

## Multimedia Appendix 2: Excluded studies

To assess eligibility, full-text of 69 articles was reviewed by 2 reviewers. The reason for exclusion was allocated to a single category as listed below, though several articles had multiple reasons for exclusion.

Authors (publication year)	Reason for exclusion
<b>Wrong study design (20)</b>	
Ashman, Collins et al. (2017)	No comparison arm. Intervention allows dietitian to view food photos to support paper dietary records.
Bartholomew, Church et al. (2011)	Crossover study design.
Bartholomew, Soules et al. (2015)	Crossover study design.
Daly, Baum et al. (2016)	Survey results about app usage. No comparative arm.
Fowles and Gentry (2008)	Descriptive study design.
Ganju, Krapf et al. (2016)	Compares intervention group ("low-risk") to general population statistics
García-Sáez, Martínez-Sarriegui et al. (2014)	Design evaluation of a prototype.
Hirst, Farmer et al. (2015)	Service development project; not intended to influence maternal knowledge or behaviour.
Hirst, Loerup et al. (2016)	Service development project; not intended to influence maternal knowledge or behaviour.
Hirst, Mackillop et al. (2015)	Service development project; not intended to influence maternal knowledge or behaviour.
Hirst, Mackillop et al. (2015)	Cross-sectional study design.
Knight-Agarwal, Davis et al. (2015)	Describes app development using cross-sectional and qualitative methods.
Loerup, Gibson et al. (2014)	Pilot cohort observational study; not intended to influence maternal knowledge or behaviour.
Loerup, Gibson et al. (2015)	Service development project; not intended to influence maternal knowledge or behaviour.
Loerup, Hirst et al. (2014)	Cross-sectional study design.
Mackillop, Loerup et al. (2014)	Describes development of an intervention.
Marko, Krapf et al. (2016)	Prospective observational study.
Miles and Mynard (2013)	Describes development of an app. No user or comparison data.
O'Brien, Cramp et al. (2016)	Mobile app interventions not specifically mentioned.
Tombor, Shahab et al. (2016)	About development of program.
<b>Wrong intervention (20)</b>	
Arnold, Nguyen et al. (2013)	Not a mobile app intervention.
Calle-Pascual, Pérez-Ferre et al. (2010)	SMS intervention using software to transmit data.
Colaci, Chaudhri et al. (2016)	No mobile app interventions for pregnant women mentioned.
Davis, Wambach et al. (2014)	Not a mobile app intervention. SMS and PowerPoint presentation preloaded onto an iPad.
Fawsitt, Meaney et al. (2016)	Not a mobile app intervention. Survey of women's willingness to pay for a type of intervention.
Graham, Uesugi et al. (2014)	Not a mobile app intervention.
Kingston, McDonald et al. (2014)	Not a mobile app intervention. Uses tablet for a screening questionnaire during a prenatal appointment.
Kirtley and Chien (2012)	Not a mobile app intervention. Overview of new research.
Logsdon, Davis et al. (2015)	Not a mobile app intervention; streams YouTube on iPad while mothers are in hospital.
Marcano-Belisario, Gupta et al. (2016)	Not a mobile app intervention; survey on a tablet computer.

<b>Authors (publication year)</b>	<b>Reason for exclusion</b>
Marko, Ganju et al. (2016)	As described, purpose of intervention to connect device and transmit data, not to provide information to pregnant women, influence maternal knowledge or behaviour.
Matsubara (1985)	Not a mobile app intervention.
Mauriello, Van Marter et al. (2016)	Not a mobile app intervention; web-based clinical intervention using iPad at prenatal appointments.
McLean, Osgood et al. (2017)	Feasibility study of a data collection system.
Nau (2016)	Not a mobile app intervention.
Olson, Graham et al. (2013)	Not a mobile app intervention.
Peter, Barron et al. (2015)	Not a mobile app intervention. About SMS.
Rotheram-Borus, Tomlinson et al. (2012)	Not a mobile app intervention.
Takeuchi and Horiuchi (2016)	Not a mobile app intervention; website.
Wang and Kim (2015)	Not a mobile app intervention; website.
<b>Wrong population (5)</b>	
Cheng, Huang et al. (2016)	Target population are postpartum women.
Demirci and Bogen (2016)	Target population are postpartum women.
Maycock, Scott et al. (2015)	Target population are male partners.
Ramallo-Farina, Garcia-Perez et al. (2015)	Pregnant women excluded from study.
Suleman (2015)	Target population are community midwives.
<b>Wrong outcomes (2)</b>	
Atkinson, Westeinde et al. (2016)	Immunisation focus.
Burgess, Atkinson et al. (2016)	Immunisation focus.
<b>No study data reported (18)</b>	
No named author (a) (2013)	Promotional piece about an app. No study presented.
No named author (b) (2013)	Promotional piece about an app. No study presented.
Agarwal and Labrique (2014)	Does not describe specific intervention. Studies described on SMS interventions or data management.
Choi, Fukuoka et al. (2013)	No data reported. About development of program.
Daniels and Wedler (2015)	No studies reported. About pregnant womens' app use
Garnweidner-Holme, Borgen et al. (2015)	No data reported. About app development for GDM.
Griffiths, Brown et al. (2016)	Systematic review protocol.
Kennelly, Ainscough et al. (2016)	Study protocol.
Larsson (2014)	Commentary.
Mackillop, Bartlett et al. (2016)	Study protocol.
Malloy (2015)	Commentary on radiation in utero, neurological effects
Mathew, Nimbalkar et al. (2016)	Journal club review
Mudey, Goyal et al. (2015)	No data reported. Type of intervention unclear.
Nguyen, Vu et al. (2015)	No data reported. HMIS project underway.
Schuster (2014)	Broadly describes mobile apps; not a mobile app intervention.
Stabile (2015)	Could not access article.
Stevenson, Wojcieszek et al. (2016)	Describes development of an app. No data reported.
Zairina, Abramson et al. (2015)	Study protocol.

## **Reference list for excluded studies (65)**

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