ratio (-0.85, 0.18, p<0.001) were negatively associated with infant mortality.

				Low birth weight: Social expenditures (0.13,0.02, p<0.001) and social/health ratio (0.73, 0.08, p<0.001) were positively associated with low birth weight. Maternal mortality: No significant effects observed. Results from multivariate analysis.
Goldstein et al, 2020	United States	Developed	State and local government expenditures on non-healthcare services (education, social services, and environment and housing)	Infant mortality rate: A $0.30 per-person increase in environmental spending and a $0.73 per-person increase in social services spending were associated with a reduction in infant mortality of 0.03 and 0.02 deaths per 1000 live births respectively. Benefit was greatest in younger mothers (<20 years old). Focusing on more specific expenditure subtypes, increased spending on solid waste management, housing, and parks and recreation revealed the greatest inverse association with infant mortality (decreases of 0.06, 0.05, and 0.05 deaths per 1000 live births). Increased spending on natural resources had the opposite effect. Among social expenditures, increased spending on public health, public welfare, and hospitals were the greatest predictors of infant mortality (decreases of 0.05, 0.03, and 0.03 deaths per 1000 live births, respectively). Among educational expenditures, the

				only statistically significant predictor of infant mortality was library spending (decrease of 0.03 deaths per 1000 live births).
Irish et al, 2021	United States	Developed	Paid family leave policy	Maternal psychological distress: Exposure to the paid family leave policy was associated with lower maternal psychological distress (Coefficient -0.52, 95% CI -0.82, 0.02, $p<0.01$). A significant association was also found for paternal but not child psychological distress.
Kim et al, 2013	17 developed countries	Developed	Government health expenditure	Life expectancy at birth: Increased government health expenditure predicted greater life expectancy at birth (coefficient 0.026, $p<0.01$). Infant mortality: Increased government health expenditure predicted lower infant mortality (coefficient -0.077, $p<0.01$).
Margolis et al, 1995	United States	Developed	Maternal and Child Health Services Block Grant	Infant mortality: Maternal and Child Health Services Block Grant facilitated infant mortality reduction. The sensitivity was moderate (45%).
Susan Marquis et al, 2002	United States	Developed	Public insurance, public delivery system	Birth weight: Outcomes for those on Medicaid and the uninsured are significantly better if they receive care in the public health system than if they receive care in the private system.

Tanaka et al, 2005	18 developed countries	Developed	Job-protected paid parental leave and other leave policies (non-job-protected paid leave and unpaid leave)	Infant mortality: 10-week extension in paid parental leave reduces infant mortality by 2.3-2.5% (depending on model). Comparable results were shown for other mortality rates. Low birth weight: Paid parental leave was negatively associated with low birth weight (coefficient -0.1576, SE 0.08, $p<0.05$) Child immunisation coverage: No statistically significant effects were observed. It was specifically job-protected paid parental leave, rather than other types of leave, that had a beneficial effect on child health outcomes.
Taylor et al, 2020	United States	Developed	Health insurance status at delivery	Preterm birth/Low birth weight/Preeclampsia/ Gestational diabetes: While commercial insurance was associated with greater health facility access than Medicaid, differences in adverse pregnancy outcomes were not statistically significant following adjustment for patient characteristics.
Ashiabi et al, 2016	40 sub-Saharan African countries	LMIC	Public health expenditure, private health expenditure	Infant mortality: Public health expenditure was negatively associated with infant mortality (coefficient -0.151, SE 0.030, $p<0.01$).

				Under-5 mortality: Public health expenditure was negatively associated with under-5 mortality (coefficient -0.193, 0.037, p<0.01). Maternal mortality: Public health expenditure was negatively associated with maternal mortality (coefficient -0.101, 0.041, p<0.05). Private health expenditure was not a significant predictor of outcomes. Random effects results were used here in preference to fixed effects results.
Bishai et al, 2016	146 LMICs	LMIC	Health service coverage and infrastructure	Maternal mortality: 100% of reductions in maternal mortality since 1990 were modelled to be due to improvements in nationwide coverage of health determinants. Child mortality: 89% of reductions in child mortality since 1990 were modelled to be due to improvements in nationwide coverage of health determinants. Overall, approximately 50% of mortality reductions were attributable to health sector improvements and 50% attributable to improvements in non-health sectors.

Farag et al, 2013	133 LMICs	LMIC	Governance, health expenditure	Infant mortality: Health expenditure had a significant impact on reducing infant mortality, elasticity 0.13-0.33. Under-5 mortality: Health expenditure had a significant impact on reducing under-5 mortality, elasticity 0.15-0.38. For both outcomes, the effect size depends on level of governance, demonstrating the importance of governance for unleashing the potential of health expenditure to improve health outcomes.
Gitobu et al, 2017/2018	Kenya	LMIC	Free Maternal Health Care Policies	Maternal mortality/ Neonatal mortality: Policy change was associated with increased facility-based delivery, but this did not translate into significant reductions in maternal and neonatal mortality.
Hajizadeh et al, 2015	20 LMICs	LMIC	Paid maternity leave	Childhood vaccination: each additional week (full time equivalent) of paid maternity leave increased diptheria, tetanus and pertussis 1st, 2nd and 3rd dose coverage by 1.38 (95% CI = 1.18, 1.57), 1.62 (CI = 1.34, 1.91) and 2.17 (CI = 1.76, 2.58) percentage points, respectively.
Jahagirdar et al, 2017	37 LMICs	LMIC	Increase in paid maternity leave (implemented in	Height-for-age Z score: A one-month increase in paid maternity leave was associated with a decrease of 0.08 (95% CI -0.20, 0.04, not statistically significant) in

			5 of the countries, Uganda, Zambia, Zimbabwe, Bangladesh and Lesotho)	height-for-age Z score. There was no robust evidence from primary or sensitivity analyses of an impact, in either direction, of increased paid paternity leave on height-for-age Z score.
Langnel et al, 2020	32 sub-Saharan African countries	LMIC	Governance, health expenditure	Infant mortality: Modelled results showed no direct impact of governance or health expenditure on infant mortality. However, the interaction between governance and health expenditure is significant and negatively associated with infant mortality. This suggests that the effectiveness of health expenditure may be explained by administrative capacity of countries in a sub-Saharan African context.
Meda et al, 2018	Burkina Faso	LMIC	Fee subsidy policy	Neonatal mortality: While the fee subsidy policy increased institutional deliveries by 4% in urban areas (RR = 1.04) and 12% in rural areas (RR=1.12), this did not translate into a significant reduction in neonatal mortality.
Nyamuranga et al, 2019	98 LMICs in Southern Africa	LMIC	Public health expenditure	Infant mortality: 1% increase in public health expenditure is associated with 0.241 percentage point reduction in infant mortality ($p<0.05$) in developing

				countries and 0.472 percentage point reduction in Sub-Saharan African countries (p<0.01). Under-5 mortality: 1% increase in public health expenditure is associated with 0.401 percentage point reduction in under-5 mortality in developing countries (p<0.01) and 0.757 percent point reduction in Sub-Saharan African countries (p<0.01).
Urquieta-Salomon et al, 2020	Mexico	LMIC	Seguro Medico Siglo XXI medical insurance programme	Neonatal mortality: Minimum neonatal mortality was reached with 70% coverage, an estimated reduction of 13% compared to 0% insurance coverage. Transition from 1st to 4th quintile of coverage would yield a reduction of 8.1% resulting in 1.72 avoided deaths per 1000 live births. Infant mortality: Minimum infant mortality was reached with 70% insurance coverage, an estimated reduction of 13.3% compared to 0% insurance coverage. Transition from 1st to 4th quintile of coverage would yield a reduction of 9.7% resulting in 3.47 avoided deaths per 1000 live births.
Behera et al, 2020	10 Southeast Asian countries	LMIC and developed	Health expenditure, categorised as	Infant mortality: Model results show that increased public expenditure on health had a positive effect on reduction of infant mortality. However, the effect

			per Ssozi and Amlani (2015)	depends on a range of non-health factors including female education and per capita income, as well as health system factors such as increased government effectiveness to access health facilities. Immunization coverage: Progress was shown in terms of improving immunization coverage. This was shown to be an important determinant of infant mortality.
Factor et al, 2015	133 LMICs and developed countries	LMIC and developed	Corruption, health expenditures	Life expectancy at birth/infant mortality/diphtheria, pertussis and tetanus vaccination: A structural equation model did not find a direct relationship between health expenditure and health outcomes once the effect of factors such as level of economic development, level of regime autocracy and corruption had been considered, suggesting these may be important determinants of child and maternal health outcomes. Indeed, these factors may determine the extent to which health expenditure can be effective.
Hall et al, 2021	191 LMICs and developed countries	LMIC and developed	Government revenue per capita (marker of expenditure capability)	Under-5 mortality/maternal mortality: Model results show that increased government revenue per capita is associated with an increase in child and maternal survival rates (i.e. a decrease in mortality). However, for low-income countries, this effect is dominated by the

				effect of improving the quality of governance. This shows how effective governance is necessary to be able to realise the potential of increased investment.

Final programme theory 2: *Austerity measures especially in LICs and areas of greater socioeconomic deprivation led to worse perinatal outcomes, life expectancy at birth and child mortality through weakened social protection*

Instrument type: treasure

Study	**Country**	**Context**	**Exposure**	**Results by outcome**
Alexiou et al, 2021b	UK	Developed	Local government revenue expenditure and funding	Life expectancy: Every £100 reduction in per capita government funding was associated with a mean life expectancy loss of 1.3 months for males and 1.2 months for females. The impact of cuts was greatest in most deprived areas. Cuts were associated with an increase in the life expectancy gap between the most and deprived quintiles by 3% for men and 4% for women. Cuts were associated with 9600 excess deaths under the age of 75 in England.
Rajmil et al, 2018	16 European developed countries	Developed	Level of austerity imposed by governments	Low birth weight: increased over the period 2012-2015 in countries with greater austerity (measured by cyclically adjusted primary balance, in tertiles) – interaction B=0.25, p<0.004).

				Infant mortality: was not statistically significantly associated by austerity (details not provided).
Kayode et al, 2016	Ghana	LMIC	Implementation of policies and programs to target Millennium Development Goal 4	Neonatal mortality: 1988 to 1989, declined from 48 to 33 per 1000; 1989 to 2008, increased by 2 per 1000 (not statistically significant) Infant mortality: 1988 to 1989, declined from 72 to 58 per 1000; 1989 to 2008, declined by 6 per 1000 (not statistically significant) Under-five mortality: 1988 to 1989, declined from 108 to 83 per 1000; 1989 to 2008, declined by 17 per 1000 (statistically significant) Intervention programmes designed to address childhood mortality had overall limited impact. Lack of comprehensive implementation was identified as a key barrier. Irregular and insufficient funding and lack of sufficient monitoring and evaluation were some of the biggest implementation challenges for policies.
Marathappu et al, 2015	176 LMIC and developed countries	LMIC and developed	Government health care spending	Neonatal mortality: 1% reduction in government health spending was associated with increase in neonatal mortality (r=0.0899, p = 0.001).

				Post-neonatal mortality: 1% reduction in government health spending was associated with increase in post-neonatal mortality (r=0.1354, p=0.001). 1-5 year mortality: 1% reduction in government health spending was associated with increase in 1-5 year mortality (r=0.3501, p<0.001). Under-5 mortality: 1% reduction in government health spending was associated with increase in under-5 mortality (r=0.5207, p<0.001)

Final programme theory 3: *Conditional cash transfer programmes especially with adequate community participation and a strong nutritional component in LMICs led to improved child growth and anthropometric outcomes and reduced infant mortality through strengthened household financial security and empowerment to access health services*

Instrument type: treasure; treasure-organisation

Study	**Country**	**Context**	**Exposure**	**Results by outcome**
Shaefer et al, 2020	United States	Developed	Decline of traditional cash welfare	Household food insecurity: Controlling for state and year trends, the decline of cash assistance was associated with increasing household food insecurity (and increasing public school child homelessness – note that 'public school' was used in the paper to refer to government or state-run schools, rather than its typical

				meaning of a private, fee-paying, secondary school, often for boarders)
Barber et al, 2008	Mexico	LMIC	Conditional cash transfer programme, Oportunidades	Birth weight: Participation in the Oportunidades conditional cash transfer programme was associated with mean 127.3g higher birthweight and a 4.6 percentage point reduction in low birthweight.
Cluver et al, 2010	South Africa	LMIC	Child-focused state cash transfers	Adolescent risk of HIV infection: Receipt of a cash transfer was associated with reduced HIV risk behaviours: incidence of transactional sex (OR 0.49, 95% CI 0.26, 0.93, incidence of age-disparate sex (0.29, 0.13, 0.67), prevalence of transactional sex (0.47, 0.26, 0.86), and prevalence of age-disparate sex (0.37, 0.18, 0.77). These results are all for girls, and no significant associations between cash transfers and HIV risk behaviour were found for boys. [Note that HIV risk was measured by proxy through risk behaviours rather than directly assessed]
De Andrade et al, 2018	Brazil	LMIC	Bolsa Familia conditional cash transfer program	New case detection of leprosy in children under 15 years: Higher coverage of the Bolsa Familia conditional cash transfer programme for both the total (RR=0.85, 95% CI 0.79-0.93) and target (0.75, 0.63, 0.88) population was associated with reduced new case

				detection of leprosy. This is taken to reflect lower incidence rather than poorer detection.
Gram et al, 2019/Saville et al, 2018	Nepal	LMIC	Participatory Action and Learning women's groups with and without transfers of food or cash	Low birthweight: Mean birthweight was significantly higher in the participatory action and learning (PLA) with food arm (difference 78g, 95% CI 13.9, 142.0) compared to control. However, no significant difference relative to control was found for the PLA with cash arm (28.9, -37.7, 95.4). Child growth: Differences in weight for-age z-score were as follows: PLA only -0.026 (95% CI -0.117, 0.065); PLA plus cash -0.045 (-0.133, 0.044); PLA plus food -0.033 (-0.121, 0.056). A process evaluation revealed that the benefit of cash transfers was limited by women not spending the money in the intended manner. The development of shared dynamics between group facilitators, supervisors and members was considered an important determinant of the extent to which cash transfer money was spent as intended by the programme.
Grellety et al, 2017	D.R. Congo	LMIC	Counselling with or without	Outcome of treatment for severe acute malnutrition: People who received counselling with an unconditional cash supplement were more likely than those who

			unconditional cash supplement	received counselling alone to recover fully from severe acute malnutrition (adj HR 1.35, 95% CI 1.10, 1.67).
Labrecque et al, 2018	Brazil	LMIC	Bolsa familia conditional cash transfer program	Length-for-age: Bolsa familia coverage was associated with a reduction in length-for-age Z score (-0.14, 95% CI -0.27, -0.02 low vs no coverage; -0.20, -0.33, -0.08 high vs no coverage). Weight-for-age: Bolsa familia coverage was associated with a reduction in weight-for-age Z score (-0.04, -0.17, 0.08, not statistically significant at 0.05 threshold, low vs no coverage; -0.18, -0.30, -0.05, high vs low coverage).
Lopez-Arana et al, 2016	Colombia	LMIC	Familias en accion conditional cash transfer programme	Child malnutrition: Conditional cash transfer programme participation was associated with reduced thinness (OR 0.26, 95% CI 0.09, 0.75) and higher BMI-for-age Z score (β=0.14, 0.00,0.27), although the latter was of small clinical significance. Reductions in stunting, overweight and obesity did not meet statistical significance.
Mascie-Taylor et al, 2010	Bangladesh	LMIC	Cash-for-work programme	Nutritional health for mothers and children: By study end, difference in mean mid-upper arm circumference for women in the cash-for-work programme and control arms had widened by 2.29mm and mean weight

				for women by 0.88kg. For children, the between group differences had widened for height (0.08cm, p<0.05), weight (0.22kg, p<0.001), mid-upper arm circumference (1.41mm, p<0.001), height-for-age Z score (0.02, p<0.001), weight-for-age Z score (0.17, p<0.001), weight-for-height Z score (0.23, p<0.001) and mid-upper arm circumference Z score (0.12, p<0.001).
Perez-Lu et al, 2017	Peru	LMIC	Juntos conditional cash transfer programme	Individual-level analyses Anaemia in children: Reduced (Prevalence ratio 0.93, 95% CI 0.86,1.00) Anaemia in mothers: Reduced (0.89, 0.79, 1.00) Acute malnutrition in children: Not significant (1.19, 0.57, 2.46) Post-partum complications: Not significant (0.92, 0.81, 1.05) Underweight in mothers: Reduced (0.39, 0.18, 0.85) Overweight in mothers: Not significant 1.06 (0.98, 1.15) District-level analyses Anaemia in children: Increased (1.09, 1.01, 1.17) Anaemia in mothers: Not significant (1.00, 0.92, 1.08) Acute malnutrition in children: Reduced (0.49, 0.32, 0.72)

				Post-partum complications: Not significant (0.96, 0.86, 1.07) Underweight in mothers: Not significant (0.69, 0.46, 1.04) Overweight in mothers: Reduced (0.94, 0.90, 0.98) For those in the conditional cash transfer group versus the control group.
Randive et al, 2014	India	LMIC	Janani Suraksha Yojana cash incentive programme	Maternal mortality: Has declined in all areas since the introduction of the cash incentive programme, but four times faster in the richest areas compared to the poorest areas, increasing inequalities.
Rasella et al, 2013	Brazil	LMIC	Bolsa Familia conditional cash transfer programme	All-cause under-5 mortality: As Bolsa familia coverage increased, all-cause under-5 mortality reduced (HR 0.94, 95% CI 0.92, 0.96 for intermediate coverage; 0.88, 0.85-0.91 for high coverage; 0.83; 0.79, 0.88 for consolidated coverage). Cause-specific under-5 mortality: The positive impact of consolidated Bolsa Familia coverage was greatest on under-5 mortality related to malnutrition (0.35, 0.24, 0.50) and diarrhoea (0.47, 0.37, 0.61).
Sanchez et al, 2000	Peru	LMIC	Juntos conditional cash	Nutrition: For younger siblings, there was an improvement in height for age by 0.19 standard

			transfer program	deviations and a reduction in stunting and severe stunting by 8.9 and 11.6 percentage points respectively. No impact was found for older siblings, who received the treatment when older. Cognitive outcomes: Contrary to previous findings, evidence for cognitive gains was shown for those in the younger initiation group. However, this was not shown for the older siblings group.

Final programme theory 4: *Health system strengthening including achieving greater integration of maternal and child health programmes into the national health agenda in LMICs led to reduced under-5 and maternal mortality through country-level including economic growth and improved infrastructure, health-system factors including increased investment in midwifery training,* increased funding for salaries and resources*, increased facility births and increased skilled birth attendance, and a high level of acceptance by providers and patients*

Instrument type: organisation; treasure-organisation

Study	**Country**	**Context**	**Exposure**	**Results by outcome**
Fernandes et al, 2014	Mozambique	LMIC	Health-system strengthening intervention	Mozambique has seen substantial improvements in public-sector health workforce, institutional birth coverage and government health financing. However, access concerns arise, because population per health facility is increasing.

				Under-5 mortality: Health workforce density (adj RR 0.94, 95% CI 0.90-0.98), maternal and child health nurse density (adj RR 0.96, 0.92-0.99), institutional birth attendance coverage (adj RR 0.94, 0.90-0.98) and government financing per head (adj RR 0.80, 0.65, 0.98) were associated with lower under-5 mortality. Higher population per health facility was associated with higher under-5 mortality (adj RR 1.14, 1.02-1.28). Infant mortality: Institutional birth attendance coverage (adj RR 0.94, 0.89, 0.99) was associated with lower infant mortality. Other predictors listed above were in the same direction but fell short of statistical significance. Higher population per health facility was associated with higher infant mortality (adj RR 1.16 (1.01, 1.33). Neonatal mortality: Health workforce density (adj RR 0.92, 0.85-0.99), maternal and child health nurse density (adj RR 0.91, 0.85-0.98) and institutional birth attendance coverage (adj RR 0.91, 0.85-0.98) were associated with lower neonatal mortality. The impact of population per health facility fell short of statistical significance.

Kayode et al, 2016	Ghana	LMIC	Implementation of policies and programs to target Millennium Development Goal 4	Neonatal mortality: 1988 to 1989, declined from 48 to 33 per 1000; 1989 to 2008, increased by 2 per 1000 (not statistically significant) Infant mortality: 1988 to 1989, declined from 72 to 58 per 1000; 1989 to 2008, declined by 6 per 1000 (not statistically significant) Under-five mortality: 1988 to 1989, declined from 108 to 83 per 1000; 1989 to 2008, declined by 17 per 1000 (statistically significant) These observed initial falls likely relate to the health system strengthening intervention.
Khan et al, 2012	Pakistan	LMIC	Health systems capacity building efforts	Neonatal mortality rate: declined by only 0.9% per annum between 2000 and 2010, less than global average (2.1%). Under-5 mortality rate: This was used as a comparator outcome for neonatal mortality rate, rather than in its own right. It was shown that neonatal mortality rate has fallen less than under-5 mortality rate. Although gains are modest, against a poor baseline level, evidence shows that integration of newborn care

				in national policies is starting to reduce newborn mortality and catalyse care improvements.
Liljestrand et al, 2012	Cambodia	LMIC	Health system strengthening of maternity care	Maternal mortality: Maternal mortality ratio fell from 690 in 1990 and 640 in 1995 to 432 in 2000, 472 in 2005, and 206 in 2010. All per 100,000 live births. Health system strengthening of maternity care was shown to be a key factor driving these falls.

Final programme theory 5: *Focused maternal and child health interventions led to reduced maternal, perinatal, infant and under-5 mortality in LMICs through a demographically responsive health system and improved sickness management*

Instrument type: organisation

Study	**Country**	**Context**	**Exposure**	**Results by outcome**
Bitler et al, 2005	United States	Developed	Special Supplemental Nutrition Program for Women, Infants and Children (WIC)	Gestational weight: OR 0.870, p<.0.01 for <10th percentile; 0.885, p<0.01 for <25th percentile. Gestation/premature birth: 0.708, p<0.01 for <37 weeks premature; 0.473, p<0.001 for <32 weeks very premature. Birth weight: 0.726, p<0.01 for low birth weight (<2500g); 0.463, p<0.001 for very low birth weight (<1500g).

				These results are for WIC participants vs non-participants. Additional data show the benefit of WIC is greater for more disadvantaged mothers.
Meghea et al, 2013	United States	Developed	Nurse-community health worker home visitation programme	Overall child health: No significant differences between intervention and control arms over 1st year of life. Mother-reported asthma/wheezing/ croup diagnostics: Lower for intervention than control group among mothers with low psychosocial resources (13% vs 27%, adj OR 0.4, p<0.01). Immunisations/ hospitalisations/ ear infections: No significant differences between groups.
Abdulahi et al, 2021	Ethiopia	LMIC	Breastfeeding education and support intervention	Infant growth: While the intervention improved breastfeeding uptake, the only growth measure that showed a significant between-group difference was mid-upper arm significance (effect size 0.25cm, 95% CI 0.01, 0.49). Child morbidity: The only morbidity measure that showed a significant between-group difference was respiratory infection (-6.90%, -13.3, -0.61).
Adubra et al, 2016	Mali	LMIC	Conditional cash transfer and/or lipid-based	Mean height-for-age Z scores: There was no significant interaction between cash and lipid-based nutrient

			nutrient supplement intervention	supplement (LNS) interventions for height-for-age Z scores (β= −0.19, P = 0.12). Stunting: There was a significant antagonistic interaction between these treatments for stunting (OR: 1.55; 95% CI: 1.05, 2.31). Post-hoc investigation of this interaction through simple effects analysis showed that the odds of stunting were (unexpectedly) greater among children who received both treatments (LNS + Cash) than among those who received either LNS or Cash.
Aquino et al, 2009	Brazil	LMIC	Family Health Programme – a strategy for reorganisation of primary care	Infant mortality: Adjusting for covariates, Family Health Programme coverage was associated with 13.0% (incipient level), 16.0% (intermediate level) and 22.0% (consolidate level) reductions in infant mortality. All were statistically significant.
Armstrong-Schellenberg et al, 2004	Tanzania	LMIC	Facility-based Integrated Management of Childhood Illness (IMCI)	Under-5 mortality: Mortality rate was 13% lower in IMCI districts over the 2 years following implementation. Rates were near-identical at baseline.

Bang et al, 2005	India	LMIC	Home-based neonatal care intervention	Neonatal mortality: in control area increased from 58 in 1993 to 1995 to 64 in 2001 to 2003; while in the intervention area it declined from 62 to 25 (70% reduction, 95% CI 59 to 81%). Infant mortality: decreased by 43 points (57%, 95% CI 46 to 68% in the intervention area. Perinatal mortality: decreased by 38 points (56%) in the intervention area.
Findlay et al, 2013/2016	Nigeria	LMIC	Integrated maternal, newborn, and child health program	Vaccination: Anti-tetanus vaccination rates increased from 69.0% to 85.0% in the intervention communities. Infant mortality: Declined from 90 to 59. (Over all child mortality from 160 to 84) in the intervention communities. Maternal mortality: Significantly declined in the intervention communities.
Narwal et al, 2013	India	LMIC	Launch of the National Rural Health Mission	Infant mortality: Declined from 74 to 55/1000 live births between 2000 and 2009, with annual average reduction of 3.0% (95% CI=2.6%-3.4%) and the urban-rural gap in infant mortality narrowed (p =0.036). No evidence however of accelerated decline following launch of National Rural Health Mission.

Okafor et al, 2011	Nigeria	LMIC	Free Maternal and Child Health programme	Maternal mortality: Reduced by 16.4% Perinatal mortality: Reduced by 34% Following introduction of programme.
Perks et al, 2006	Laos	LMIC	District health programmes and health-sector reform	Infant mortality: decreased from 47 (per 1000 live births) to 21 (over years 1998 to 2003) Under-5 mortality: Province wide probability of dying before age 5 was 29 per 1000 live births in 2003 compared to a national average of 107. Maternal mortality: decreased from 218 (per 100,000 live births) to 110 (over years 1998 to 2003) Increased health facility access (92% vs 61% nationally) was noted. By 2003, infant and child mortality rates were less than one third of the national average.
Acuin et al, 2011	10 Southeastern Asian countries	LMIC and developed	Policies to improve health coverage	Maternal mortality/child mortality: Significant reductions in Southeast Asia, however reductions are geographically uneven. Disparities in coverage of interventions to improve health are likely to underpin these differences and be a key area for improvement.

The development and justification of final programme theories may involve more studies than those that end up being pivotal for the theory. Therefore, all studies cited in the relevant results section of the manuscript for each theory are included here, including those that offer a complementary perspective.
LMIC = Lower and Middle Income Countries.