

Table S1. PRISMA-P (Preferred Reporting Items for Systematic review and Meta-Analysis Protocols) 2015 checklist: recommended items to address in a systematic review protocol*

Section/Topic	Item No	Item	Reported on Page Number/Line Number (P/L)	Reported on Section/Paragraph
ADMINISTRATIVE INFORMATION				
Title	1a	Identification - identify the report as a protocol of a systematic review	P3/L37	Title
	1b	Update - if the protocol is for an update of a previous systematic review, identify as such	Non-update	Non-update
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	P4/L68	Abstract
Authors	3a	Contact - provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	P1-2/L5-34	Title page
	3b	Contributions - describe contributions of protocol authors and identify the guarantor of the review	P15/L407-411	Contributors
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	Non-amendments	Non-amendments
Support	5a	Sources - indicate sources of financial or other support for the review	P15/L412-413	Funding
	5b	Sponsor - provide name for the review funder and/or sponsor	P15/L412-413	Funding
	5c	Role of sponsor or funder - describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	P15/L412-413	Funding
INTRODUCTION				
Rationale	6	Describe the rationale for the review in the context of what is already known	P4-8/L82-194	Introduction
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	P8/L184-194	Objectives
METHODS				
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	P8-10/L206-254	Eligibility criteria for selecting studies
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	P10/L256-266	Search methods for identification of studies
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	Supplementary file: Table 1	
Study records	11a	Data management - describe the mechanism(s) that will be used to manage records and data throughout the review	P11/L279-297	Data extraction and management

	11b	Selection process - state the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	P10-11/L268-277	Study selection
	11c	Data collection process - describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	P11/L279-297	Data extraction and management
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	P10/L256-266	Search methods for identification of studies
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	P8-10/L206-254	Eligibility criteria for selecting studies
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	P11-12/L299-310	Methodological quality assessment
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	P12/L320-322	Data analysis
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I, Kendall's τ)	P12-13/L325-344	Data analysis
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	P13/L346-350	Data analysis
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	P12/L322-324	Data analysis
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	P13/L350-351	Data analysis
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	P12/L312-317	Grading the quality of evidence

* It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items.

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*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.

Embase #1 'pregnancy diabetes mellitus'/exp OR 'diabetes, pregnancy-induced':ab,ti OR 'diabetes, pregnancy induced':ab,ti OR 'diabetes mellitus, gestational':ab,ti OR 'diabetes, gestational':ab,ti OR 'diabetes in pregnancy':ab,ti OR 'gestational diabetes':ab,ti OR 'gestational diabetes mellitus':ab,ti OR gdm:ab,ti OR 'maternal diabetes':ab,ti OR 'pregnancy-induced diabetes':ab,ti OR 'pregnancy diabetes mellitus':ab,ti OR 'mobile application'/exp OR 'telemedicine'/exp OR 'internet'/exp OR 'computer'/exp OR 'telecommunication'/exp OR 'online system'/exp OR 'software'/exp OR 'wireless communication'/exp OR 'mobile phone'/exp OR app:ab,ti OR apps:ab,ti OR application:ab,ti OR applications:ab,ti OR blog:ab,ti OR blogging:ab,ti OR computer:ab,ti OR 'computer interface':ab,ti OR 'cell phones':ab,ti OR 'cell phone':ab,ti OR 'cellular phone':ab,ti OR digital:ab,ti OR 'digital health':ab,ti OR 'digital-health':ab,ti OR ehealth:ab,ti OR 'e-health':ab,ti OR 'e-mail':ab,ti OR electronic:ab,ti OR 'e-learning':ab,ti OR facebook:ab,ti OR 'health, mobile':ab,ti OR 'health technolog':ab,ti OR 'health app':ab,ti OR internet:ab,ti OR 'internet forum':ab,ti OR iphone:ab,ti OR 'i phone':ab,ti OR 'i-phone':ab,ti OR ipad:ab,ti OR 'i pad':ab,ti OR 'i-pad':ab,ti OR laptop:ab,ti OR linkedin:ab,ti OR mobile:ab,ti OR 'mobile application':ab,ti OR 'mobile apps':ab,ti OR 'mobile app':ab,ti OR 'mobile phone':ab,ti OR 'mobile phones':ab,ti OR mhealth:ab,ti OR 'm-health':ab,ti OR 'mobile health':ab,ti OR 'mobile electronic device':ab,ti OR 'mobile technolog':ab,ti OR 'mobile communication':ab,ti OR 'mobile computing':ab,ti OR network:ab,ti OR online:ab,ti OR 'online intervention':ab,ti OR 'online interventions':ab,ti OR platform:ab,ti OR 'personal computer':ab,ti OR 'personal digital assistant':ab,ti OR qq:ab,ti OR remote:ab,ti OR smartphone:ab,ti OR 'smart phone':ab,ti OR 'social media':ab,ti OR 'social networking':ab,ti OR telehealth:ab,ti OR 'tele-health':ab,ti OR telephone:ab,ti OR telemedicine:ab,ti OR 'tele-medicine':ab,ti OR 'tele-care':ab,ti OR telecare:ab,ti OR telecommunication:ab,ti OR telemonitor:ab,ti OR 'tele-monitor':ab,ti OR telemonitoring:ab,ti OR twitter:ab,ti OR web:ab,ti OR 'web-based':ab,ti OR website:ab,ti OR wireless:ab,ti OR wechat:ab,ti

#3 'randomized controlled trial'/exp OR 'randomized controlled trials as topic'/exp OR 'controlled clinical trial'/exp OR 'controlled clinical trials as topic'/exp OR 'clinical trials, randomized':ta,ab OR 'trials, randomized clinical':ta,ab OR 'controlled clinical trials, randomized':ta,ab OR rct:ta,ab OR 'clinical trials':ta,ab OR 'controlled clinical trials':ta,ab OR cct:ta,ab

#4 #1 AND #2 AND #3

the #1 [Diabetes, Gestational] explode all trees OR (Diabetes, Pregnancy-Induced OR Diabetes, Pregnancy Induced OR Diabetes Mellitus, Gestational OR Diabetes, Gestational OR diabetes in pregnancy OR Gestational Diabetes OR Gestational Diabetes Mellitus OR GDM OR maternal diabetes OR Pregnancy-Induced Diabetes OR pregnancy diabetes mellitus):ti,ab,kw

Cochrane library (CENTRAL) #2 [Mobile Applications] explode all trees OR [Telemedicine] explode all trees OR [Internet] explode all trees OR [Computers] explode all trees OR [Telecommunications] explode all trees OR [Online Systems] explode all trees OR [Software] explode all trees OR [Wireless Technology] explode all trees OR [Cell Phone] explode all trees OR (app OR apps OR application OR applications OR ipad OR blog OR blogging OR computer OR computer interface OR cell phones OR cell phone OR cellular phone OR digital OR digital health OR digital-health OR ehealth OR e-health OR e-mail OR electronic OR E-learning OR Facebook OR health, mobile OR health technolog OR health app OR Internet OR Internet forum OR iphone OR i phone OR i-phone OR ipad OR i pad OR i-pad OR laptop OR linkedin OR mobile OR mobile application OR mobile apps OR mobile app OR mobile phone OR mobile phones OR mhealth OR m-health OR mobile health OR mobile electronic device OR mobile technolog OR mobile communication OR mobile computing OR network OR online OR online intervention OR online interventions OR platform OR personal computer OR personal digital assistant OR QQ OR remote OR smartphone OR smart phone OR social media OR social networking OR telehealth OR tele-health OR telephone OR telemedicine OR tele-medicine OR tele-care OR telecare OR telecommunication OR telemonitor OR tele-monitor OR telemonitoring OR twitter OR web OR web-based OR website OR wireless OR WeChat):ti,ab,kw

#3 [Randomized Controlled Trial] explode all trees OR [Randomized Controlled Trials as Topic] explode all trees OR [Controlled Clinical Trial] explode all trees OR [Controlled Clinical Trials as Topic] explode all trees OR (clinical trials, randomized OR trials, randomized clinical OR controlled clinical trials, randomized OR rct OR clinical trials OR controlled clinical trials OR cct):ti,ab,kw

#4 #1 AND #2 AND #3

Web of Science	<p>TS = (Diabetes, Pregnancy-Induced OR Diabetes, Pregnancy Induced OR Diabetes Mellitus, Gestational OR Diabetes, Gestational OR diabetes in pregnancy OR Gestational Diabetes OR Gestational Diabetes Mellitus OR GDM OR maternal diabetes OR Pregnancy-Induced Diabetes OR pregnancy diabetes mellitus) AND</p> <p>TS = (app OR apps OR application OR applications OR ipad OR blog OR blogging OR computer OR computer interface OR cell phones OR cell phone OR cellular phone OR digital OR digital health OR digital-health OR ehealth OR e-health OR e-mail OR electronic OR E-learning OR Facebook OR health, mobile OR health technolog OR health app OR Internet OR Internet forum OR iphone OR i phone OR i-phone OR ipad OR i pad OR i-pad OR laptop OR linkedin OR mobile OR mobile application OR mobile apps OR mobile app OR mobile phone OR mobile phones OR mhealth OR m-health OR mobile health OR mobile electronic device OR mobile technolog OR mobile communication OR mobile computing OR network OR online OR online intervention OR online interventions OR online system OR platform OR personal computer OR personal digital assistant OR QQ OR remote OR smartphone OR smart phone OR social media OR social networking OR Software OR telehealth OR tele-health OR telephone OR telemedicine OR tele-medicine OR tele-care OR telecare OR telecommunication OR telemonitor OR tele-monitor OR telemonitoring OR twitter OR web OR web-based OR website OR wireless OR wireless technology OR WeChat) AND</p> <p>TS = (Randomized Controlled Trial OR Randomized Controlled Trials as Topic OR Controlled Clinical Trial OR Controlled Clinical Trials as Topic OR clinical trials, randomized OR trials, randomized clinical OR controlled clinical trials, randomized OR rct OR clinical trials OR controlled clinical trials OR cct)</p>
CINAHL	<p>MH Diabetes, Gestational OR AB (Diabetes, Pregnancy-Induced OR Diabetes, Pregnancy Induced OR Diabetes Mellitus, Gestational OR Diabetes, Gestational OR diabetes in pregnancy OR Gestational Diabetes OR Gestational Diabetes Mellitus OR GDM OR maternal diabetes OR Pregnancy-Induced Diabetes OR pregnancy diabetes mellitus)</p> <p>AND MH Mobile applications OR MH Telemedicine OR MH internet OR MH Computers OR MH Telecommunications OR MH online system OR MH Software OR MH wireless technology OR MH cell phones OR AB (app OR apps OR application OR applications OR ipad OR blog OR blogging OR computer OR computer interface OR cell phones OR cell phone OR cellular phone OR digital OR digital health OR digital-health OR ehealth OR e-health OR e-mail OR electronic OR E-learning OR Facebook OR health, mobile OR health technolog OR health app OR Internet OR Internet forum OR iphone OR i phone OR i-phone OR ipad OR i pad OR i-pad OR laptop OR linkedin OR mobile OR mobile application OR mobile apps OR mobile app OR mobile phone OR mobile phones OR mhealth OR m-health OR mobile health OR mobile electronic device OR mobile technolog OR mobile communication OR mobile computing OR network OR online OR online intervention OR online interventions OR platform OR personal computer OR personal digital assistant OR QQ OR remote OR smartphone OR smart phone OR social media OR social networking OR telehealth OR tele-health OR telephone OR telemedicine OR tele-medicine OR tele-care OR telecare OR telecommunication OR telemonitor OR tele-monitor OR telemonitoring OR twitter OR web OR web-based OR website OR wireless OR WeChat)</p> <p>AND MH randomized controlled trials OR MH Randomized Controlled Trials as Topic OR MH Controlled Clinical Trial OR MH Controlled Clinical Trials as Topic OR AB (Clinical Trials, Randomized OR Trials, Randomized Clinical OR Controlled Clinical Trials, Randomized OR RCT OR Clinical Trials OR Controlled Clinical Trials OR CCT)</p>
PsycINFO	<p>(Diabetes, Pregnancy-Induced OR Diabetes, Pregnancy Induced OR Diabetes Mellitus, Gestational OR Diabetes, Gestational OR diabetes in pregnancy OR Gestational Diabetes OR Gestational Diabetes Mellitus OR GDM OR maternal diabetes OR Pregnancy-Induced Diabetes OR pregnancy diabetes mellitus)[Any Field]</p> <p>AND (app OR apps OR application OR applications OR ipad OR blog OR blogging OR computer OR computer interface OR cell phones OR cell phone OR cellular phone OR digital OR digital health OR digital-health OR ehealth OR e-health OR e-mail OR electronic OR E-learning OR Facebook OR health, mobile OR health technolog OR health app OR Internet OR Internet forum OR iphone OR i phone OR i-phone OR ipad OR i pad OR i-pad OR laptop OR linkedin OR mobile OR mobile application OR mobile apps OR mobile app OR mobile phone OR mobile phones OR mhealth OR m-health OR mobile health OR mobile electronic device OR mobile technolog OR mobile communication OR mobile computing OR network OR online OR online intervention OR online interventions OR online system OR platform OR personal computer OR personal digital assistant OR QQ OR remote OR smartphone OR smart phone OR social media OR social networking OR Software OR telehealth OR tele-health OR telephone OR telemedicine OR tele-medicine OR tele-care OR telecare OR telecommunication OR telemonitor OR tele-monitor OR telemonitoring OR twitter OR web OR web-based OR website OR wireless OR wireless technology OR WeChat) [Any Field]</p> <p>AND (Randomized Controlled Trial OR Randomized Controlled Trials as Topic OR Controlled Clinical Trial OR Controlled Clinical Trials as Topic OR clinical trials, randomized OR trials, randomized clinical OR controlled clinical trials, randomized OR rct OR clinical trials OR controlled clinical trials OR cct) [Any Field]</p>