Appendix

Contents

Appendix A. Methods

Search Strategies

Database: Ovid MEDLINE(R) ALL
Search Strategy:
---
1 Telemedicine/ (29598)
2 Mobile Applications/ (8384)
3 (telemedicine or telemedical or telehealth or telephone or phone or (cell adj2 (phone or device)) or (cellular adj2 (phone or device)) or (text adj2 messag*) or "texting" or virtual or "remote monitor*" or "ehealth" or "e-health" or "mhealth" or "m-health" or (mobile adj2 health) or (digital adj2 health)).ti,ab,kf. (197288)
4 or/1-3 (211054)
5 Women's Health/ (28423)
6 exp Women/ (39293)
7 Female/ (9130665)
8 (woman or women).ti,kf,sh. (302510)
9 (pregnant or pregnancy).ti,kf,sh. (946208)
10 or/5-9 (9206211)
11 Gynecology/ (19598)
12 Family Planning Services/ (25416)
13 exp Contraception/ (27747)
14 exp Sexually Transmitted Diseases/ (355014)
15 exp Domestic Violence/ (46360)
16 exp Intimate Partner Violence/ (10844)
17 ("reproductive health" or "family planning" or contraception or contraceptive or "sexually transmitted infection*" or "sexually transmitted disease*" or "STI*").ti,ab,kf. (2562045)
18 (violent or violence or abuse or abused or abusive).ti,ab,kf. (190567)
19 or/11-18 (3074671)
20 4 and 10 and 19 (10167)
21 (201607$ or 201608$ or 201609$ or 20161$ or "2016 06 $" or "2016 07 $" or "2016 08 $" or "2016 09 $" or "2016 1 $" or "2016 jun $" or "2016 jul $" or "2016 aug $" or "2016 sep $" or "2016 oct $" or "2016 nov $" or "2016 dec $").dp. (186387)
22 20 and 21 (86)
23 limit 20 to yr="2017 -Current" (3452)
24 22 or 23 (3538)
25 "case reports".pt. (2202140)
26 24 not 25 (3497)
27 limit 26 to english language (3428)

Database: EBM Reviews - Cochrane Central Register of Controlled Trials
Search Strategy:
---
1 Telemedicine/ (2426)
2 Mobile Applications/ (872)

3 (telemedicine or telemedical or telehealth or telephone or phone or (cell adj2 (phone or device)) or (cellular adj2 (phone or device)) or (text adj2 messag*) or "texting" or virtual or "remote monitor*" or "ehealth" or "e-health" or "mhealth" or "m-health" or (mobile adj2 health) or (digital adj2 health)).ti,ab. (46993)
4 or/1-3 (48221)
5 Women's Health/ (879)
6 exp Women/ (716)
7 Female/ (472511)
8 (woman or women).ti,sh. (50665)
9 (pregnant or pregnancy).ti,sh. (32745)
10 or/5-9 (510914)
11 Gynecology/ (162)
12 Family Planning Services/ (262)
13 exp Contraception/ (458)
14 exp Sexually Transmitted Diseases/ (14645)
15 exp Domestic Violence/ (884)
16 ("reproductive health" or "family planning" or contraception or contraceptive or "sexually transmitted infection*" or "sexually transmitted disease*" or "STI*").ti,ab. (164414)
17 (violent or violence or abuse or abused or abusive).ti,ab. (13437)
18 or/11-17 (188649)
19 4 and 10 and 18 (1383)
20 limit 19 to yr="2016 -Current" (661)

Database: CINAHL
Search Strategy:

S1 (MH "Telecommunications+")
S2 TI telemedicine or telemedical or telehealth or telephone or phone or "cell* phone" "or "cell* device" or "text messag*" or "texting" or virtual or "remote monitor*" or "ehealth" or "e-health" or "mhealth" or "m-health" or "mobile health" or "digital health"
S3 AB telemedicine or telemedical or telehealth or telephone or phone or "cell* phone" "or "cell* device" or "text messag*" or "texting" or virtual or "remote monitor*" or "ehealth" or "e-health" or "mhealth" or "m-health" or "mobile health" or "digital health"
S4 S1 OR S2 OR S3
S5 (MH "Women+")
S6 (MH "Women's Health")
S7 (MH "Female")
S8 TI woman or women or pregnant or pregnancy
S9 AB woman or women or pregnant or pregnancy
S10 S5 OR S6 OR S7 OR S8 OR S9
S11 (MH "Reproduction+")
S12 (MH "Gynecology")
S13 (MH "Family Planning")
S14 (MH "Contraception+")
S15 (MH "Sexually Transmitted Diseases+")
S16 (MH "Domestic Violence") OR (MH "Intimate Partner Violence")

S17 TI "reproductive health" or "family planning" or contraception or contraceptive or "sexually transmitted infection*" or "sexually transmitted disease*" or "STI*" or violent or violence or abuse or abused or abusive
S18 AB "reproductive health" or "family planning" or contraception or contraceptive or "sexually transmitted infection*" or "sexually transmitted disease*" or "STI*" or violent or violence or abuse or abused or abusive
S19 S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18
S20 S4 AND S10 AND S19
S21 S4 AND S10 AND S19
S22 S4 AND S10 AND S19
S23 S4 AND S10 AND S19
Limiters - Published Date: 20160601-20211231; Publication Type: Clinical Trial, Journal Article, Meta Analysis, Randomized Controlled Trial, Systematic Review

Database: Elsevier Embase
Search Strategy:

('telehealth'/exp OR 'mobile application'/exp OR telemedicine:ti OR telemedical:ti OR telehealth:ti OR telephone:ti OR phone:ti OR 'cell* phone':ti OR 'cell* device':ti OR 'text messag*':ti OR 'texting':ti OR virtual:ti OR 'remote monitor*':ti OR 'ehealth':ti OR 'e-health':ti OR 'mhealth':ti OR 'm-health':ti OR 'mobile health':ti OR 'digital health':ti) AND ('female'/de OR woman:ti OR women:ti OR pregnant:ti OR pregnancy:ti) AND ('reproductive health'/exp OR 'birth control'/exp OR 'domestic violence'/exp OR 'reproductive health':ti OR 'family planning':ti OR contraception:ti OR contraceptive:ti OR 'sexually transmitted infection*':ti OR 'sexually transmitted disease*':ti OR 'sti*':ti OR violent:ti OR violence:ti OR abuse:ti OR abused:ti OR abusive:ti) AND [english]/lim AND [2016-2021]/py

Inclusion and Exclusion Criteria

The criteria for eligibility of individual studies are based on the Key Questions and PICOS described in the text. Additional details on the scope of this project are provided below and the inclusion and exclusion criteria are outlined in **Table A-1**.

Study Designs: We included comparative studies of any design including comparative trials and observational studies. We included observational cohort studies, including pre-post designs (i.e., the same participants compared across time points) as well as before-after designs (i.e., one group of participants before an intervention/system change compared to a different group after the change). We excluded descriptive studies with no outcomes data or studies that included only data from one point in time (post only). We also excluded modeling studies or studies that used synthetic data. We accessed existing systematic reviews, and reviewed reference lists to identify studies. We also excluded commentaries, letters, and articles that described telehealth systems or implementations but did not assess impact.

Outcomes: In the protocol we specified included outcomes for the following preventive services: family planning, contraception, sexually transmitted infection (STI) counseling, and interpersonal violence (IPV). Only prespecified outcomes for these services were considered and are further defined in **Table A-2.**

Non-English-Language Studies: We restricted to English-language articles, but reviewed English-language abstracts of non-English language articles to identify studies that would otherwise meet inclusion criteria, to assess for the likelihood of language bias.

The systematic review protocol and a request for unpublished information was posted by AHRQ on the Federal Register Supplemental Evidence and Data (SEADs) webpage. Additionally, emails requesting information were sent to individual federal agencies as well as non-governmental organizations involved in telehealth and experts familiar with telehealth practices and policy. The request resulted in one file upload of an unpublished abstract on access to sexual and reproductive health services and care during the COVID-19 pandemic. This paper is currently under review at a journal and will be reviewed for this report when published.

Table A-1. PICOS and Corresponding Inclusion and Exclusion Criteria

	Include	Exclude
Population	Adolescent and adult women (≥13 years), regardless of pregnancy status; eligible for screening, counseling, or treatment for: KQ 1: Reproductive health services: (family planning, contraception, STI counseling) KQ 2: IPV	• Men • Age <13 years

	Include	Exclude
Interventions	KQ1: Reproductive health services: • Family planning (preconception counseling and care) • Contraception (screening, counseling, provision, and follow-up care) • STI counseling KQ2: Interpersonal violence (intimate partner violence, domestic violence) KQ 1a, 1b, 1e, 1f, 2a, 2b, 2e, and 2f: Telehealth and virtual health, defined as: • Any two-way telehealth strategy intended to supplement or replace traditional in-person care (e.g. virtual visits, remote monitoring, mobile applications, at-home use of medical devices, use of a facilitator; use of patient-portal or electronic medical record) • Must include direct contact between a clinician or other provider and a patient or group of patients • Telehealth can be synchronous or asynchronous • Interventions may be comprised of a single telehealth strategy or may be delivered as telehealth packages, comprised of multiple telehealth strategies. KQ 1c, 1d, 2c, and 2d: Patient engagement strategies using telehealth and virtual health	• KQ1: Non-FDA-approved contraceptive devices, medications, and other methods that are not currently in clinical use in the U.S. as of 2021 • Telehealth clinician-to-clinician consults • Interventions without bidirectional communication between the patient and the health care team (e.g., one-way email or text messages) • Peer-led interventions (no clinician involvement) • Maternity Care
Comparators	• For effectiveness and harms (KQ 1a, 1c, 1d, 1f, 2a, 2c, 2d, 2f): Usual or in-person care or traditional care models (care provided without telehealth); telehealth + in-person care vs. in-person care alone (augmentation) • For barriers, facilitators, preferences (KQ 1b, 1e, 2b, 2e): Studies with or without comparison groups (i.e. patients' perceptions are based on comparisons of their own previous experiences) • KQ 1d and 2d: during COVID-19: Clinical services before and after COVID-19 pandemic	No comparison for effectiveness and harms

Outcomes	For all conditions and services
	KQ 1a and 2a:
	• Clinical effectiveness, patient health outcomes (see specific outcomes)
	• Quality of life, function
	KQ 1b, 1c, 1d, 2b, 2c, and 2d: Measures or descriptions of patient satisfaction, patient engagement and activation, patient choice
	KQ 1e and 2e: Measures or descriptions of barriers and facilitators in low-resource settings
	• Patient-reported outcomes: patient empowerment, engagement, and satisfaction
	• Measures of health care access, equity, and utilization
	  ○ Rates of screening and followup; adherence; no-shows
	  ○ Utilization of services
	KQ 1f and 2f: Harms (e.g. missed diagnosis, incorrect diagnosis, overdiagnosis, delay in treatment, increase in redundant testing or in low-value care, mental health outcomes, stress, anxiety, loss to followup)
		• Outcomes not relevant to the KQs
		• Cost analyses
		• Patient knowledge/education

Clinical setting	• Home, outpatient, primary care, or primary care-referable • Contact can be simultaneous (synchronous) or communicating across time (asynchronous) • Individuals providing care include a broad range of health care workers (physicians, nurses, pharmacists, counselors, etc.) • No geographic restriction: can be urban, suburban, or rural	Studies of health care services delivered outside of health care settings (e.g., social services, churches, schools, prisons)

	Include	Exclude
Country setting	Research conducted in the U.S. or in populations similar to U.S. populations, with services and interventions applicable to U.S. practice (i.e., countries with a United Nations HDI of "very high")	Countries with significantly different health care systems and fewer resources (e.g., low-income countries); not rated 'very high' on the 2018 HDI
Study types and designs	• RCTs • A best evidence approach will be used for considering inclusion of observational studies (non-RCT with some type of comparison): ○ Comparative studies including trial and observational studies, including prospective and retrospective cohort studies and before-after studies (i.e., natural experiments) ○ Qualitative studies that evaluate preferences, barriers/facilitators ○ Studies that specifically note that they were conducted during the COVID-19 pandemic (e.g. either specify they are assessing effects of COVID-19, or compare practices before and after March 2020) will be included. Studies with data that overlap this period will be considered only if results are stratified by pre-post pandemic.	Case reports, case series
Language	English language	Non-English

Abbreviations: COVID-19=novel coronavirus; FDA=U.S. Food and Drug Administration; HDI=human development index rating; KQ=key question; RCT=randomized controlled trial; STI=sexually transmitted infection; US=United States

Table A-2. Table of Outcomes by Preventive Service

Category	Included outcomes
Family planning	• Desired pregnancy; unwanted/unintended pregnancy • Interpregnancy interval • Resource utilization
Contraception	• Reduced unintended or unwanted pregnancy and births • Increased contraceptive use/uptake • Change in contraceptive method • Reproductive health outcomes • Harms associated with contraceptive care (e.g., complications of contraceptive methods; delayed method start; unable to start method of choice; reproductive coercion)
STI counseling	• Health outcomes: ○ STI incidence (based on testing/biologic confirmation) ○ STI complications • Behavioral outcomes: ○ Changes in STI risk behaviors (e.g., multiple sexual partners, concurrent sexual partners, sexual partners with high STI risk, unprotected sexual intercourse or contact, sex while intoxicated with alcohol or other substances, sex in exchange for money or drugs) ○ Changes in protective behaviors (e.g., sexual abstinence; mutual monogamy; delayed initiation of intercourse or age of sexual debut; use of condoms, other barrier methods, or chemical barriers; or other changes in sexual behavior) • STI harms: ○ Health care avoidance ○ Psychological harms (e.g., anxiety, shame, guilt, stigma)

Category	Included outcomes

IPV	• Health outcomes
	  ○ Reduced exposure to IPV as measured by a validated instrument (e.g., Community Composite Scale), self-report frequency of abuse (e.g., number of physical/sexual assaults), or discontinuation of an unsafe relationship
	  ○ Physical morbidity caused by IPV, including acute physical trauma (e.g., fractures, dislocations)
	  ○ Mental health morbidity caused by IPV, including acute mental morbidity (e.g., stress, nightmares) and chronic mental health conditions (e.g., posttraumatic stress disorder, anxiety, depression)
	  ○ Sexual trauma, unintended pregnancy, pregnancy loss, and sexually transmitted infections
	  ○ Health care utilization attributed to physical or mental effects of IPV (e.g., rates of emergency room visits);
	  ○ Social isolation
	• Harms
	  ○ Increased abuse or other forms of retaliation; and other reported harms of screening or identification

Abbreviations: IPV=interpersonal violence; KQ=key question; STI=sexually transmitted infections

Process for Selecting Studies: Pre-established criteria as presented in **Table A-1** was used to determine eligibility for inclusion and exclusion of abstracts in accordance with the AHRQ *Methods Guide for Effectiveness and Comparative Effectiveness Reviews*.[1] After de-duplication, we imported all references to DistillerSR for managing abstract and full-text review. To ensure accuracy, all excluded abstracts were dual reviewed. Full-text was retrieved for all citations deemed appropriate for inclusion by at least one of the reviewers. All potentially relevant full-text articles were independently reviewed for eligibility by two team members. Any disagreements were resolved by consensus. A flow diagram of study screening and inclusion is below in **Appendix B**, and a record of studies included in the review and those excluded at the full-text level with reasons for exclusion can be found in **Appendix C** and **D**, respectively.

Data Extraction

After studies were deemed to meet inclusion criteria, we abstracted study design, year, setting, country, sample size, patient and providers types and characteristics (e.g., age, sex, race, reason for presentation, diagnosis, and provider specialty), intervention characteristics (e.g., mode of delivery, duration or frequency, function) and results relevant to each Key Question as outlined in the PICOS section in **Tables A-1 and A-2**. Information relevant for assessing applicability included the number of patients randomized/eligible for inclusion in an observational study relative to the number of patients enrolled or the number and diversity of settings or locations as well characteristics of the population, telehealth intervention or implementation strategy, and administrating personnel. Sources of funding for all studies were also recorded. All study data was extracted into Excel and verified for accuracy and completeness by a second team member.

Risk of Bias (Quality) Assessment of Individual Studies

Predefined criteria were used to assess the risk of bias (also referred to as quality or internal validity) for each individual included study, using criteria appropriate for the study designs. Controlled trials and observational studies were assessed using a priori established criteria consistent with the AHRQ-EPC approach recommended in the chapter, Assessing the Risk of

Bias of Individual Studies When Comparing Medical Interventions in the *Methods Guide for Effectiveness and Comparative Effectiveness Reviews*.[1]

For randomized controlled trials we assessed adequacy of randomization and allocation concealment, eligibility criteria, baseline differences between groups, intention-to-treat analyses, attrition and adherence levels, blinding methods, reliable and consistently implemented outcome measures, and prespecified and reported outcomes. For observational cohort studies, we assessed eligibility criteria, participant selection, baseline differences between groups, reliable and consistently implemented outcome measures, blinding of outcome assessors or data analysts, amount and handling of missing data, loss-to-follow up and attrition, and prespecified and reported outcomes. Individual studies were rated as "low risk of bias," "moderate risk of bias," or "high risk of bias," and ratings can be found in **Appendix E**.

Modified risk of bias assessment tools have been developed by the National Institutes of Health (NIH) to assist researchers in focusing on concepts key to a study's internal validity. These tools have not been independently published and are not considered standardized, but may be useful for interpreting research findings. Criteria for evaluating the cross-sectional studies, derived from a set of questions developed by members of this review team for a Health Information Exchange systematic review,[2] were used to distinguish the relative quality of the studies done during the COVID-19 pandemic. These assessments are defined in **Table A-3** and **A-4** below.

Studies rated "low risk of bias" are considered to have the least risk of bias, and their results are generally considered valid. "Low risk of bias" studies include clear descriptions of the population, setting, interventions, and comparison groups; a valid method for allocation of patients to treatment; low dropout rates and clear reporting of dropouts; appropriate means for preventing bias; and appropriate measurement of outcomes.

Studies rated "moderate risk of bias" are susceptible to some bias, though not enough to invalidate the results. These studies may not meet all the criteria for a rating of low risk of bias, but no flaw is likely to cause major bias. The study may be missing information, making it difficult to assess limitations and potential problems. The "moderate risk of bias" category is broad, and studies with this rating will vary in their strengths and weaknesses. The results of some moderate risk of bias studies are likely to be valid, while others may be only possibly valid.

Studies rated "high risk of bias" have significant flaws that imply biases of various types that may invalidate the results. They have a serious or "fatal" flaw in design, analysis, or reporting; large amounts of missing information; discrepancies in reporting; or serious problems in the delivery of the intervention. In general, observational studies that do not perform adjustment for potential confounders will be assessed as "high risk of bias." This is because it is likely the results of these studies are at least as likely to reflect flaws in the study design as the true difference between the compared interventions. We did not exclude studies rated high risk of bias a priori, but high risk of bias studies were considered to be less reliable than low or medium risk of bias studies when synthesizing the evidence, particularly if discrepancies between studies were present.

Each study evaluated was independently reviewed by two team members. Any disagreements were resolved by consensus.

Table A-3. Modified Risk of Bias Assessment Tool for Pre-Post, Before-After, and Interrupted Time-Series Studies*

Criteria	Response options		
Were all eligible participants that met the prespecified entry criteria enrolled?	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Were the outcome measures prespecified, clearly defined, valid, reliable, and assessed consistently across all study participants?	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Were the people assessing the outcomes blinded to the participants' exposures/interventions?	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Were outcome measures of interest taken multiple times before the intervention and multiple times after the intervention (i.e., did they use an interrupted time-series design)? (this is also about the same patients)	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Risk of bias rating			Low, Moderate, High

*National Institutes of Health (NIH) quality assessment tool for before-after (Pre-Post) study with no control group, https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools

Table A-4. Risk of Bias Criteria for Cross-Sectional Surveys*

Criteria	Response options		
Is the sampling strategy or selection criteria reported and appropriate?	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Are the response or participation rates reported and are they acceptable given the type of study?	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Are characteristics (e.g., demographics) of respondents/participants reported?	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Is how the questions were developed/selected reported and is it appropriate?	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Were confounders considered? (could be in analysis or presentation, such as stratifying results)	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Is analysis appropriate? (given the type of data)	Yes	No	Cannot Determine/ Not Applicable/ Not Reported
Risk of bias rating			Low, Moderate, High

*Source: Hersh W, Totten A, Eden K, et al. Health Information Exchange. Evid Rep Technol Assess (Full Rep). 2015 (220):1-465. doi: 10.23970/ahrqepcerta220. PMID: 30307736.

Data Analysis and Synthesis

Evidence tables identify study characteristics, results of interest, and risk of bias ratings for all included studies and summary tables highlight the main findings **(Appendix E)**. Since the key questions varied in nature and scope, our approach to synthesis also differed.

Quantitative data was summarized in tables; ranges of results, descriptive analysis, and interpretation of the results is provided. Meta-analyses were not performed as they would not producing meaningful results due to limited numbers of studies reporting similar outcomes, and heterogeneity based on study design, patient population, and interventions.

Standard systematic review methods were applied to evaluate studies and highlight studies using a hierarchy-of-evidence approach. Randomized trials were prioritized; studies with lower risk of bias ratings were given more weight in our synthesis for each clinical indication and outcome. Qualitative data are summarized in tables (**Appendix E**) with ranges provided. Descriptive analysis and interpretation of the results are provided based on the direction and magnitude of effect. Using qualitative synthesis, we created categories of results based primarily on the direction of the effect, whether there was statistical significance or not, with less emphasis on the magnitude of the effect (e.g., large difference in benefits, no difference in harms), reporting findings according to risk of bias ratings, and summarizing results across studies grouped by preventive service and/or telehealth function/modality.

For synthesis of qualitative data on barriers, facilitators, and patient preferences (KQ1b, e and KQ 2b, e), key statements from each study were extracted and categorized according to theme and type of preventive service (family planning, contraception, STI counseling, IPV). Main themes and frequencies of occurrences across studies are summarized in tables (**see Appendix E**). Results are compared with results of quantitative studies reporting barriers, facilitators, and preferences as available to determine coherence of findings across all sources in the systematic review.

There was not sufficient data available for any of the KQs to conduct an additional analysis of populations particularly affected by potential barriers to preventive care services delivered via telehealth. Although health equity, access, utilization, and disparities were considered for inclusion, they were not reported by studies.

Grading the Strength of the Body of Evidence

The strength of evidence (SOE) for each Key Question was assessed by one researcher for each clinical outcome (see PICOS). For KQ1a, c, d (effectiveness) we used the approach described in the *Methods Guide for Effectiveness and Comparative Effectiveness Reviews*.[1] To ensure reliability and validity of the evaluation, the body of evidence was assessed for the following criteria as they are defined in the Methods Guide:

- Study limitations (low, medium, or high level of study limitations)
    - Rated as the degree to which studies for a given outcome are likely to reduce bias with study design and study conduct, based on risk of bias assessments.
- Consistency (consistent, inconsistent, or unknown/not applicable)
    - Rated by degree to which studies find similar magnitude of effect (i.e., range sizes are similar) or same direction (i.e., effect sizes have the same sign) or where there was only one study of a given design, we assessed consistency as "unknown" and downgraded the SOE.
- Directness (direct or indirect)
    - Rated by degree to which evidence assesses a) comparison of interest, b) in the population of interest, and measures the specific outcome of interest.
- Precision (precise or imprecise)
    - Degree of certainty surrounding an effect estimate as it relates to a specific outcome. This may be based on sufficiency of sample size and number of events, and if these are adequate, the interpretation of the confidence interval.

KQs 1b, d, e and 2b, d, e are descriptive and modified SOE assessment was conducted based on criteria for specific study designs (**Tables A-3 and A-4**). We prioritized reports of U.S. national or regional studies over local reports or data from other countries. We summarized the strengths and limitations of the data collection and analyses of the included reports for these questions, with a focus on elements such as the extent the sample represents the population of interest and the completeness and reliability of the data.

The evidence for KQs 1b, d, e and 2b, d, e consisted of studies that use qualitative methods (e.g., interviews, case studies, focus groups) as well as quantitative methods and the studies were not comparative. For these reasons the SOE approach planned for the other KQs was not applicable. To address this, we assessed the fit of the GRADE-CERQual approach to our included studies for these questions.[3] When applicable to the body of literature, we assessed SOE based on the following domains from this framework:

- Methodological limitations
- Coherence
- Adequacy
- Relevance

The bodies of evidence were assigned an overall SOE grade of high, moderate, low, or insufficient according to a four-level scale by evaluating and weighing the combined results of the above domains (**Table A-5**). Because studies were anticipated to be heterogeneous in the interventions, clinical settings, and outcomes, we did not anticipate that meta-analysis would be possible. As such, the conclusion of findings being similar were based on individual studies not finding statistically significant differences, with consistency across multiple studies in this finding, and that the point estimates were not subjectively viewed as being large. Importantly, studies with moderate SOE had assurance that each study had sufficient power to detect meaningful differences together with the range of reported effect estimates.

Table A-5. Definitions of the Grades of Overall Strength of Evidence

Grade	Definition
High	Very confident that the estimate of effect lies close to the true effect for this outcome. The body of evidence has few or no deficiencies. The findings are stable (i.e., another study would not change the conclusions).
Moderate	Moderately confident that the estimate of effect lies close to the true effect for this outcome. The body of evidence has some deficiencies. The findings are likely to be stable, but some doubt remains.
Low	Limited confidence that the estimate of effect lies close to the true effect for this outcome. The body of evidence has major or numerous deficiencies (or both). Additional evidence is needed before concluding either that the findings are stable or that the estimate of effect is close to the true effect.
Insufficient	No evidence. Investigators are unable to estimate an effect, or have no confidence in the estimate of effect for this outcome. No evidence is available, or the body of evidence has unacceptable deficiencies, precluding reaching a conclusion.

Appendix B. Results

Results of Literature Searches

A total of 5,282 references were identified from electronic database searches. After dual review of abstracts, 301 articles were evaluated for inclusion. Search results and selection of studies are summarized in the literature flow diagram (**Figure 2** in the report). A total of 14 studies were included (7 for each key question). **Table B-1** reports the characteristics of the included studies. The list of included studies is in **Appendix C** and excluded studies with reason for exclusion are in **Appendix G.**

Table B-1. Characteristics of Included Studies

Characteristic	Categories	Number of Articles
Clinical Preventive Service	Family Planning	0
	Contraception	7[4-10]
	STI counseling	0
	IPV	7[11-17]
Mode of Telehealth	Telephone	5[4,6,15-17]
	Mobile App	1[14]
	Online Module	3[11-13]
	Unclear or undefined mode	5[5,7-10]
Outcome categories	Patient	11[4-6,9,11-17]
	Clinician	3[7,8,10]
Study Design	RCT	6[4,6,11-13,17]
	Controlled observational study	1[15]
	Observational-before/after	1[14]
	Observational-pre/post	0
	Observational-cross-sectional	6[5,7-10,16]
Sample Size	Under 100	2[8,16]
	100-500	5[9,12,13,15,17]
	501-1000	4[6,7,11,14]
	1001-10,000	3[4,5,10]
Geographic Location	United States, Urban/suburban	5[4,9,12,15,17]
	United States, Mixed/unclear	6[5,7,8,10,14,16]
	United States, Rural	0
	United Kingdom	1[6]
	Canada	1[11]
	Australia	1[13]
Risk of Bias	Low	2[7,13]
	Moderate	11[4-6,8-12,14,15,17]
	High	1[16]

Abbreviations: IPV=interpersonal violence; RCT=randomized controlled trial; STI=sexually transmitted infection

Appendix C. Included Studies List

1. Berenson AB, Rahman M. A randomized controlled study of two educational interventions on adherence with oral contraceptives and condoms. Contraception. 2012;86(6):716-24. doi: 10.1016/j.contraception.2012.06.007. PMID: 22840278.
2. Ford-Gilboe M, Varcoe C, Scott-Storey K, et al. Longitudinal impacts of an online safety and health intervention for women experiencing intimate partner violence: randomized controlled trial. BMC Public Health. 2020;20(1):260. doi: 10.1186/s12889-020-8152-8. PMID: 32098633.
3. Gilbert L, Shaw SA, Goddard-Eckrich D, et al. Project WINGS (Women Initiating New Goals of Safety): A randomised controlled trial of a screening, brief intervention and referral to treatment (SBIRT) service to identify and address intimate partner violence victimisation among substance-using women receiving community supervision. Crim Behav Ment Health. 2015;25(4):314-29. doi: 10.1002/cbm.1979. PMID: 26482019.
4. Hegarty K, Tarzia L, Valpied J, et al. An online healthy relationship tool and safety decision aid for women experiencing intimate partner violence (I-DECIDE): a randomised controlled trial. Lancet Public Health. 2019;4(6):e301-e10. doi: 10.1016/s2468-2667(19)30079-9. PMID: 31155223.
5. Hill BJ, Lock L, Anderson B. Racial and ethnic differences in family planning telehealth use during the onset of the COVID-19 response in Arkansas, Kansas, Missouri, and Oklahoma. Contraception. 2021;104(3):262-4. doi: 10.1016/j.contraception.2021.05.016. PMID: 34058223.
6. Krishnamurti T, Davis AL, Quinn B, et al. Mobile remote monitoring of intimate partner violence among pregnant patients during the COVID-19 shelter-in-place order: quality improvement pilot study. J Med Internet Res. 2021;23(2):e22790. doi: 10.2196/22790. PMID: 33605898.
7. Kumar U, Pollard L, Campbell L, et al. Specialist follow-up contraceptive support after abortion-Impact on effective contraceptive use at six months and subsequent abortions: a randomised controlled trial. PLoS ONE [Electronic Resource]. 2019;14(6):e0217902. doi: https://dx.doi.org/10.1371/journal.pone.0217902. PMID: 31185058.
8. McFarlane J, Malecha A, Gist J, et al. Increasing the safety-promoting behaviors of abused women. Am J Nurs. 2004;104(3):40-50; quiz -1. doi: 10.1097/00000446-200403000-00019. PMID: 15108570.
9. Sabri B, Hartley M, Saha J, et al. Effect of COVID-19 pandemic on women's health and safety: a study of immigrant survivors of intimate partner violence. Health Care Women Int. 2020;41(11-12):1294-312. doi: 10.1080/07399332.2020.1833012. PMID: 33085577.
10. Saftlas AF, Harland KK, Wallis AB, et al. Motivational interviewing and intimate partner violence: a randomized trial. Ann Epidemiol. 2014;24(2):144-50. doi: 10.1016/j.annepidem.2013.10.006. PMID: 24252714.
11. Steiner RJ, Zapata LB, Curtis KM, et al. COVID-19 and sexual and reproductive health care: findings from primary care providers who serve adolescents. J Adolesc Health. 2021;69(3):375-82. doi: 10.1016/j.jadohealth.2021.06.002. PMID: 34301467.
12. Stifani BM, Avila K, Levi EE. Telemedicine for contraceptive counseling: an exploratory survey of US family planning providers following rapid adoption of services during the COVID-19 pandemic. Contraception. 2021;103(3):157-62. doi: 10.1016/j.contraception.2020.11.006. PMID: 33212033.
13. Stifani BM, Smith A, Avila K, et al. Telemedicine for contraceptive counseling: patient experiences during the early phase of the COVID-19 pandemic in New York City. Contraception. 2021;104(3):254-61. doi: 10.1016/j.contraception.2021.04.006. PMID: 33861981.
14. Zapata LB, Curtis KM, Steiner RJ, et al. COVID-19 and family planning service delivery: findings from a survey of U.S. physicians. Prev Med. 2021;150:106664. doi: 10.1016/j.ypmed.2021.106664. PMID: 34081938.

Appendix D. Excluded Studies List

1. Abrahams N, Jewkes R, Lombard C, et al. Impact of telephonic psycho-social support on adherence to post-exposure prophylaxis (PEP) after rape. AIDS Care. 2010;22(10):1173-81. doi: 10.1080/09540121003692185. PMID: 20640949. **Exclusion reason:** Ineligible intervention
2. Abroms LC, Johnson PR, Leavitt LE, et al. A randomized trial of text messaging for smoking cessation in pregnant women. Am J Prev Med. 2017;53(6):781-90. doi: 10.1016/j.amepre.2017.08.002. PMID: 28982527. **Exclusion reason:** Ineligible intervention
3. Ahmad F, Hogg-Johnson S, Stewart DE, et al. Computer-assisted screening for intimate partner violence and control: a randomized trial. Ann Intern Med. 2009;151(2):93-102. doi: 10.7326/0003-4819-151-2-200907210-00124. PMID: 19487706. **Exclusion reason:** Ineligible intervention
4. Ahmed AH, Roumani AM, Szucs K, et al. The effect of interactive web-based monitoring on breastfeeding exclusivity, intensity, and duration in healthy, term infants after hospital discharge. J Obstet Gynecol Neonatal Nurs. 2016;45(2):143-54. doi: 10.1016/j.jogn.2015.12.001. PMID: 26779838. **Exclusion reason:** Ineligible intervention
5. Aicken CRH, Fuller SS, Sutcliffe LJ, et al. Young people's perceptions of smartphone-enabled self-testing and online care for sexually transmitted infections: qualitative interview study. BMC Public Health. 2016;16(1):1-11. doi: 10.1186/s12889-016-3648-y. PMID: 118158122. **Exclusion reason:** Ineligible population
6. Aicken CRH, Sutcliffe LJ, Gibbs J, et al. Using the eSexual Health Clinic to access chlamydia treatment and care via the internet: a qualitative interview study. Sex Transm Infect. 2018;94(4):241-7. doi: 10.1136/sextrans-2017-053227. PMID: 28988193. **Exclusion reason:** Ineligible population
7. Akinola M, Hebert LE, Hill BJ, et al. Development of a mobile app on contraceptive options for young African American and Latina women. Health Educ Behav. 2019;46(1):89-96. doi: 10.1177/1090198118775476. PMID: 29896969. **Exclusion reason:** Ineligible intervention
8. Alemi F, Stephens RC, Javalghi RG, et al. A randomized trial of a telecommunications network for pregnant women who use cocaine. Med Care. 1996;34(10 Suppl):Os10-20. doi: 10.1097/00005650-199610003-00002. PMID: 8843933. **Exclusion reason:** Ineligible intervention
9. Alhusen JL, Bloom T, Anderson J, et al. Intimate partner violence, reproductive coercion, and unintended pregnancy in women with disabilities. Disabil Health J. 2020;13(2):100849. doi: 10.1016/j.dhjo.2019.100849. PMID: 31679950. **Exclusion reason:** Ineligible intervention
10. Alvarez C, Debnam K, Clough A, et al. Responding to intimate partner violence: healthcare providers' current practices and views on integrating a safety decision aid into primary care settings. Res Nurs Health. 2018;41(2):145-55. doi: 10.1002/nur.21853. PMID: 29441596. **Exclusion reason:** Ineligible intervention
11. Anderson EJ, Krause KC, Meyer Krause C, et al. Web-based and mHealth interventions for intimate partner violence victimization prevention: a systematic review. Trauma Violence Abuse. 2019:1524838019888889. doi: 10.1177/1524838019888889. PMID: 31742475. **Exclusion reason:** Ineligible intervention
12. Anderson EJ, McClelland J, Meyer Krause C, et al. Web-based and mHealth interventions for intimate partner violence prevention: a systematic review protocol. BMJ Open. 2019;9(8):e029880. doi: 10.1136/bmjopen-2019-029880. PMID: 31401604. **Exclusion reason:** Ineligible intervention
13. Anonymous. Implementing telehealth in practice: ACOG Committee opinion summary, number 798. Obstet Gynecol. 2020;135(2):493-4. doi: 10.1097/AOG.0000000000003672. PMID: 31977794. **Exclusion reason:** Not a study
14. Aragao JMN, Gubert FDA, Torres RAM, et al. The use of Facebook in health education: perceptions of adolescent students. Rev Bras Enferm. 2018;71(2):265-71. doi: 10.1590/0034-7167-2016-0604. PMID: 29412282. **Exclusion reason:** Ineligible intervention
15. Aronowitz SV. Taking call. Am J Nurs. 2021;121(5):11. doi: 10.1097/01.NAJ.0000751024.74461.ae. PMID: 33872240. **Exclusion reason:** Not a study
16. Asklund I, Nyström E, Sjöström M, et al. Mobile app for treatment of stress urinary incontinence: a randomized controlled trial. Neurourol Urodyn. 2017;36(5):1369-76. doi: 10.1002/nau.23116. PMID: 27611958. **Exclusion reason:** Ineligible intervention
17. Atnafu A, Otto K, Herbst CH. The role of mHealth intervention on maternal and child health service delivery: findings from a randomized controlled field trial in rural Ethiopia. MHealth. 2017;3:39-. doi: 10.21037/mhealth.2017.08.04. PMID: 29184891. **Exclusion reason:** Ineligible country

18. Bacchus LJ, Bullock L, Sharps P, et al. Infusing technology into perinatal home visitation in the United States for women experiencing intimate partner violence: exploring the interpretive flexibility of an mHealth intervention. J Med Internet Res. 2016;18(11):e302. doi: 10.2196/jmir.6251. PMID: 27856405. **Exclusion reason:** Ineligible intervention
19. Bacchus LJ, Bullock L, Sharps P, et al. Infusing technology into perinatal home visitation in the united states for women experiencing intimate partner violence: exploring the interpretive flexibility of an mHealth intervention. J Med Internet Res. 2016;18(11):e302. doi: 10.2196/jmir.6251. PMID: 27856405. **Exclusion reason:** Ineligible intervention
20. Baraitser P, McCulloch H, Morelli A, et al. How do users of a 'digital-only' contraceptive service provide biometric measurements and what does this teach us about safe and effective online care? A qualitative interview study. BMJ Open. 2020;10(9):e037851. doi: 10.1136/bmjopen-2020-037851. PMID: 32994244. **Exclusion reason:** No comparison
21. Barbara G, Facchin F, Micci L, et al. COVID-19, lockdown, and intimate partner violence: some data from an Italian service and suggestions for future approaches. J Womens Health (Larchmt). 2020;29(10):1239-42. doi: 10.1089/jwh.2020.8590. PMID: 33006492. **Exclusion reason:** Ineligible intervention - background papers
22. Barney A, Buckelew S, Mesheriakova V, et al. The COVID-19 pandemic and rapid implementation of adolescent and young adult telemedicine: challenges and opportunities for innovation. Journal of Adolescent Health. 2020;67(2):164-71. doi: 10.1016/j.jadohealth.2020.05.006. PMID: 32410810. **Exclusion reason:** Ineligible intervention
23. Batra P, Mangione CM, Cheng E, et al. A cluster randomized controlled trial of the MyFamilyPlan online preconception health education tool. Am J Health Promot. 2018;32(4):897-905. doi: 10.1177/0890117117700585. PMID: 28391703. **Exclusion reason:** Ineligible intervention
24. Bello JK, Chavez J, Liederbauer V, et al. Perceptions of a Spanish language reproductive health self-assessment tool among Spanish-speaking women at a federally qualified health center. J Immigr Minor Health. 2020;22(4):691-700. doi: 10.1007/s10903-020-00988-6. PMID: 32072377. **Exclusion reason:** Ineligible intervention
25. Berglund Scherwitzl E, Gemzell Danielsson K, Sellberg JA, et al. Fertility awareness-based mobile application for contraception. Eur J Contracept Reprod Health Care. 2016;21(3):234-41. doi: 10.3109/13625187.2016.1154143. PMID: 27003381. **Exclusion reason:** Ineligible intervention
26. Berglund Scherwitzl E, Lundberg O, Kopp Kallner H, et al. Short- and long-term effect of contraceptive methods on fecundity. European Journal of Contraception & Reproductive Health Care. 2019;24(4):260-5. doi: 10.1080/13625187.2019.1621999. PMID: 31223036. **Exclusion reason:** Ineligible intervention
27. Blair DL, Morgan HM, McLernon DJ. Women's perspectives on smartphone apps for fertility tracking and predicting conception: a mixed methods study. Eur J Contracept Reprod Health Care. 2021;26(2):119-27. doi: 10.1080/13625187.2021.1874336. PMID: 33576699. **Exclusion reason:** Ineligible intervention
28. Blayney JA, Jenzer T, Read JP, et al. Enlisting friends to reduce sexual victimization risk: there's an app for that... but nobody uses it. J Am Coll Health. 2018;66(8):767-73. doi: 10.1080/07448481.2018.1446439. PMID: 29488831. **Exclusion reason:** Ineligible intervention
29. Bloom T, Gielen A, Glass N. Developing an app for college women in abusive same-sex relationships and their friends. J Homosex. 2016;63(6):855-74. doi: 10.1080/00918369.2015.1112597. PMID: 26515797. **Exclusion reason:** Ineligible intervention
30. Bloom TL, Glass NE, Case J, et al. Feasibility of an online safety planning intervention for rural and urban pregnant abused women. Nurs Res. 2014;63(4):243-51. doi: 10.1097/nnr.0000000000000036. PMID: 24977721. **Exclusion reason:** Ineligible outcome(s)
31. Borrero S, Callegari LS, Zhao X, et al. Unintended pregnancy and contraceptive use among women veterans: the ECUUN Study. J Gen Intern Med. 2017;32(8):900-8. doi: 10.1007/s11606-017-4049-3. PMID: 28432564. **Exclusion reason:** Ineligible intervention - background papers
32. Bracken H, Lohr PA, Taylor J, et al. RU OK? The acceptability and feasibility of remote technologies for follow-up after early medical abortion. Contraception. 2014;90(1):29-35. doi: 10.1016/j.contraception.2014.03.016. PMID: 24815098. **Exclusion reason:** Ineligible intervention
33. Braithwaite SR, Fincham FD. Computer-based prevention of intimate partner violence in marriage. Behav Res Ther. 2014;54:12-21. doi: 10.1016/j.brat.2013.12.006. PMID: 24463577. **Exclusion reason:** Ineligible intervention
34. Brayboy LM, McCoy K, Thamotharan S, et al. The use of technology in the sexual health education especially among minority adolescent girls in the United States. Curr Opin Obstet Gynecol.

2018;30(5):305-9. doi: 10.1097/GCO.0000000000000485. PMID: 30153129. **Exclusion reason:** Ineligible study design
35. Brown HL, DeNicola N. Telehealth in maternity care. Obstet Gynecol Clin North Am. 2020;47(3):497-502. doi: 10.1016/j.ogc.2020.05.003. PMID: 32762934. **Exclusion reason:** Ineligible intervention - background papers
36. Brown KE, Beasley K, Das S. Self-control, plan quality, and digital delivery of action planning for condom and contraceptive pill use of 14-24-year-olds: findings from a clinic-based online pilot randomised controlled trial. Appl Psychol Health Well Being. 2018;10(3):391-413. doi: 10.1111/aphw.12138. PMID: 30198101. **Exclusion reason:** Ineligible intervention
37. Bull S, Devine S, Schmiege SJ, et al. Text messaging, teen outreach program, and sexual health behavior: a cluster randomized trial. Am J Public Health. 2016;106(S1):S117-S24. doi: 10.2105/AJPH.2016.303363. PMID: 27689478. **Exclusion reason:** Ineligible intervention
38. Burke SM. Texting as a strategy to increase contraception use compliance in adolescent females. J Pediatr Nurs. 2018;43:134-5. doi: 10.1016/j.pedn.2018.08.006. PMID: 30213502. **Exclusion reason:** Not a study
39. Burnett J, Dyer CB, Clark LE, et al. A statewide elder mistreatment virtual assessment program: preliminary data. J Am Geriatr Soc. 2019;67(1):151-5. doi: 10.1111/jgs.15565. PMID: 30221757. **Exclusion reason:** Ineligible outcome(s)
40. Bush J, Barlow DE, Echols J, et al. Impact of a Mobile Health Application on User Engagement and Pregnancy Outcomes Among Wyoming Medicaid Members. Telemed J E Health. 2017;23(11):891-8. doi: 10.1089/tmj.2016.0242. PMID: 28481167. **Exclusion reason:** Ineligible intervention
41. Byker T, Myers C, Graff M. Can a social media campaign increase the use of long-acting reversible contraception? Evidence from a cluster randomized control trial using Facebook. Contraception. 2019;100(2):116-22. doi: 10.1016/j.contraception.2019.04.001. PMID: 137361022. **Exclusion reason:** Ineligible intervention
42. Caballero-Ruiz E, García-Sáez G, Rigla M, et al. A web-based clinical decision support system for gestational diabetes: automatic diet prescription and detection of insulin needs. Int J Med Inform. 2017;102:35-49. doi: 10.1016/j.ijmedinf.2017.02.014. PMID: 28495347. **Exclusion reason:** Ineligible intervention
43. Carey MP, Dunne EM, Norris A, et al. Telephone-delivered mindfulness training to promote medication adherence and reduce sexual risk behavior among persons living with HIV: an exploratory clinical trial. AIDS Behav. 2020;24(6):1912-28. doi: 10.1007/s10461-019-02768-2. PMID: 31848765. **Exclusion reason:** Ineligible intervention
44. Caruso S, Rapisarda AMC, Minona P. Sexual activity and contraceptive use during social distancing and self-isolation in the COVID-19 pandemic. European Journal of Contraception & Reproductive Health Care. 2020;25(6):445-8. doi: 10.1080/13625187.2020.1830965. PMID: 33044107. **Exclusion reason:** Ineligible intervention
45. Chabot C, Gilbert M, Haag D, et al. Anticipating the potential for positive uptake and adaptation in the implementation of a publicly funded online STBBI testing service: a qualitative analysis. BMC Health Serv Res. 2018;18(1):57. doi: 10.1186/s12913-018-2871-x. PMID: 29378574. **Exclusion reason:** No comparison
46. Chandler R, Guillaume D, Parker A, et al. Developing culturally tailored mHealth tools to address sexual and reproductive health outcomes among Black and Latina women: a systematic review. Health Promot Pract. 2021:15248399211002831. doi: 10.1177/15248399211002831. PMID: 33771045. **Exclusion reason:** Ineligible study design
47. Chandler R, Guillaume D, Parker AG, et al. Promoting optimal sexual and reproductive health with mobile health tools for Black women: combining technology, culture and context. Perspect Sex Reprod Health. 2020;52(4):205-9. doi: 10.1363/psrh.12170. PMID: 33399277. **Exclusion reason:** Not a study
48. Chandler R, Hernandez N, Guillaume D, et al. A community-engaged approach to creating a mobile HIV prevention app for Black women: focus group study to determine preferences via prototype demos. JMIR MHealth UHealth. 2020;8(7):e18437. doi: 10.2196/18437. PMID: 32706723. **Exclusion reason:** Ineligible intervention
49. Chang JC, Dado D, Schussler S, et al. In person versus computer screening for intimate partner violence among pregnant patients. Patient Educ Couns. 2012;88(3):443-8. doi: 10.1016/j.pec.2012.06.021. PMID: 22770815. **Exclusion reason:** Ineligible intervention

50. Chaudhary A. Women in COVID pandemic: beyond morbidity and mortality. Indian Journal of Cardiovascular Disease in Women - WINCARS. 2020;5(3):274-7. doi: 10.1055/s-0040-1716133. **Exclusion reason:** Ineligible intervention
51. Chermack ST, Bonar EE, Goldstick JE, et al. A randomized controlled trial for aggression and substance use involvement among veterans: impact of combining motivational interviewing, cognitive behavioral treatment and telephone-based continuing care. J Subst Abuse Treat. 2019;98:78-88. doi: 10.1016/j.jsat.2019.01.001. PMID: 30665608. **Exclusion reason:** Ineligible intervention
52. Chernick LS, Stockwell MS, Wu M, et al. Texting to increase contraceptive initiation among adolescents in the emergency department. J Adolesc Health. 2017;61(6):786-90. doi: 10.1016/j.jadohealth.2017.07.021. PMID: 29056437. **Exclusion reason:** Ineligible intervention
53. Chernick LS. Improving adolescent sexual and reproductive health: can mobile health interventions affect behavior? Pediatrics. 2021;147(3):03. doi: 10.1542/peds.2020-029801. PMID: 33568492. **Exclusion reason:** Ineligible study design
54. Choi J, Lee JH, Vittinghoff E, et al. mHealth physical activity intervention: a randomized pilot study in physically inactive pregnant women. Matern Child Health J. 2016;20(5):1091-101. doi: 10.1007/s10995-015-1895-7. PMID: 26649879. **Exclusion reason:** Ineligible intervention
55. Choo EK, Tapé C, Glerum KM, et al. "That's where the arguments come in": a qualitative analysis of booster sessions following a brief intervention for drug use and intimate partner violence in the emergency department. Subst Abuse. 2016;10:77-87. doi: 10.4137/SART.S33388. PMID: 27660459. **Exclusion reason:** Ineligible study design
56. Church K, Gassner J, Elliott M. Reproductive health under COVID-19–challenges of responding in a global crisis. Sex Reprod Health Matters. 2020;28(1):1-3. doi: 10.1080/26410397.2020.1773163. PMID: 32441213. **Exclusion reason:** Not a study
57. Cizmeli C, Lobel M, Harland KK, et al. Stability and change in types of intimate partner violence across pre-pregnancy, pregnancy, and the postpartum period. Womens Reprod Health (Phila). 2018;5(3):153-69. doi: 10.1080/23293691.2018.1490084. PMID: 30505877. **Exclusion reason:** Ineligible intervention
58. Clark CJ, Wetzel M, Renner LM, et al. Linking partner violence survivors to supportive services: impact of the M Health Community Network project on healthcare utilization. BMC Health Serv Res. 2019;19(1):479. doi: 10.1186/s12913-019-4313-9. PMID: 31299953. **Exclusion reason:** Ineligible intervention
59. Cohen MA, Powell AM, Coleman JS, et al. Special ambulatory gynecologic considerations in the era of coronavirus disease 2019 (COVID-19) and implications for future practice. Am J Obstet Gynecol. 2020;223(3):372-8. doi: 10.1016/j.ajog.2020.06.006. PMID: 32522513. **Exclusion reason:** Used for contextual question only
60. Constantino R, Crane PA, Noll BS, et al. Exploring the feasibility of email-mediated interaction in survivors of abuse. J Psychiatr Ment Health Nurs. 2007;14(3):291-301. doi: 10.1111/j.1365-2850.2007.01080.x. PMID: 17430453. **Exclusion reason:** No comparison
61. Constantino RE, Braxter B, Ren D, et al. Comparing Online with Face-to-Face HELPP Intervention in Women Experiencing Intimate Partner Violence. Issues Ment Health Nurs. 2015;36(6):430-8. doi: 10.3109/01612840.2014.991049. PMID: 26241569. **Exclusion reason:** Ineligible study design
62. Cope AB, Seña AC, Eagle C, et al. Assessing patient opinions about electronic messaging for gonorrhea and chlamydia result notification and partner services, Durham, North Carolina. Sex Transm Dis. 2019;46(9):625-8. doi: 10.1097/OLQ.0000000000001021. PMID: 138160304. **Exclusion reason:** Ineligible intervention
63. Corbetta-Rastelli CM, Morgan TK, Homaifar N, et al. Experiences in electronic consultation (eConsult) service in gynecology from a quaternary academic medical center. J Med Syst. 2021;45(5):58. doi: 10.1007/s10916-021-01732-9. PMID: 33825075. **Exclusion reason:** Ineligible intervention
64. Cordova D, Bauermeister JA, Fessler K, et al. A community-engaged approach to developing an mhealth hiv/sti and drug abuse preventive intervention for primary care: a qualitative study. JMIR Mhealth Uhealth. 2015;3(4):e106. doi: 10.2196/mhealth.4620. PMID: 26685288. **Exclusion reason:** Ineligible intervention
65. Cordova D, Lua FM, Muñoz-Velázquez J, et al. A multilevel mHealth drug abuse and STI/HIV preventive intervention for clinic settings in the United States: a feasibility and acceptability study. PLoS ONE. 2019;14(8):e0221508. doi: 10.1371/journal.pone.0221508. PMID: 31437240. **Exclusion reason:** Ineligible intervention
66. Cordova D, Munoz-Velazquez J, Mendoza Lua F, et al. Pilot study of a multilevel mobile health app for substance use, sexual risk behaviors, and testing for sexually transmitted infections and HIV among youth:

randomized controlled trial. JMIR MHealth UHealth. 2020;8(3):e16251. doi: 10.2196/16251. PMID: 32181747. **Exclusion reason:** Ineligible intervention
67. Costello RE, Anand A, Jameson Evans M, et al. Associations between engagement with an online health community and changes in patient activation and health care utilization: longitudinal web-based survey. J Med Internet Res. 2019;21(8):e13477. doi: 10.2196/13477. PMID: 31469082. **Exclusion reason:** Ineligible intervention
68. Creech SK, Pulverman CS, Kahler CW, et al. Computerized intervention in primary care for women veterans with sexual assault histories and psychosocial health risks: a randomized clinical trial. J Gen Intern Med. 2021;19:19. doi: 10.1007/s11606-021-06851-0. PMID: 34013470. **Exclusion reason:** Ineligible intervention
69. Dalfrà MG, Nicolucci A, Lapolla A. The effect of telemedicine on outcome and quality of life in pregnant women with diabetes. J Telemed Telecare. 2009;15(5):238-42. doi: 10.1258/jtt.2009.081213. PMID: 19590029. **Exclusion reason:** Ineligible intervention
70. Darrat I, Tam S, Boulis M, et al. Socioeconomic disparities in patient use of telehealth during the Coronavirus disease 2019 surge. JAMA Otolaryngol Head Neck Surg. 2021;147(3):287-95. doi: 10.1001/jamaoto.2020.5161. PMID: 33443539. **Exclusion reason:** Ineligible intervention - background papers
71. Day S, Kinsella R, Jones S, et al. Safeguarding outcomes of 16 and 17-year-old service users of Sexual Health London (SHL.uk), a pan-London online sexual health service. Int J STD AIDS. 2020;31(14):1373-9. doi: 10.1177/0956462420933462. PMID: 33103583. **Exclusion reason:** Ineligible intervention
72. De Kort L, Wouters E, Van de Velde S. Obstacles and opportunities: a qualitative study of the experiences of abortion centre staff with abortion care during the first COVID-19 lockdown in Flanders, Belgium. Sex Reprod Health Matters. 2021;29(1):1921901. doi: 10.1080/26410397.2021.1921901. PMID: 33982638. **Exclusion reason:** Ineligible intervention
73. DeSisto CL, Estrich C, Kroelinger CD, et al. Using a multi-state Learning Community as an implementation strategy for immediate postpartum long-acting reversible contraception. Implement Sci. 2017;12(1):138. doi: 10.1186/s13012-017-0674-9. PMID: 29162140. **Exclusion reason:** Ineligible intervention
74. DeSisto CL, Kroelinger CD, Estrich C, et al. Application of an implementation science framework to policies on immediate postpartum long-acting reversible contraception. Public Health Rep. 2019;134(2):189-96. doi: 10.1177/0033354918824329. PMID: 30699303. **Exclusion reason:** Ineligible population
75. di Biase N, Napoli A, Sabbatini A, et al. Telemedicine in the treatment of diabetic pregnancy. Ann Ist Super Sanita. 1997;33(3):347-51. PMID: 9542261. **Exclusion reason:** Ineligible intervention
76. Dodd JM, Louise J, Cramp C, et al. Evaluation of a smartphone nutrition and physical activity application to provide lifestyle advice to pregnant women: the SNAPP randomised trial. Matern Child Nutr. 2018;14(1):e12502. doi: 10.1111/mcn.12502. PMID: 28836373. **Exclusion reason:** Ineligible intervention
77. Dorland JM, Fowler LR, Morain SR. From cervical cap to mobile app: examining the potential reproductive health impacts of new technologies. Health Promot Pract. 2019;20(5):642-7. doi: 10.1177/1524839919863464. PMID: 31315457. **Exclusion reason:** Ineligible intervention
78. Drosatos G, Kaldoudi E. A probabilistic semantic analysis of eHealth scientific literature. J Telemed Telecare. 2020;26(7/8):414-32. doi: 10.1177/1357633X19846252. PMID: 145159334. **Exclusion reason:** Ineligible intervention
79. Duryea EL, Adhikari EH, Ambia A, et al. Comparison between in-person and audio-only virtual prenatal visits and perinatal outcomes. JAMA Netw Open. 2021;4(4):e215854. doi: 10.1001/jamanetworkopen.2021.5854. PMID: 33852002. **Exclusion reason:** Ineligible outcome(s)
80. Eden KB, Perrin NA, Hanson GC, et al. Use of online safety decision aid by abused women: effect on decisional conflict in a randomized controlled trial. Am J Prev Med. 2015;48(4):372-83. doi: 10.1016/j.amepre.2014.09.027. PMID: 25547929. **Exclusion reason:** Ineligible intervention
81. Eisenhut K, Sauerborn E, Garcia-Moreno C, et al. Mobile applications addressing violence against women: a systematic review. BMJ Glob Health. 2020;5(4):e001954. doi: 10.1136/bmjgh-2019-001954. PMID: 32399255. **Exclusion reason:** Ineligible intervention
82. El Morr C, Layal M. Effectiveness of ICT-based intimate partner violence interventions: a systematic review. BMC Public Health. 2020;20(1):1372. doi: 10.1186/s12889-020-09408-8. PMID: 32894115. **Exclusion reason:** Ineligible intervention - background papers

83. El Morr C, Layal M. ICT-based interventions for women experiencing intimate partner violence: research needs in usability and mental health. Stud Health Technol Inform. 2019;257:103-9. PMID: 30741181. **Exclusion reason:** Not a study
84. Emezue C. Digital or digitally delivered responses to domestic and intimate partner violence during COVID-19. JMIR Public Health Surveill. 2020;6(3):e19831. doi: 10.2196/19831. PMID: 32678797. **Exclusion reason:** Used for contextual question only
85. Ershoff DH, Quinn VP, Boyd NR, et al. The Kaiser Permanente prenatal smoking-cessation trial: when more isn't better, what is enough? Am J Prev Med. 1999;17(3):161-8. doi: 10.1016/s0749-3797(99)00071-9. PMID: 10987630. **Exclusion reason:** Ineligible intervention
86. Estcourt CS, Gibbs J, Sutcliffe LJ, et al. The eSexual Health Clinic system for management, prevention, and control of sexually transmitted infections: exploratory studies in people testing for Chlamydia trachomatis. The lancet. Public Health. 2017;2(4):e182-e90. doi: 10.1016/S2468-2667(17)30034-8. PMID: 29253450. **Exclusion reason:** Ineligible intervention
87. Evans C, Turner K, Suggs LS, et al. Developing a mHealth intervention to promote uptake of HIV testing among African communities in the UK: a qualitative study. BMC Public Health. 2016;16:656. doi: 10.1186/s12889-016-3278-4. PMID: 27465586. **Exclusion reason:** Ineligible intervention
88. Evans ML, Qasba N, Shah Arora K. COVID-19 highlights the policy barriers and complexities of postpartum sterilization. Contraception. 2021;103(1):3-5. doi: 10.1016/j.contraception.2020.10.006. PMID: 33068611. **Exclusion reason:** Ineligible intervention - background papers
89. Evans WD, Wallace Bihm J, Szekely D, et al. Initial outcomes from a 4-week follow-up study of the Text4baby program in the military women's population: randomized controlled trial. J Med Internet Res. 2014;16(5):e131-e. doi: 10.2196/jmir.3297. PMID: 24846909. **Exclusion reason:** Ineligible intervention
90. Ferreira JM, Collins M, Palmqvist H, et al. Analysis of 16 years of calls and emails to the options for sexual health "sex sense" information and referral service. Can J Hum Sex. 2019;28(1):38-45. doi: 10.3138/cjhs.2018-0008. **Exclusion reason:** Ineligible outcome(s)
91. Figueroa CA, Luo T, Aguilera A, et al. The need for feminist intersectionality in digital health. Lancet Digit Health. 2021;3(8):e526-e33. doi: 10.1016/S2589-7500(21)00118-7. PMID: 34325855. **Exclusion reason:** Not a study
92. Fjeldsoe BS, Miller YD, Marshall AL. MobileMums: a randomized controlled trial of an SMS-based physical activity intervention. Ann Behav Med. 2010;39(2):101-11. doi: 10.1007/s12160-010-9170-z. PMID: 20174902. **Exclusion reason:** Ineligible intervention
93. Flaathen EME, Lukasse M, Garnweidner-Holme L, et al. User-involvement in the development of a culturally sensitive intervention in the safe pregnancy study to prevent intimate partner violence. Violence Against Women. 2020;27(12-13):2235-354. doi: 10.1177/1077801220954274. PMID: 32985376. **Exclusion reason:** Ineligible intervention
94. Ford-Gilboe M, Varcoe C, Scott-Storey K, et al. A tailored online safety and health intervention for women experiencing intimate partner violence: the iCAN Plan 4 Safety randomized controlled trial protocol. BMC Public Health. 2017;17(1):273. doi: 10.1186/s12889-017-4143-9. PMID: 28327116. **Exclusion reason:** Not a study
95. French VA, Rangel AV, Mattingly TL. Access to emergency contraception in Kansas City clinics. Contraception. 2018;98(6):482-5. doi: 10.1016/j.contraception.2018.06.011. PMID: 30369407. **Exclusion reason:** Ineligible intervention
96. Gabrielli S, Rizzi S, Bassi G, et al. Engagement and effectiveness of a healthy-coping intervention via chatbot for university students during the COVID-19 pandemic: mixed methods proof-of-concept study. JMIR MHealth UHealth. 2021;9(5):e27965. doi: 10.2196/27965. PMID: 33950849. **Exclusion reason:** Ineligible population
97. Gallegos D, Russell-Bennett R, Previte J, et al. Can a text message a week improve breastfeeding? BMC Pregnancy Childbirth. 2014;14:374-. doi: 10.1186/s12884-014-0374-2. PMID: 25369808. **Exclusion reason:** Ineligible intervention
98. Garcia Y, Ferras C, Rocha A, et al. Design and acceptability of a psychosocial text messaging intervention for victims of gender-based violence. Health Informatics J. 2019;25(4):1588-94. doi: 10.1177/1460458218792688. PMID: 30113247. **Exclusion reason:** Ineligible intervention
99. Gerris J, Delvigne A, Dhont N, et al. Self-operated endovaginal telemonitoring versus traditional monitoring of ovarian stimulation in assisted reproduction: an RCT. Hum Reprod. 2014;29(9):1941-8. doi: 10.1093/humrep/deu168. PMID: 24993931. **Exclusion reason:** Ineligible intervention

100. Gilbert L, Goddard-Eckrich D, Hunt T, et al. Efficacy of a computerized intervention on hiv and intimate partner violence among substance-using women in community corrections: a randomized controlled trial. Am J Public Health. 2016;106(7):1278-86. doi: 10.2105/ajph.2016.303119. PMID: 27077342. **Exclusion reason:** Ineligible intervention
101. Gilbert M, Salway T, Haag D, et al. Use of GetCheckedOnline, a comprehensive web-based testing service for sexually transmitted and blood-borne infections. J Med Internet Res. 2017;19(3):1-. doi: 10.2196/jmir.7097. PMID: 122323778. **Exclusion reason:** Ineligible intervention
102. Gilmore LA, Klempel MC, Martin CK, et al. Personalized mobile health intervention for health and weight loss in postpartum women receiving women, infants, and children benefit: a randomized controlled pilot study. J Womens Health (Larchmt). 2017;26(7):719-27. doi: 10.1089/jwh.2016.5947. PMID: 28338403. **Exclusion reason:** Ineligible intervention
103. Goldstein KM, Zullig LL, Dedert EA, et al. Telehealth interventions designed for women: an evidence map. J Gen Intern Med. 2018;33(12):2191-200. doi: 10.1007/s11606-018-4655-8. PMID: 30284173. **Exclusion reason:** Ineligible study design
104. Graham ML, Strawderman MS, Demment M, et al. Does usage of an eHealth intervention reduce the risk of excessive gestational weight gain? Secondary analysis from a randomized controlled trial. J Med Internet Res. 2017;19(1):e6-e. doi: 10.2196/jmir.6644. PMID: 28069560. **Exclusion reason:** Ineligible intervention
105. Grandahl M, Larsson M, Herrmann B. 'To be on the safe side': a qualitative study regarding users' beliefs and experiences of internet-based self-sampling for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* testing. BMJ Open. 2020;10(12):e041340. doi: 10.1136/bmjopen-2020-041340. PMID: 33376171. **Exclusion reason:** Ineligible intervention
106. Grandahl M, Mohammad J, Larsson M, et al. Users' opinions of internet-based self-sampling tests for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in Sweden. Acta Derm Venereol. 2020;100(18):adv00315. doi: 10.2340/00015555-3677. PMID: 33104232. **Exclusion reason:** Ineligible intervention
107. Gray MJ, Hassija CM, Jaconis M, et al. Provision of evidence-based therapies to rural survivors of domestic violence and sexual assault via telehealth: treatment outcomes and clinical training benefits. Training and Education in Professional Psychology. 2015;9(3):235. **Exclusion reason:** No comparison
108. Grossman D, Grindlay K, Buchacker T, et al. Effectiveness and acceptability of medical abortion provided through telemedicine. Obstet Gynecol. 2011;118(2 Pt 1):296-303. doi: 10.1097/AOG.0b013e318224d110. PMID: 21775845. **Exclusion reason:** Ineligible intervention
109. Grossman D, Grindlay K. Safety of medical abortion provided through telemedicine compared with in person. Obstet Gynecol. 2017;130(4):778-82. doi: 10.1097/aog.0000000000002212. PMID: 28885427. **Exclusion reason:** Ineligible intervention
110. Grossman DA, Grindlay K, Buchacker T, et al. Changes in service delivery patterns after introduction of telemedicine provision of medical abortion in Iowa. Am J Public Health. 2013;103(1):73-8. doi: 10.2105/AJPH.2012.301097. PMID: 23153158. **Exclusion reason:** Ineligible intervention
111. Gupte S. Ethical challenges in the era of new realities in women's health. Int J Gynaecol Obstet. 2021;153(1):1-2. doi: 10.1002/ijgo.13336. PMID: 32745278. **Exclusion reason:** Not a study
112. Haggerty AF, Huepenbecker S, Sarwer DB, et al. The use of novel technology-based weight loss interventions for obese women with endometrial hyperplasia and cancer. Gynecol Oncol. 2016;140(2):239-44. doi: 10.1016/j.ygyno.2015.11.033. PMID: 26644265. **Exclusion reason:** Ineligible intervention
113. Harrison S, Li X. Toward an enhanced understanding of psychological resilience for HIV youth populations. AIDS Care. 2018;30(sup4):1-4. doi: 10.1080/09540121.2018.1556384. PMID: 30551725. **Exclusion reason:** Ineligible intervention
114. Hassija C, Gray MJ. The effectiveness and feasibility of videoconferencing technology to provide evidence-based treatment to rural domestic violence and sexual assault populations. Telemed J E Health. 2011;17(4):309-15. doi: 10.1089/tmj.2010.0147. PMID: 21457012. **Exclusion reason:** No comparison
115. Hatch SG, Roddy MK, Doss BD, et al. Texts 4 romantic relationships – a randomized controlled trial. J Couple Relatsh Ther. 2020;19(2):115-35. doi: 10.1080/15332691.2019.1667936. PMID: 143138405. **Exclusion reason:** Ineligible intervention
116. Hebert LE, Hill BJ, Quinn M, et al. Mobile contraceptive application use in a clinical setting in addition to standard contraceptive counseling: a randomized controlled trial. Contraception. 2018;98(4):281-7. doi: 10.1016/j.contraception.2018.07.001. PMID: 30006030. **Exclusion reason:** Ineligible intervention
117. Heller R, Johnstone A, Cameron ST. Routine provision of intrauterine contraception at elective cesarean section in a national public health service: a service evaluation. Acta Obstet Gynecol Scand.

2017;96(9):1144-51. doi: 10.1111/aogs.13178. PMID: 28590560. **Exclusion reason:** Ineligible intervention
118. Herring SJ, Cruice JF, Bennett GG, et al. Intervening during and after pregnancy to prevent weight retention among African American women. Prev Med Rep. 2017;7:119-23. doi: 10.1016/j.pmedr.2017.05.015. PMID: 28660118. **Exclusion reason:** Ineligible intervention
119. Herring SJ, Cruice JF, Bennett GG, et al. Preventing excessive gestational weight gain among African American women: a randomized clinical trial. Obesity (Silver Spring). 2016;24(1):30-6. doi: 10.1002/oby.21240. PMID: 26592857. **Exclusion reason:** Ineligible intervention
120. Hesser H, Axelsson S, Backe V, et al. Preventing intimate partner violence via the internet: a randomized controlled trial of emotion-regulation and conflict-management training for individuals with aggression problems. Clin Psychol Psychother. 2017;24(5):1163-77. doi: 10.1002/cpp.2082. PMID: 28261923. **Exclusion reason:** Ineligible study design
121. Heuvel JFMvd, Groenhof TK, Veerbeek JHW, et al. eHealth as the next-generation perinatal care: an overview of the literature. J Med Internet Res. 2018;20(6):1-. doi: 10.2196/jmir.9262. PMID: 130694649. **Exclusion reason:** Ineligible study design
122. Hickey M. Championing eHealth in clinical care. Clin J Oncol Nurs. 2020;24(3):4-9. doi: 10.1188/20.CJON.S1.4-9. PMID: 32441696. **Exclusion reason:** Not a study
123. Hillard PJA. The sexual and reproductive health of adolescents and young adults during a pandemic. J Pediatr Adolesc Gynecol. 2020;33(5):443-4. doi: 10.1016/j.jpag.2020.08.007. PMID: 32981591. **Exclusion reason:** Not a study
124. Hirshberg A, Downes K, Srinivas S. Comparing standard office-based follow-up with text-based remote monitoring in the management of postpartum hypertension: a randomised clinical trial. BMJ Qual Saf. 2018;27(11):871-7. doi: 10.1136/bmjqs-2018-007837. PMID: 29703800. **Exclusion reason:** Ineligible intervention
125. Hirvonen M, Purcell C, Elliott L, et al. Peer-to-peer sharing of social media messages on sexual health in a school-based intervention: opportunities and challenges identified in the STASH Feasibility Trial. J Med Internet Res. 2021;23(2):e20898. doi: 10.2196/20898. PMID: 149133663. **Exclusion reason:** Ineligible intervention
126. Hoffman V, Söderström L, Samuelsson E. Self-management of stress urinary incontinence via a mobile app: two-year follow-up of a randomized controlled trial. Acta Obstet Gynecol Scand. 2017;96(10):1180-7. doi: 10.1111/aogs.13192. PMID: 28718223. **Exclusion reason:** Ineligible intervention
127. Hogenson E, Jett-Goheen M, Gaydos CA. An analysis of user survey data for an internet program for testing for sexually transmitted infections, I want the kit, in Maryland and Washington, DC. Sex Transm Dis. 2019;46(12):768-70. doi: 10.1097/OLQ.0000000000001061. PMID: 139750696. **Exclusion reason:** Ineligible intervention
128. Homko CJ, Deeb LC, Rohrbacher K, et al. Impact of a telemedicine system with automated reminders on outcomes in women with gestational diabetes mellitus. Diabetes Technol Ther. 2012;14(7):624-9. doi: 10.1089/dia.2012.0010. PMID: 22512287. **Exclusion reason:** Ineligible intervention
129. Homko CJ, Santamore WP, Whiteman V, et al. Use of an internet-based telemedicine system to manage underserved women with gestational diabetes mellitus. Diabetes Technol Ther. 2007;9(3):297-306. doi: 10.1089/dia.2006.0034. PMID: 17561800. **Exclusion reason:** Ineligible intervention
130. Hoth AB, Shafer C, Dillon DB, et al. Iowa TelePrEP: a public-health-partnered telehealth model for Human Immunodeficiency Virus Preexposure Prophylaxis delivery in a rural state. Sex Transm Dis. 2019;46(8):507-12. doi: 10.1097/OLQ.0000000000001017. PMID: 31295217. **Exclusion reason:** Ineligible intervention
131. Hou MY, Hurwitz S, Kavanagh E, et al. Using daily text-message reminders to improve adherence with oral contraceptives: a randomized controlled trial. Obstet Gynecol. 2010;116(3):633-40. doi: 10.1097/AOG.0b013e3181eb6b0f. PMID: 20733446. **Exclusion reason:** Ineligible intervention
132. Huang AJ, Phillips S, Schembri M, et al. Device-guided slow-paced respiration for menopausal hot flushes: a randomized controlled trial. Obstet Gynecol. 2015;125(5):1130-8. doi: 10.1097/AOG.0000000000000821. PMID: 25932840. **Exclusion reason:** Ineligible outcome(s)
133. Huberty JL, Buman MP, Leiferman JA, et al. Dose and timing of text messages for increasing physical activity among pregnant women: a randomized controlled trial. Transl Behav Med. 2017;7(2):212-23. doi: 10.1007/s13142-016-0445-1. PMID: 27800565. **Exclusion reason:** Ineligible intervention

134. Hudson LC, Lowenstein EJ, Hoenig LJ. Domestic violence in the coronavirus disease 2019 era: insights from a survivor. Clin Dermatol. 2020;38(6):737-43. doi: 10.1016/j.clindermatol.2020.07.003. PMID: 33341207. **Exclusion reason:** Ineligible intervention - background papers
135. Humphreys J, Tsoh JY, Kohn MA, et al. Increasing discussions of intimate partner violence in prenatal care using Video Doctor plus Provider Cueing: a randomized, controlled trial. Womens Health Issues. 2011;21(2):136-44. doi: 10.1016/j.whi.2010.09.006. PMID: 21185737. **Exclusion reason:** Ineligible intervention
136. Ingersoll K, Frederick C, MacDonnell K, et al. A pilot RCT of an internet intervention to reduce the risk of alcohol-exposed pregnancy. Alcohol Clin Exp Res. 2018;42(6):1132-44. doi: 10.1111/acer.13635. PMID: 29741798. **Exclusion reason:** Ineligible intervention
137. Inhae C, Jiwon K. Effects of mHealth intervention on sexual and reproductive health in emerging adulthood: a systematic review and meta-analysis of randomized controlled trials. Int J Nurs Stud. 2021;119:103949. doi: 10.1016/j.ijnurstu.2021.103949. PMID: 34004469. **Exclusion reason:** Ineligible intervention
138. Ireland S, Belton S, Doran F. 'I didn't feel judged': exploring women's access to telemedicine abortion in rural Australia. J Prim Health Care. 2020;12(1):49-56. doi: 10.1071/HC19050. PMID: 32223850. **Exclusion reason:** Ineligible population
139. Jack SM, Munro-Kramer ML, Williams JR, et al. Recognising and responding to intimate partner violence using telehealth: practical guidance for nurses and midwives. J Clin Nurs. 2021;30(3-4):588-602. doi: 10.1111/jocn.15554. PMID: 33141467. **Exclusion reason:** Ineligible intervention - background papers
140. Jackson EC, Renner LM, Flowers NI, et al. Process evaluation of a systemic intervention to identify and support partner violence survivors in a multi-specialty health system. BMC Health Services Research. 2020;20(1):996. doi: 10.1186/s12913-020-05809-y. PMID: 33129317. **Exclusion reason:** Ineligible intervention
141. Jacobs F, Easterbrooks MA, Goldberg J, et al. Improving adolescent parenting: results from a randomized controlled trial of a home visiting program for young families. Am J Public Health. 2016;106(2):342-9. doi: 10.2105/AJPH.2015.302919. PMID: 26562107. **Exclusion reason:** Ineligible intervention
142. Jakob L, Steeb T, Fiocco Z, et al. Patient perception of mobile phone apps for the care and prevention of sexually transmitted diseases: cross-sectional study. JMIR MHealth UHealth. 2020;8(11):e16517. doi: 10.2196/16517. PMID: 33170133. **Exclusion reason:** Ineligible intervention
143. Javidi H, Widman L, Lipsey N, et al. Redeveloping a digital sexual health intervention for adolescents to allow for broader dissemination: implications for HIV and STD prevention. AIDS Education & Prevention. 2021;33(2):89-102. doi: 10.1521/aeap.2021.33.2.89. PMID: 33821678. **Exclusion reason:** No comparison
144. Jennings Mayo-Wilson L, Coleman J, Timbo F, et al. Acceptability of a feasibility randomized clinical trial of a microenterprise intervention to reduce sexual risk behaviors and increase employment and HIV preventive practices (EMERGE) in young adults: a mixed methods assessment. BMC Public Health. 2020;20(1):1846. doi: 10.1186/s12889-020-09904-x. PMID: 33267860. **Exclusion reason:** Ineligible intervention
145. Jennings V, Haile LT, Simmons RG, et al. Perfect- and typical-use effectiveness of the Dot fertility app over 13 cycles: results from a prospective contraceptive effectiveness trial. Eur J Contracept Reprod Health Care. 2019;24(2):148-53. doi: 10.1080/13625187.2019.1581164. PMID: 30880509. **Exclusion reason:** Ineligible intervention
146. Jiang H, Li M, Wen LM, et al. Effect of short message service on infant feeding practice: findings from a community-based study in Shanghai, China. JAMA Pediatr. 2014;168(5):471-8. doi: 10.1001/jamapediatrics.2014.58. PMID: 24639004. **Exclusion reason:** Ineligible intervention
147. Jiménez-Rodríguez D, García MTB, García AS, et al. Nurse training in gender-based violence using simulated nursing video consultations during the COVID-19 pandemic: a qualitative study. Int J Environ Res Public Health. 2020;17(22):1-15. doi: 10.3390/ijerph17228654. PMID: 33233390. **Exclusion reason:** Ineligible intervention
148. Johnson D, Juras R, Riley P, et al. A randomized controlled trial of the impact of a family planning mHealth service on knowledge and use of contraception. Contraception. 2017;95(1):90-7. doi: 10.1016/j.contraception.2016.07.009. PMID: 27421767. **Exclusion reason:** Ineligible country
149. Jordan NN, Jett-Goheen M, Hsieh Y-H, et al. Detection of three sexually transmitted infections by anatomic site: evidence from an internet-based screening program. Sex Transm Dis. 2020;47(4):243-5. doi: 10.1097/OLQ.0000000000001139. PMID: 142345090. **Exclusion reason:** Ineligible intervention

150. Joseph RP, Keller C, Adams MA, et al. Print versus a culturally-relevant Facebook and text message delivered intervention to promote physical activity in African American women: a randomized pilot trial. BMC Womens Health. 2015;15:30-. doi: 10.1186/s12905-015-0186-1. PMID: 25886945. **Exclusion reason:** Ineligible intervention
151. Jouriles EN, McDonald R, Rosenfield D, et al. Increasing bystander behavior to prevent adolescent relationship violence: a randomized controlled trial. J Consult Clin Psychol. 2019;87(1):3-15. doi: 10.1037/ccp0000355. PMID: 30474990. **Exclusion reason:** Ineligible intervention
152. Kakollu A, Hari A. Review of recommendations for gynecology practice during COVID-19 pandemic. Indian Journal of Cardiovascular Disease in Women - WINCARS. 2020;5(3):230-2. doi: 10.1055/s-0040-1716921. **Exclusion reason:** Not a study
153. Karasneh RA, Al-Azzam SI, Alzoubi KH, et al. Smartphone applications for period tracking: rating and behavioral change among women users. Obstet Gynecol Int. 2020;2020:2192387. doi: 10.1155/2020/2192387. PMID: 32952563. **Exclusion reason:** Ineligible intervention
154. Katerndahl D, Burge S, Ferrer R, et al. Multi-day patterns around taking action in intimate partner violence. Nonlinear Dynamics Psychol Life Sci. 2018;22(2):225-41. PMID: 29600953. **Exclusion reason:** Ineligible intervention
155. Katz M, Newmark RL, Aronstam A, et al. An implementation project to expand access to self-administered depot medroxyprogesterone acetate (DMPA). Contraception. 2020;102(6):392-5. doi: 10.1016/j.contraception.2020.09.001. PMID: 32931811. **Exclusion reason:** No comparison
156. Kerestes C, Delafield R, Elia J, et al. "It was close enough, but it wasn't close enough": a qualitative exploration of the impact of direct-to-patient telemedicine abortion on access to abortion care. Contraception. 2021;104(1):67-72. doi: 10.1016/j.contraception.2021.04.028. PMID: 33933421. **Exclusion reason:** Ineligible intervention
157. Koziol-McLain J, McLean C, Rohan M, et al. Participant recruitment and engagement in automated eHealth trial registration: challenges and opportunities for recruiting women who experience violence. J Med Internet Res. 2016;18(10):e281. doi: 10.2196/jmir.6515. PMID: 27780796. **Exclusion reason:** Ineligible study design
158. Koziol-McLain J, Vandal AC, Wilson D, et al. Efficacy of a web-based safety decision aid for women experiencing intimate partner violence: randomized controlled trial. J Med Internet Res. 2018;19(12):e426. doi: 10.2196/jmir.8617. PMID: 29321125. **Exclusion reason:** Ineligible intervention
159. Kreines FM, Farr A, Chervenak FA, et al. Quality of web-based family-building information for LGBTQ individuals. Eur J Contracept Reprod Health Care. 2018;23(1):18-23. doi: 10.1080/13625187.2018.1432036. PMID: 128422772. **Exclusion reason:** Ineligible intervention
160. Kutner BA, Pho AT, Lopez-Rios J, et al. Attitudes and perceptions about disclosing HIV and syphilis results using Smarttest, a smartphone app dedicated to self- and partner testing. AIDS Educ Prev. 2021;33(3):234-48. doi: 10.1521/aeap.2021.33.3.234. PMID: 34014111. **Exclusion reason:** Ineligible population
161. Ładyzynski P, Wójcicki JM. Home telecare during intensive insulin treatment--metabolic control does not improve as much as expected. J Telemed Telecare. 2007;13(1):44-7. doi: 10.1258/135763307779701167. PMID: 17288659. **Exclusion reason:** Ineligible intervention
162. Lanssens D, Vandenberk T, Smeets CJ, et al. Remote monitoring of hypertension diseases in pregnancy: a pilot study. JMIR Mhealth Uhealth. 2017;5(3):e25-e. doi: 10.2196/mhealth.6552. PMID: 28279948. **Exclusion reason:** Ineligible intervention
163. Lee K, Hoti K, Hughes JD, et al. Dr Google is here to stay but health care professionals are still valued: an analysis of health care consumers' internet navigation support preferences. J Med Internet Res. 2017;19(6):1-. doi: 10.2196/jmir.7489. PMID: 123949364. **Exclusion reason:** Ineligible intervention
164. Lee S, Begley CE, Morgan R, et al. Addition of mHealth (mobile health) for family planning support in Kenya : disparities in access to mobile phones and associations with contraceptive knowledge and use. Int Health. 2019;11(6):463-71. doi: 10.1093/inthealth/ihy092. PMID: 30576546. **Exclusion reason:** Ineligible country
165. Lee S, Hitt WC. Clinical applications of telemedicine in gynecology and women's health. Obstet Gynecol Clin North Am. 2020;47(2):259-70. doi: 10.1016/j.ogc.2020.02.002. PMID: 32451017. **Exclusion reason:** Ineligible intervention - background papers
166. Leonardsen AL, Hardeland C, Helgesen AK, et al. Patient experiences with technology enabled care across healthcare settings- a systematic review. BMC Health Serv Res. 2020;20(1):779. doi: 10.1186/s12913-020-05633-4. PMID: 32838784. **Exclusion reason:** Ineligible outcome(s)

167. Li J, Liu M, Liu X, et al. Why and when do patients use e-consultation services? The trust and resource supplementary perspectives. Telemed J E Health. 2018;24(1):77-85. doi: 10.1089/tmj.2016.0268. PMID: 28686084. **Exclusion reason:** Ineligible intervention
168. Linde DS, Bakiewicz A, Normann AK, et al. Intimate partner violence and electronic health interventions: systematic review and meta-analysis of randomized trials. J Med Internet Res. 2020;22(12):e22361. doi: 10.2196/22361. PMID: 33306030. **Exclusion reason:** Unusable systematic review
169. Lindsay M, Messing JT, Thaller J, et al. Survivor feedback on a safety decision aid smartphone application for college-age women in abusive relationships. Journal of Technology in Human Services. 2013;31(4):368-88. **Exclusion reason:** Ineligible intervention
170. Lockhart E, Turner D, Ficek J, et al. Understanding technology fit among people with HIV based on intersections of race, sex, and sexual behavior: an equitable approach to analyzing differences across multiple social identities. AIDS Behav. 2021;25(8):2618-29. doi: 10.1007/s10461-021-03223-x. PMID: 33751311. **Exclusion reason:** Ineligible intervention
171. Logie C, Okumu M, Abela H, et al. Sexual and reproductive health mobile apps: results from a cross-sectional values and preferences survey to inform World Health Organization normative guidance on self-care interventions. Glob Health Action. 2020;13(1):1796346. doi: 10.1080/16549716.2020.1796346. PMID: 32778000. **Exclusion reason:** Ineligible intervention
172. Lohr PA, Aiken ARA, Forsyth T, et al. Telephone or integrated contraception counselling before abortion: Impact on method choice and receipt. BMJ Sex Reprod Health. 2018;44(2):114-21. doi: 10.1136/bmjsrh-2017-101818. PMID: 29921634. **Exclusion reason:** Ineligible intervention
173. Loughnan SA, Sie A, Hobbs MJ, et al. A randomized controlled trial of 'MUMentum Pregnancy': internet-delivered cognitive behavioral therapy program for antenatal anxiety and depression. J Affect Disord. 2019;243:381-90. doi: 10.1016/j.jad.2018.09.057. PMID: 132288823. **Exclusion reason:** Ineligible intervention
174. Lowery C. Intro to telemedicine and connected health in obstetrics and gynecology. Obstet Gynecol Clin North Am. 2020;47(2):xv-xvi. doi: 10.1016/j.ogc.2020.03.001. PMID: 32451025. **Exclusion reason:** Not a study
175. Maben-Feaster RE, Stansfield RB, Opipari A, et al. Evaluating patient perspectives of provider professionalism on Twitter in an academic obstetrics and gynecology clinic: patient survey. J Med Internet Res. 2018;20(3):11-. doi: 10.2196/jmir.8056. PMID: 128892685. **Exclusion reason:** Ineligible intervention
176. MacCarthy S, Mendoza-Graf A, Wagner Z, et al. The acceptability and feasibility of a pilot study examining the impact of a mobile technology-based intervention informed by behavioral economics to improve HIV knowledge and testing frequency among Latinx sexual minority men and transgender women. BMC Public Health. 2021;21(1):341. doi: 10.1186/s12889-021-10335-5. PMID: 33579242. **Exclusion reason:** Ineligible intervention
177. Mackillop L, Hirst JE, Bartlett KJ, et al. Comparing the efficacy of a mobile phone-based blood glucose management system with standard clinic care in women with gestational diabetes: randomized controlled trial. JMIR Mhealth Uhealth. 2018;6(3):e71-e. doi: 10.2196/mhealth.9512. PMID: 29559428. **Exclusion reason:** Ineligible intervention
178. MacMillan HL, Wathen CN, Jamieson E, et al. Approaches to screening for intimate partner violence in health care settings: a randomized trial. JAMA. 2006;296(5):530-6. doi: 10.1001/jama.296.5.530. PMID: 16882959. **Exclusion reason** Ineligible intervention
179. Martinez KA, Rastogi R, Lipold L, et al. Response to requests for contraception in one direct-to-consumer telemedicine service. Contraception. 2020;101(5):350-2. doi: 10.1016/j.contraception.2020.01.017. PMID: 32059840. **Exclusion reason:** Ineligible intervention
180. Martino S, Ondersma SJ, Forray A, et al. A randomized controlled trial of screening and brief interventions for substance misuse in reproductive health. Am J Obstet Gynecol. 2018;218(3):322.e1-.e12. doi: 10.1016/j.ajog.2017.12.005. PMID: 29247636. **Exclusion reason:** Ineligible population
181. McCarthy OL, French RS, Baraitser P, et al. Safetxt: a pilot randomised controlled trial of an intervention delivered by mobile phone to increase safer sex behaviours in young people. BMJ Open. 2016;6(12):e013045. doi: 10.1136/bmjopen-2016-013045. PMID: 28011811. **Exclusion reason:** Ineligible intervention
182. McCloud RF, Okechukwu CA, Sorensen G, et al. Beyond access: barriers to internet health information seeking among the urban poor. J Am Med Inform Assoc. 2016;23(6):1053-9. doi: 10.1093/jamia/ocv204. PMID: 118960385. **Exclusion reason:** Ineligible intervention

183. Mesheriakova VV, Tebb KP. Effect of an iPad-based intervention to improve sexual health knowledge and intentions for contraceptive use among adolescent females at school-based health centers. Clin Pediatr (Phila). 2017;56(13):1227-34. doi: 10.1177/0009922816681135. PMID: 28950721. **Exclusion reason:** Ineligible outcome(s)
184. Michie L, Cameron ST, Glasier A, et al. Giving information about the contraceptive implant using a DVD: is it acceptable and informative? A pilot randomised study. J Fam Plann Reprod Health Care. 2016;42(3):194-200. doi: 10.1136/jfprhc-2015-101186. PMID: 117174854. **Exclusion reason:** Ineligible intervention
185. Miremberg H, Ben-Ari T, Betzer T, et al. The impact of a daily smartphone-based feedback system among women with gestational diabetes on compliance, glycemic control, satisfaction, and pregnancy outcome: a randomized controlled trial. Am J Obstet Gynecol. 2018;218(4):453.e1-.e7. doi: 10.1016/j.ajog.2018.01.044. PMID: 29425836. **Exclusion reason:** Ineligible intervention
186. Moniz MH, Hasley S, Meyn LA, et al. Improving influenza vaccination rates in pregnancy through text messaging: a randomized controlled trial. Obstet Gynecol. 2013;121(4):734-40. doi: 10.1097/AOG.0b013e31828642b1. PMID: 23635672. **Exclusion reason:** Ineligible intervention
187. Muender MM, Moore ML, Chen GJ, et al. Cost-benefit of a nursing telephone intervention to reduce preterm and low-birthweight births in an African American clinic population. Prev Med. 2000;30(4):271-6. doi: 10.1006/pmed.2000.0637. PMID: 10731454. **Exclusion reason:** Ineligible outcome(s)
188. Munro S, Manski R, Donnelly KZ, et al. Investigation of factors influencing the implementation of two shared decision-making interventions in contraceptive care: a qualitative interview study among clinical and administrative staff. Implementation Science. 2019;14(1):95. doi: 10.1186/s13012-019-0941-z. PMID: 31706329. **Exclusion reason:** Ineligible intervention
189. Murugesu S, Galazis N, Jones BP, et al. Evaluating the use of telemedicine in gynaecological practice: a systematic review. BMJ Open. 2020;10(12):e039457. doi: 10.1136/bmjopen-2020-039457. PMID: 33293306. **Exclusion reason:** Ineligible intervention - background papers
190. Nadarzynski T, Bayley J, Llewellyn C, et al. Acceptability of artificial intelligence (AI)-enabled chatbots, video consultations and live webchats as online platforms for sexual health advice. BMJ Sex Reprod Health. 2020;46(3):210-7. doi: 10.1136/bmjsrh-2018-200271. PMID: 31964779. **Exclusion reason:** Ineligible intervention
191. Nanda K, Lebetkin E, Steiner MJ, et al. Contraception in the era of COVID-19. Glob Health Sci Pract. 2020;8(2):166-8. doi: 10.9745/GHSP-D-20-00119. PMID: 32312738. **Exclusion reason:** Used for contextual question only
192. Naughton F, Cooper S, Foster K, et al. Large multi-centre pilot randomized controlled trial testing a low-cost, tailored, self-help smoking cessation text message intervention for pregnant smokers (MiQuit). Addiction. 2017;112(7):1238-49. doi: 10.1111/add.13802. PMID: 28239919. **Exclusion reason:** Ineligible intervention
193. Ng KYB, Wellstead S, Cheong Y, et al. A randomised controlled trial of a personalised lifestyle coaching application in modifying periconceptional behaviours in women suffering from reproductive failures (iPLAN trial). BMC Womens Health. 2018;18(1):196. doi: 10.1186/s12905-018-0689-7. PMID: 30514285. **Exclusion reason:** Ineligible population
194. Ngoc NTN, Bracken H, Blum J, et al. Acceptability and feasibility of phone follow-up after early medical abortion in Vietnam: a randomized controlled trial. Obstet Gynecol. 2014;123(1):88-95. doi: 10.1097/aog.0000000000000050. PMID: 24463668. **Exclusion reason:** Ineligible intervention
195. Nguyen A, Mosadeghi S, Almario CV. Persistent digital divide in access to and use of the Internet as a resource for health information: results from a California population-based study. Int J Med Inform. 2017;103:49-54. doi: 10.1016/j.ijmedinf.2017.04.008. PMID: 123218463. **Exclusion reason:** Ineligible intervention
196. Nittari G, Khuman R, Baldoni S, et al. Telemedicine practice: review of the current ethical and legal challenges. Telemed J E Health. 2020;26(12):1427-37. doi: 10.1089/tmj.2019.0158. PMID: 32049608. **Exclusion reason:** Ineligible outcome(s)
197. Özçelik E, Uzuner A, Karahan Ö, et al. Standard days method: comparison of CycleBeads and smartphone app. International Medicine. 2020;2(5):294-301. doi: 10.5455/IM.102991. **Exclusion reason:** Ineligible intervention
198. Patterson TL, Semple SJ, Abramovitz D, et al. Impact of time perspectives on texting intervention to reduce HIV/STI transmission among female sex workers in Tijuana and Ciudad Juarez, Mexico. J Behav

Med. 2019;42(1):111-27. doi: 10.1007/s10865-018-9948-1. PMID: 29987740. **Exclusion reason:** Ineligible intervention
199. Paul M, Iyengar K, Essén B, et al. Acceptability of home-assessment post medical abortion and medical abortion in a low-resource setting in Rajasthan, India. Secondary outcome analysis of a non-inferiority randomized controlled trial. PloS One. 2015;10(9):e0133354-e. doi: 10.1371/journal.pone.0133354. PMID: 26327217. **Exclusion reason:** Ineligible intervention
200. Paul M, Iyengar SD, Essen B, et al. Does mode of follow-up influence contraceptive use after medical abortion in a low-resource setting? Secondary outcome analysis of a non-inferiority randomized controlled trial. BMC Public Health. 2016;16(1):1087. doi: 10.1186/s12889-016-3726-1. PMID: 27745552. **Exclusion reason:** Ineligible outcome(s)
201. Pérez-Ferre N, Galindo M, Fernández MD, et al. A telemedicine system based on Internet and short message service as a new approach in the follow-up of patients with gestational diabetes. Diabetes Res Clin Pract. 2010;87(2):e15-7. doi: 10.1016/j.diabres.2009.12.002. PMID: 20044162. **Exclusion reason:** Ineligible intervention
202. Phelan S, Hagobian T, Brannen A, et al. Effect of an internet-based program on weight loss for low-income postpartum women: a randomized clinical trial. JAMA. 2017;317(23):2381-91. doi: 10.1001/jama.2017.7119. PMID: 28632867. **Exclusion reason:** Ineligible intervention
203. Philbin MM, Parish C, Pereyra M, et al. Health disparities and the digital divide: the relationship between communication inequalities and quality of life among women in a nationwide prospective cohort study in the United States. J Health Commun. 2019;24(4):405-12. doi: 10.1080/10810730.2019.1630524. PMID: 137411903. **Exclusion reason:** Ineligible intervention
204. Potter S, Howard R, Murphy S, et al. Long-term impacts of college sexual assaults on women survivors' educational and career attainments. J Am Coll Health. 2018;66(6):496-507. doi: 10.1080/07448481.2018.1440574. PMID: 29447618. **Exclusion reason:** Ineligible intervention
205. Powell A, Henry N. Technology-facilitated sexual violence victimization: results from an online survey of Australian adults. J Interpers Violence. 2019;34(17):3637-65. doi: 10.1177/0886260516672055. PMID: 27697966. **Exclusion reason:** Ineligible intervention - background papers
206. Prinja S, Nimesh R, Gupta A, et al. Impact of m-health application used by community health volunteers on improving utilisation of maternal, new-born and child health care services in a rural area of Uttar Pradesh, India. Trop Med Int Health. 2017;22(7):895-907. doi: 10.1111/tmi.12895. PMID: 28510997. **Exclusion reason:** Ineligible intervention
207. Quilty L, Agic B, Coombs M, et al. Benefits of digital health resources for substance use concerns in women: scoping review. JMIR Mental Health. 2021;8(6):e25952. doi: 10.2196/25952. PMID: 34096879. **Exclusion reason:** Ineligible intervention
208. Ragavan MI, Ferre V, Bair-Merritt M. Thrive: a novel health education mobile application for mothers who have experienced intimate partner violence. Health Promot Pract. 2020;21(2):160-4. doi: 10.1177/1524839919890870. PMID: 31874566. **Exclusion reason:** Ineligible intervention - background papers
209. Rayburn WF. The role of telemedicine in improving women's health care. Obstet Gynecol Clin North Am. 2020;47(2):xiii-xiv. doi: 10.1016/j.ogc.2020.03.002. PMID: 32451024. **Exclusion reason:** Not a study
210. Redman LM, Gilmore LA, Breaux J, et al. Effectiveness of SmartMoms, a novel eHealth intervention for management of gestational weight gain: randomized controlled pilot trial. JMIR Mhealth Uhealth. 2017;5(9):e133-e. doi: 10.2196/mhealth.8228. PMID: 28903892. **Exclusion reason:** Ineligible population
211. Reed JL, Huppert JS, Taylor RG, et al. Improving sexually transmitted infection results notification via mobile phone technology. J Adolesc Health. 2014;55(5):690-7. doi: 10.1016/j.jadohealth.2014.05.004. PMID: 24962503. **Exclusion reason:** Ineligible intervention
212. Reeder JA, Joyce T, Sibley K, et al. Telephone peer counseling of breastfeeding among WIC participants: a randomized controlled trial. Pediatrics. 2014;134(3):e700-e9. doi: 10.1542/peds.2013-4146. PMID: 25092936. **Exclusion reason:** Ineligible intervention
213. Reiss K, Andersen K, Pearson E, et al. Unintended consequences of mhealth interactive voice messages promoting contraceptive use after menstrual regulation in Bangladesh: intimate partner violence results from a randomized controlled trial. Global Health Science & Practice. 2019;7(3):386-403. doi: 10.9745/GHSP-D-19-00015. PMID: 31558596. **Exclusion reason:** Ineligible country
214. Rempel E, Donelle L, Hall J, et al. Intimate partner violence: a review of online interventions. Inform Health Soc Care. 2019;44(2):204-19. doi: 10.1080/17538157.2018.1433675. PMID: 135932602. **Exclusion reason:** Ineligible study design

215. Rinehart DJ, Leslie S, Durfee MJ, et al. Acceptability and efficacy of a sexual health texting intervention designed to support adolescent females. Acad Pediatr. 2020;20(4):475-84. doi: 10.1016/j.acap.2019.09.004. PMID: 31560971. **Exclusion reason:** Ineligible intervention
216. Robinson EF, Moulder JK, Zerden ML, et al. Preserving and advocating for essential care for women during the coronavirus disease 2019 pandemic. Am J Obstet Gynecol. 2020;223(2):219-20.e1. doi: 10.1016/j.ajog.2020.05.022. PMID: 32405073. **Exclusion reason:** Not a study
217. Roddy MK, Georgia EJ, Doss BD. Couples with intimate partner violence seeking relationship help: associations and implications for self-help and online interventions. Fam Process. 2018;57(2):293-307. doi: 10.1111/famp.12291. PMID: 28425562. **Exclusion reason:** Ineligible outcome(s)
218. Rodgers M, Meisel Z, Wiebe D, et al. Wireless participant incentives using reloadable bank cards to increase clinical trial retention with abused women drinkers: a natural experiment. J Interpers Violence. 2019;34(13):2774-96. doi: 10.1177/0886260516662849. PMID: 27503325. **Exclusion reason:** Ineligible intervention
219. Rodriguez J, Fletcher A, Heredia F, et al. Alternative management for gynecological cancer care during the COVID-2019 pandemic: a Latin American survey. Int J Gynaecol Obstet. 2020;150(3):368-78. doi: 10.1002/ijgo.13272. PMID: 32526044. **Exclusion reason:** Ineligible intervention
220. Rodríguez Vargas B, Sánchez-Rubio Ferrández J, Garrido Fuentes J, et al. Usability and acceptability of a comprehensive HIV and other sexually transmitted infections prevention app. J Med Syst. 2019;43(6):175. doi: 10.1007/s10916-019-1323-4. PMID: 31069548. **Exclusion reason:** Ineligible intervention
221. Roe AH, Fortin J, Gelfand D, et al. Advance notice of contraceptive availability at surgical abortion: a pilot randomised controlled trial. BMJ Sex Reprod Health. 2018;44(3):187-92. doi: 10.1136/bmjsrh-2017-200023. PMID: 30012721. **Exclusion reason:** Ineligible outcome(s)
222. Roesch E, Amin A, Gupta J, et al. Violence against women during covid-19 pandemic restrictions. BMJ. 2020;369:m1712. doi: 10.1136/bmj.m1712. PMID: 32381644. **Exclusion reason:** Not a study
223. Rotker K, Velez D. Where will telemedicine go from here? Fertil Steril. 2020;114(6):1135-9. doi: 10.1016/j.fertnstert.2020.10.050. PMID: 33280718. **Exclusion reason:** Ineligible intervention
224. Santacrose LB, Laurita AC, Marchell TC. Intervene: modeling pro-social bystander behavior in college students through online video. Health Commun. 2020;35(4):397-409. doi: 10.1080/10410236.2018.1564956. PMID: 141935510. **Exclusion reason:** Ineligible intervention
225. Sharma A, Kahle E, Todd K, et al. Variations in testing for HIV and other sexually transmitted infections across gender identity among transgender youth. Transgend Health. 2019;4(1):46-57. doi: 10.1089/trgh.2018.0047. PMID: 30805557. **Exclusion reason:** Ineligible intervention
226. Sharma AE, Frederiksen BN, Malcolm NM, et al. Community education and engagement in family planning: updated systematic review. Am J Prev Med. 2018;55(5):747-58. doi: 10.1016/j.amepre.2018.06.022. PMID: 132527093. **Exclusion reason:** Unusable systematic review
227. Sharma KA, Zangmo R, Kumari A, et al. Family planning and abortion services in COVID 19 pandemic. Taiwan J Obstet Gynecol. 2020;59(6):808-11. doi: 10.1016/j.tjog.2020.09.005. PMID: 33218393. **Exclusion reason:** Ineligible country
228. Shrier LA, Burke PJ, Parker S, et al. Development and pilot testing of a counseling-plus-mHealth intervention to reduce risk for pregnancy and sexually transmitted infection in young women with depression. Began with 2015. 2020;6:17. doi: 10.21037/mhealth.2019.11.05. PMID: 32270009. **Exclusion reason:** Ineligible intervention
229. Simone J, Hoyt MJ, Storm DS, et al. Models of HIV preconception care and key elements influencing these services: findings from healthcare providers in seven US cities. AIDS Patient Care STDS. 2018;32(7):272-81. doi: 10.1089/apc.2017.0299. PMID: 29870269. **Exclusion reason:** Ineligible intervention
230. Skiadas CC, Terry K, De Pari M, et al. Does emotional support during the luteal phase decrease the stress of in vitro fertilization? Fertil Steril. 2011;96(6):1467-72. doi: 10.1016/j.fertnstert.2011.09.028. PMID: 22000914. **Exclusion reason:** Ineligible intervention
231. Smith C, Ngo TD, Gold J, et al. Effect of a mobile phone-based intervention on post-abortion contraception: a randomized controlled trial in Cambodia. Bull World Health Organ. 2015;93(12):842-50A. doi: 10.2471/BLT.15.160267. PMID: 26668436. **Exclusion reason:** Ineligible country
232. Snaith VJ, Hewison J, Steen IN, et al. Antenatal telephone support intervention with and without uterine artery Doppler screening for low risk nulliparous women: a randomised controlled trial. BMC Pregnancy Childbirth. 2014;14:121-. doi: 10.1186/1471-2393-14-121. PMID: 24685072. **Exclusion reason:** Ineligible intervention

233. Sockolow P, Joppa M, Zhu J. Assessment of evaluation frameworks for design of a sexual risk prevention game for Black adolescent girls. Stud Health Technol Inform. 2018;250:101-5. PMID: 29857398. **Exclusion reason:** Ineligible outcome(s)
234. Speller B, Metcalfe K, Kennedy ED, et al. The "Begin Exploring Fertility Options, Risks and Expectations" (BEFORE) decision aid: development and alpha testing of a fertility tool for premenopausal breast cancer patients. BMC Medical Informatics & Decision Making. 2019;19(1):1-16. doi: 10.1186/s12911-019-0912-y. PMID: 139364906. Language: English. Entry Date: 20200510. Revision Date: 20200510. Publication Type: journal article. **Exclusion reason:** Ineligible intervention
235. Spillane A, Taylor M, Henchion C, et al. Early abortion care during the COVID-19 public health emergency in Ireland: implications for law, policy, and service delivery. Int J Gynaecol Obstet. 2021;154(2):379-84. doi: 10.1002/ijgo.13720. PMID: 33893642. **Exclusion reason:** Ineligible intervention
236. Steinberg A, Griffin-Tomas M, Abu-Odeh D, et al. Evaluation of a mobile phone app for providing adolescents with sexual and reproductive health information, New York City, 2013-2016. Public Health Rep. 2018;133(3):234-9. doi: 10.1177/0033354918769289. PMID: 29664696. **Exclusion reason:** Ineligible intervention
237. Stephenson R, Todd K, Kahle E, et al. Project Moxie: results of a feasibility study of a telehealth intervention to increase HIV testing among binary and nonbinary transgender youth. AIDS Behav. 2020;24(5):1517-30. doi: 10.1007/s10461-019-02741-z. PMID: 31760536. **Exclusion reason:** Ineligible intervention
238. Stevens J, Scribano PV, Marshall J, et al. A trial of telephone support services to prevent further intimate partner violence. Violence Against Women. 2015;21(12):1528-47. doi: 10.1177/1077801215596849. PMID: 26223696. **Exclusion reason:** Ineligible intervention
239. Stockwell MS, Westhoff C, Kharbanda EO, et al. Influenza vaccine text message reminders for urban, low-income pregnant women: a randomized controlled trial. Am J Public Health. 2014;104 (Suppl 1):e7-e12. doi: 10.2105/AJPH.2013.301620. PMID: 24354839. **Exclusion reason:** Ineligible intervention
240. Subramanian R, Weare A. #notokay: challenging sexual violence through digital health activism. Crit Public Health. 2020 doi: 10.1080/09581596.2020.1776218. **Exclusion reason:** Ineligible intervention
241. Sun CJ, Anderson KM, Kuhn T, et al. A sexual health promotion app for transgender women (Trans Women Connected): development and usability study. JMIR MHealth UHealth. 2020;8(5):e15888. doi: 10.2196/15888. PMID: 32396131. **Exclusion reason:** Ineligible intervention
242. Sun CJ, Anderson KM, Mayer L, et al. Findings from formative research to develop a strength-based HIV prevention and sexual health promotion mHealth intervention for transgender women. Transgend Health. 2019;4(1):350-8. doi: 10.1089/trgh.2019.0032. PMID: 32042925. **Exclusion reason:** Ineligible intervention
243. Sundstrom B, DeMaria AL, Ferrara M, et al. "The closer, the better:" the role of telehealth in increasing contraceptive access among women in rural South Carolina. Matern Child Health J. 2019;23(9):1196-205. doi: 10.1007/s10995-019-02750-3. PMID: 31228142. **Exclusion reason:** Ineligible intervention
244. Sutton RT, Wierstra K, Huang VW. Knowledge translation dataset: an e-health intervention for pregnancy in inflammatory bowel disease. Data Brief. 2019;23:103647. doi: 10.1016/j.dib.2018.12.085. PMID: 30788391. **Exclusion reason:** Ineligible outcome(s)
245. Tarzia L, May C, Hegarty K. Assessing the feasibility of a web-based domestic violence intervention using chronic disease frameworks: reducing the burden of 'treatment' and promoting capacity for action in women abused by a partner. BMC Womens Health. 2016;16:73-. doi: 10.1186/s12905-016-0352-0. PMID: 120348741. **Exclusion reason:** Ineligible intervention
246. Tarzia L, Murray E, Humphreys C, et al. I-DECIDE: an online intervention drawing on the psychosocial readiness model for women experiencing domestic violence. Womens Health Issues. 2016;26(2):208-16. doi: 10.1016/j.whi.2015.07.011. PMID: 26362841. **Exclusion reason:** Ineligible outcome
247. Tarzia L, Valpied J, Koziol-McLain J, et al. Methodological and ethical challenges in a web-based randomized controlled trial of a domestic violence intervention. J Med Internet Res. 2017;19(3):e94. doi: 10.2196/jmir.7039. PMID: 28351830. **Exclusion reason:** Ineligible study design
248. Teadt S, Burns JC, Montgomery TM, et al. African American adolescents and young adults, new media, and sexual health: scoping review. JMIR MHealth and UHealth. 2020;8(10):e19459. doi: 10.2196/19459. PMID: 33016890. **Exclusion reason:** Ineligible study design
249. Tebb K, Rodriguez F, Pollack L, et al. Reducing health disparities in unintended pregnancies among Latina adolescents using a patient-centered computer-based clinic intervention. J Adolesc Health. 2020;66:S16-S7. doi: 10.1016/j.jadohealth.2019.11.033. PMID: 141170246. **Exclusion reason:** Not a study

250. Tebb KP, Leng Trieu S, Rico R, et al. A mobile health contraception decision support intervention for Latina adolescents: implementation evaluation for use in school-based health centers. JMIR MHealth UHealth. 2019;7(3):e11163. doi: 10.2196/11163. PMID: 30869649. **Exclusion reason:** Ineligible intervention
251. Tebb KP, Rodriguez F, Pollack LM, et al. Improving contraceptive use among Latina adolescents: a cluster-randomized controlled trial evaluating an mHealth application, Health-E You/Salud iTu. Contraception. 2021;104(3):246-53. doi: 10.1016/j.contraception.2021.03.004. PMID: 33744300. **Exclusion reason:** Ineligible intervention
252. Thomas CR, Miller G, Hartshorn JC, et al. Telepsychiatry program for rural victims of domestic violence. Telemed J E Health. 2005;11(5):567-73. doi: 10.1089/tmj.2005.11.567. PMID: 16250820. **Exclusion reason:** No comparison
253. Thompson RG, Aivadyan C, Stohl M, et al. Smartphone application plus brief motivational intervention reduces substance use and sexual risk behaviors among homeless young adults: results from a randomized controlled trial. Psychol Addict Behav. 2020;34(6):641-9. doi: 10.1037/adb0000570. PMID: 32175752. **Exclusion reason:** Ineligible intervention
254. Thompson TA, Ahrens KA, Coplon L. Virtually possible: using telehealth to bring reproductive health care to women with opioid use disorder in rural Maine. Began with 2015. 2020;6:41. doi: 10.21037/mhealth-19-237. PMID: 33437837. **Exclusion reason:** No comparison
255. Tiwari A, Fong DY, Yuen KH, et al. Effect of an advocacy intervention on mental health in Chinese women survivors of intimate partner violence: a randomized controlled trial. JAMA. 2010;304(5):536-43. doi: 10.1001/jama.2010.1052. PMID: 20682933. **Exclusion reason:** Ineligible country
256. Tiwari A, Yuk H, Pang P, et al. Telephone intervention to improve the mental health of community-dwelling women abused by their intimate partners: a randomised controlled trial. Hong Kong Med J. 2012;18 Suppl 6:14-7. PMID: 23249846. **Exclusion reason:** Ineligible outcome(s)
257. Tozzo P, Gabbin A, Politi C, et al. The usage of mobile apps to fight violence against women: a survey on a sample of female students belonging to an Italian University. Int J Environ Res Public Health. 2021;18(13):29. doi: 10.3390/ijerph18136968. PMID: 34209846. **Exclusion reason:** Ineligible intervention - background papers
258. Tran NT, Tappis H, Spilotros N, et al. Not a luxury: a call to maintain sexual and reproductive health in humanitarian and fragile settings during the COVID-19 pandemic. Lancet Glob Health. 2020;8(6):e760-e1. doi: 10.1016/S2214-109X(20)30190-X. PMID: 32330429. **Exclusion reason:** Not a study
259. Troude P, Segouin C, Duteil C, et al. Text messaging after HIV and sexually transmitted infection screening: do patients' profiles matter? Sex Transm Dis. 2019;46(3):159-64. doi: 10.1097/OLQ.0000000000000941. PMID: 30418418. **Exclusion reason:** Ineligible intervention
260. Tsoh JY, Kohn MA, Gerbert B. Promoting smoking cessation in pregnancy with Video Doctor plus provider cueing: a randomized trial. Acta Obstet Gynecol Scand. 2010;89(4):515-23. doi: 10.3109/00016341003678419. PMID: 20196678. **Exclusion reason:** Ineligible population
261. Tsur L, Kozer E, Berkovitch M. The effect of drug consultation center guidance on contraceptive use among women using isotretinoin: a randomized, controlled study. J Womens Health (Larchmt). 2008;17(4):579-84. doi: 10.1089/jwh.2007.0623. PMID: 18447762. **Exclusion reason:** Ineligible intervention
262. Turner KME, Zienkiewicz AK, Syred J, et al. Web-based activity within a sexual health economy: observational study. J Med Internet Res. 2018;20(3):40-. doi: 10.2196/jmir.8101. PMID: 128892714. **Exclusion reason:** Ineligible intervention
263. Unutzer A, Dombrowski JC, Katz DA, et al. Evaluation of text message reminders to encourage retesting for chlamydia and gonorrhea among female patients at the Municipal Sexually Transmitted Disease Clinic in Seattle, Washington. Sex Transm Dis. 2020;47(7):458-63. doi: 10.1097/OLQ.0000000000001184. PMID: 32541305. **Exclusion reason:** Ineligible intervention
264. van der Pligt P, Ball K, Hesketh KD, et al. A pilot intervention to reduce postpartum weight retention and central adiposity in first-time mothers: results from the mums OnLiNE (Online, Lifestyle, Nutrition & Exercise) study. J Hum Nutr Diet. 2018;31(3):314-28. doi: 10.1111/jhn.12521. PMID: 29034545. **Exclusion reason:** Ineligible outcome(s)
265. van Gelder N, Ligthart S, Ten Elzen J, et al. "If I'd had something like SAFE at the time, maybe I would've left him sooner."-Essential features of eHealth interventions for women exposed to intimate partner violence: a qualitative study. J Interpers Violence. 2021:8862605211036108. doi: 10.1177/08862605211036108. PMID: 34355982. **Exclusion reason:** Ineligible intervention

266. Vanhamel J, Rotsaert A, Reyniers T, et al. The current landscape of pre-exposure prophylaxis service delivery models for HIV prevention: a scoping review. BMC Health Serv Res. 2020;20(1):704. doi: 10.1186/s12913-020-05568-w. PMID: 32736626. **Exclusion reason:** Ineligible study design
267. Vonk Noordegraaf A, Anema JR, van Mechelen W, et al. A personalised eHealth programme reduces the duration until return to work after gynaecological surgery: results of a multicentre randomised trial. BJOG. 2014;121(9):1127-35; discussion 36. doi: 10.1111/1471-0528.12661. PMID: 24511914. **Exclusion reason:** Ineligible population
268. Vu LTH, Nguyen NTK, Tran HTD, et al. MHealth information for migrants: an e-health intervention for internal migrants in Vietnam. Reprod Health. 2016;13(1):55. doi: 10.1186/s12978-016-0172-6. PMID: 27180147. **Exclusion reason:** Ineligible country
269. Weinstein RS, Lopez AM, Joseph BA, et al. Telemedicine, telehealth, and mobile health applications that work: opportunities and barriers. Am J Med. 2014;127(3):183-7. doi: 10.1016/j.amjmed.2013.09.032. PMID: 24384059. **Exclusion reason:** Ineligible intervention
270. Weltin A, Etcher L. The role of telemedicine in gynecologic healthcare: a narrative review. Nurse Pract. 2021;46(5):24-32. doi: 10.1097/01.NPR.0000742912.87293.02. PMID: 150480928. **Exclusion reason:** Unusable systematic review
271. Widman L, Golin CE, Kamke K, et al. Sexual Assertiveness Skills and Sexual Decision-Making in Adolescent Girls: Randomized Controlled Trial of an Online Program. American Journal of Public Health. 2018;108(1):96-102. doi: 10.2105/AJPH.2017.304106. PMID: 29161072. **Exclusion reason:** Ineligible intervention
272. Widman L, Nesi J, Kamke K, et al. Technology-based interventions to reduce sexually transmitted infections and unintended pregnancy among youth. J Adolesc Health. 2018;62(6):651-60. doi: 10.1016/j.jadohealth.2018.02.007. PMID: 29784112. **Exclusion reason:** Unusable systematic review
273. Wilkinson TA, Berardi MR, Crocker EA, et al. Feasibility of using text message reminders to increase fulfilment of emergency contraception prescriptions by adolescents. J Fam Plann Reprod Health Care. 2017;43(1):79-80. doi: 10.1136/jfprhc-2016-101647. PMID: 27888182. **Exclusion reason:** Ineligible intervention
274. Willetts SJ, Cowper S, Cameron ST. An audit of a novel electronic messaging treatment service for *Chlamydia trachomatis* at a community pharmacy. Int J STD AIDS. 2018;29(5):511-4. doi: 10.1177/0956462417740062. PMID: 29126379. **Exclusion reason:** Ineligible intervention
275. Williams RL, Meredith AH, Ott MA. Expanding adolescent access to hormonal contraception: an update on over-the-counter, pharmacist prescribing, and web-based telehealth approaches. Curr Opin Obstet Gynecol. 2018;30(6):458-64. doi: 10.1097/GCO.0000000000000497. PMID: 138776798. **Exclusion reason:** Ineligible intervention
276. Wilson E, Leyrat C, Baraitser P, et al. Does internet-accessed STI (e-STI) testing increase testing uptake for chlamydia and other STIs among a young population who have never tested? Secondary analyses of data from a randomised controlled trial. Sex Transm Infect. 2019;95(8):569-74. doi: 10.1136/sextrans-2019-053992. PMID: 31175210. **Exclusion reason** Ineligible intervention
277. Wirtz AL, Cooney EE, Chaudhry A, et al. Computer-mediated communication to facilitate synchronous online focus group discussions: feasibility study for qualitative HIV research among transgender women across the United States. J Med Internet Res. 2019;21(3):e12569. doi: 10.2196/12569. PMID: 30924782. **Exclusion reason:** Ineligible intervention
278. Wolgemuth TE, Cuddeback M, Callegari LS, et al. Perceived barriers and facilitators to contraceptive use among women veterans accessing the Veterans Affairs Healthcare System. Womens Health Issues. 2020;30(1):57-63. doi: 10.1016/j.whi.2019.08.005. PMID: 31558352. **Exclusion reason:** Ineligible intervention
279. Wood SM, White K, Peebles R, et al. Outcomes of a rapid adolescent telehealth scale-up during the COVID-19 pandemic. J Adolesc Health. 2020;67(2):172-8. doi: 10.1016/j.jadohealth.2020.05.025. PMID: 32611509. **Exclusion reason:** Ineligible outcome(s)
280. Xue J, Chen J, Chen C, et al. The hidden pandemic of family violence during COVID-19: unsupervised learning of tweets. J Med Internet Res. 2020;22(11):e24361. doi: 10.2196/24361. PMID: 147360191. **Exclusion reason:** Ineligible intervention
281. Ybarra M, Goodenow C, Rosario M, et al. An mHealth intervention for pregnancy prevention for LGB teens: an RCT. Pediatrics. 2021;147(3):e2020013607. doi: 10.1542/PEDS.2020-013607. PMID: 33568491. **Exclusion reason:** Ineligible intervention

282. Yousef H, Al-Sheyab N, Al Nsour M, et al. Perceptions toward the use of digital technology for enhancing family planning services: focus group discussion with beneficiaries and key informative interview with midwives. J Med Internet Res. 2021;23(7):e25947. doi: 10.2196/25947. PMID: 34319250. **Exclusion reason:** Ineligible country
283. Yudin MH, Mistry N, De Souza LR, et al. Text messages for influenza vaccination among pregnant women: a randomized controlled trial. Vaccine. 2017;35(5):842-8. doi: 10.1016/j.vaccine.2016.12.002. PMID: 28062124. **Exclusion reason:** Ineligible intervention
284. Zairina E, Abramson MJ, McDonald CF, et al. Telehealth to improve asthma control in pregnancy: a randomized controlled trial. Respirology. 2016;21(5):867-74. doi: 10.1111/resp.12773. PMID: 27037722. **Exclusion reason:** Ineligible intervention
285. Zero O, Geary M. COVID-19 and intimate partner violence: a call to action. R I Med J. 2020;103(5):57-9. PMID: 32481784. **Exclusion reason:** Used for contextual question only
286. Zlotnick C, Tzilos Wernette G, Raker CA. A randomized controlled trial of a computer-based brief intervention for victimized perinatal women seeking mental health treatment. Arch Womens Ment Health. 2019;22(3):315-25. doi: 10.1007/s00737-018-0895-1. PMID: 30088145. **Exclusion reason:** Ineligible intervention
287. Zuniga C, Grossman D, Harrell S, et al. Breaking down barriers to birth control access: an assessment of online platforms prescribing birth control in the USA. J Telemed Telecare. 2020;26(6):322-31. doi: 10.1177/1357633X18824828. PMID: 30665333. **Exclusion reason:** Ineligible intervention

Appendix E. Evidence Tables

Table E-1. Study Characteristics of Trials of Telehealth for Women's Preventive Services

Author, Year	Population; setting	Study Characteristics (N)	Population Characteristics	Inclusion and Exclusion criteria
Contraception				
Berenson, 2020[4]	Low-income women 16 to 24 years; U.S.; 5 publicly funded reproductive health clinics	RCT (N=1,155) TH Mode: Online and telephone Funding: MCHB; HRSA Risk of Bias: Moderate	Mean (SD) age: 19.9 (2.4) years Race: -White: 24.8% -Black: 18.6% -Hispanic: 54.2% -Other race: 2.3% Mean (SD) number of prior pregnancies: 1.5 (0.7) History of STI: 16.1%	Inclusion: Sexually active, non-pregnant females ages 16 to 24 years, requesting initiation of OCP between July 2006 and January 2010 Exclusion: Desire to become pregnant in the next year, a medical contraindication to OCP, and current or prior (>1 month) OCP use
Kumar, 2019[6]	Women seeking an abortion; U.K.; Abortion clinics	RCT (N=569) TH Mode: Telephone Funding: London sexual health program; NIHR Risk of Bias: Moderate	Mean (SD) age: 27.3 (6.4) years Race: -White: 38% -Black: 50% -Asian: 4% -Mixed/other race: 8% Ever had a live birth: 51% No previous abortion: 50.3%	Inclusion: Women seeking an abortion Exclusion: Could not speak English, intended to leave area, decided to continue with pregnancy
IPV				
Ford-Gilboe, 2020[11] "*iCAN*"	Women ≥19 years; Canada; online intervention	RCT (N=531) TH mode: Online, interactive Funding: Canadian Institutes of Health Research Risk of Bias: Moderate	Mean (SD) age: 34.61 (10.7) years Indigenous identity: 13.4% Children <18 years living at home: 47.8% Large urban community: 48.9% Medium sized city: 27.5% Rural community/small town: 23.6% Abuse type -Severe combined abuse: 82.5% -Physical abuse: 85.5% -Emotional abuse: 99.1% -Harassment: 78.8%	Inclusion: ≥19 years who reported IPV in the previous 6 months, with a safe computer to access the internet, a safe email address, and secure mailing address Exclusion: Women who had separated from abusive partner >12 months prior to study enrollment

Author, Year	Population; setting	Study Characteristics (N)	Population Characteristics	Inclusion and Exclusion criteria
IPV, continued				
Gilbert, 2015[12] "WINGS"	Women >18 years; U.S.; community court and probation sites	RCT (N=191) TH mode: Computer Funding: NIDA Risk of Bias: Moderate	Mean (SD) age: 34.2 (11.4) years Race: -Black: 67% -Latina: 30% Single or never married: 71% Ongoing intimate relationship: 70%	Inclusion: Substance abusing women age >18 years receiving community supervision Exclusion: No permanent address, no drug use or drug treatment in the past 6 months, no intimate partner relationships in the past year, relocating or living far from study sites
Hegarty, 2019[13] "I-DECIDE"	Women 16 to 50; Australia; online	RCT (N=422) TH mode: tailored website Funding: Australian research council Risk of Bias: Low	Mean (SD) age: 33.7 (8.48) years Race: NR Currently in a relationship with perpetrator of violence: 46% Children <18 years at home: 45% Urban: 79% Rural: 18% Remote: 3%	Inclusion: 16 to 50 years, had safe access to a computer and internet connection, and answered positively to 1 of the screening questions about IPV Exclusion: NR
McFarlane, 2004[15]	Women; U.S.; district attorney's office, family violence uni	Non-randomized controlled study (N=150) TH mode: Telephone Funding: National Institute of Justice Risk of Bias: Moderate	Mean (SD) age: 32.4 (8.9) years Race: -White: 26.7% -Black: 32.7% -Latino: 5.3% Relationship to abuser: -Spouse or common-law spouse: 54% -Ex-spouse or ex-common-law spouse: 16.7% -Girlfriend: 8% -Ex-girlfriend: 21.3%	Inclusion: Women receiving protection orders against an intimate partner Exclusion: NR

Author, Year	Population; setting	Study Characteristics (N)	Population Characteristics	Inclusion and Exclusion criteria
IPV, continued				
Saftlas, 2014[17]	Women ≥18 years; U.S., family planning clinics	RCT (N=306) TH mode: Telephone. Funding: CDC Risk of Bias: Moderate	Age 18-19 years: 25.5% Age 20-24 years: 38.9% Age 25-29 years: 20.6% Age 30-39 years: 9.5% Age ≥40 years: 5.2% Race: - White: 84.6% - Non-white: 14.4% - Hispanic: 12.1% - Non-Hispanic: 86.9% Cohabitation status: -Living together: 48.0% -Not living together: 49.3%	Inclusion: ≥18 years, positive screen for IPV, English speaking Exclusion: Pregnant or incarcerated

Abbreviations: CDC=centers for disease control and prevention; HRSA=health resource services administration; IPV=interpersonal violence; MCHB=Maternal and Child Health Bureau; NIDA=National institute on drug abuse; NIHR=National institute for health research, clinical research network; NR=not reported; OCP=oral contraceptive pill; RCT=randomized controlled trial; SD=standard deviation; TH=telehealth; U.K.=United Kingdom; U.S.=United States

Table E-2. Intervention Characteristics of Trials of Telehealth for Women's Preventive Services

Author, Year	Telehealth Intervention (n)	Comparison Intervention(s) (n)	Intervention Duration	Followup, Method
Contraception				
Berenson, 2012[4]	C+P: Clinic-based plus telephone intervention; face to face behavioral counseling; phone calls reviewed how to take OCP correctly; what to do with missed doses, strategies to address side effects; and importance of condom use; given toll free number to call 24 hours a day if needed for additional assistance (275 at 6 months; 218 at 12 months)	S: Standard care; face-to-face behavioral counseling and education at baseline clinic visit (268 at 6 months; 213 at 12 months) C: Oral and written instructions, 4-month supply of OCPs and 24 free condoms; additional 9-month supply at 3-month followup (270 at 6 months; 214 at 12 months)	Contacted weekly until they began OCP and then monthly for 6 months by contraceptive counselor	12 months (3, 6, and 12) via phone interviews and medical record review
Kumar, 2019[6]	2 telephone followup contacts by nurses for contraceptive support in addition to usual care (282)	Usual care: general advice to follow up with a general practitioner (287)	2 to 4 weeks and 3 months post-abortion via telephone	6 months via telephone
IPV				
Ford-Gilboe, 2020[11] "*iCAN*"	*iCAN,* an interactive, tailored online safety and health intervention (231)	Brief, static version of *iCAN*, that was not tailored (231)	1-time, online session	12-month online survey
Gilbert, 2015[12] "WINGS"	Computerized WINGS intervention: computerized program providing IPV education, screening and risk assessment (94)	Case manager WINGS intervention: in-person IPV education, screening and risk assessment; safety planning (97)	1-time session averaging 44.6 minutes for the computerized version and 46.7 minutes for the case manager version	3-month post-intervention assessment using audio computer-assisted self-interviewing
Hegarty, 2019[13] "I-DECIDE"	I-DECIDE: 3 modules addressing healthy relationships, safety, and priorities, with questions from the CAS and Danger Assessment, received tailored messages; individualized action plan developed and tailored to the woman's preferences. (227)	Static website containing brief information about domestic violence and a standard emergency safety plan (195)	12 monthly sessions	6 and 12 months via telephone
McFarlane, 2004[15]	6 intervention telephone calls and 4 follow up calls over 8 weeks in which safety-promoting behaviors were discussed (75)	Usual services: counseling on promoting safety, social services, legal resources and 4 followup calls (75)	8 weeks	3, 6, 12, 18-month followup interviews via telephone
Saftlas, 2014[17]	Motivational Interviewing: 1-hour face-to-face educational session at baseline, followed by 3, 10- to 15-minute telephone sessions conducted 1, 2, and 4 months post enrollment (98)	On-site meeting with field coordinator or advocate; written materials and referral to community-based resources (108)	Repeated 4 times at 1, 2, 4 months post-baseline	6-month post-baseline via telephone

Abbreviations: OCP=oral contraceptive pill; IPV=interpersonal violence

Table E-3. Outcomes of Trials of Telehealth for Women's Preventive Services

Author, Year	Clinical Outcomes	Patient Reported Outcomes	Harms/Adverse Events
Contraception			
Berenson, 2012[4]	I vs. S vs. C OCP continuation after 3 months: 58.3% (224/384) vs. 55.2% (214/388) vs. 49.9% (191/383), p=0.06 OCP continuation after 6 months: 39.3% (151/384) vs. 37.4% (145/388) vs. 31.9% (122/383), p=0.08 OCP continuation after 12 months: 19.8% (76/384) vs. 19.8% (77/388) vs. 18.0% (69/383), p=0.77 Became pregnant: 13.5% (52/384) vs. 12.4% (48/388) vs. 16.5% (63/383) Pregnancy, HR (95% CI): 1.07 (0.72 to 1.59) vs. 1.00 vs. 1.39 (0.95 to 2.03), p=0.22 Continued to use OCP OR (95%CI): 1.09 (0.86 to 1.40) vs. 1.00 vs. 0.80 (0.63 to 1.03) STI at 12 months: 13 (3.4%) vs. 18 (4.6%) vs. 12 (3.1%)	None	NR
Kumar, 2019[6]	I vs. C, ITT analysis Using effective contraception method at 6 months: 62% (88/142) vs. 54% (80/148); mean difference 8% (95% CI, -3.4 to 19.2) LARC at 6 months: 42% (60/142) vs. 32% (48/148); mean difference 10 (95% CI, -1.3 to 20.9) Changed from non-LARC or no contraception method prior to abortion to LARC at 6 months: 43% vs. 31%; OR 1.67 (95% CI, 1.01 to 2.75) Subsequent abortion within 1 year: 10% (26/270) vs. 10% (28/281); mean difference 0.3 (95% CI, -4.6 to 5.3) Subsequent abortion at 1 year: 10% (26/270) vs 10% (28/281); p=0.098; and 2 years: 6% (15/270) vs. 6% (16/281); mean difference 0.1 (95% CI, -3.7 to 4.0)	I vs. C Satisfaction with chosen contraceptive method at 6 months: 87% (116/134) vs. 79% (111/140); mean difference 7 (95% CI, -1.5 to 16.1)	None reported

Author, Year	Clinical Outcomes	Patient Reported Outcomes	Harms/Adverse Events
IPV			
Ford-Gilboe, 2020[11] "*iCAN*"	I vs. C, mean (SD) CESD-R at 3 months: 33.44 (20.79) vs. 33.03 (20.38) CESD-R at 6 months: 30.47 (22.15) vs. 30.82 (20.31) CESD-R at 12 months: 27.95 (22.50) vs. 29.83 (21.26) WEB at 3 months: 43.09 (11.66) vs. 44.77 (11.93) WEB at 6 months: 42.04 (14.15) vs. 42.28 (14.12) WEB at 12 months: 39.62 (15.73) vs. 40.94 (14.69)	I vs. C, mean (SD) Score on question using 5-point scale ranging from 1=strongly disagree to 5=strongly agree -I gained something from completing the online tool: 4.51 (0.625) vs. 4.45 (0.699), p=0.380 -The information in the online tool fit with my needs and concerns: 4.28 (0.756) vs. 4.11 -If I had known what this study would be like, I would still have taken part: 4.46 (0.700) vs. 4.35 (0.798), p=0.159 -I would recommend the online tool to other women: 4.62 (0.599) vs. 4.47 (0.766), p=0.038 -I felt comfortable and safe taking part: 4.63 (0.603) vs. 4.59 (0.723), p=0.511	I vs. C, mean (SD) Score on question using 5-point scale ranging from 1=strongly disagree to 5=strongly agree -I felt anxious or upset engaging with the tool: 3.22 (1.25) vs. 3.33 (1.21), p=0.380
Gilbert, 2015[12] "WINGS"	NR	No differences between the two intervention groups for any outcome measure: physical, sexual, verbal, and psychological IPV and combinations; received IPV services after the intervention over past 90 days; IPV self-efficacy; social support; days not using drugs over past 30 days	NR
Hegarty, 2019[13] "I-DECIDE"	I vs. C, mean (SD), ITT imputed analysis CESDS-R at 6 months: 22.5 (17.1) vs. 24.2 (17.2); mean difference -0.3 (95% CI, -3.5 to 3.0) CESDS-R at 12 months: 21.9 (19.3) vs. 21.5 (19.3); mean difference -1.9 (95% CI, -5.6 to 1.7) CAS score at 12 months: 17.1 (20.5) vs. 17.0 (19.5); mean difference -0.1 (95% CI, -4.4 to 4.3)	I vs. C, mean (SD), ITT imputed analysis GSES at 6 months: 27.5 (5.2) vs. 28.1 (4.4); mean difference 1.3 (95% CI, 0.3 to 2.3) GSES at 12 months: 27.8 (5.4) vs. 29.0 (5.0); mean difference 1.6 (95% CI, 0.6 to 2.7) Fear of partner (VAS, 0 to 10) at 6 months: 3.0 (2.7) vs. 3.5 (2.5); mean difference 0.4 (95% CI, -0.3 to 1.0) Fear of partner (VAS, 0 to 10) at 12 months: 2.7 (2.8) vs. 2.9 (3.0); mean difference 0.1 (95% CI, -0.6 to 0.9) Number of helpful actions taken at 6 months: 4.3 (2.6) vs. 4.2 (2.7); mean difference -0.2 (95% CI, -0.8 to 0.4) Number of helpful actions taken at 12 months: 4.2 (2.8) vs. 4.2 (2.6); mean difference -0.1 (95% CI, -0.8 to 0.5)	NR
IPV			
McFarlane, 2004[15]	I vs. C, mean (SD) Number of safety promoting behaviors practiced: p=0.028 between groups over time -3 months: 12.5 (2.9) vs. 9.9 (2.8) -6 months: 12.0 (2.5) vs. 10.4 (2.2) -12 months: 11.9 (2.7) vs. 10.6 (2.5) -18 months: 12.0 (2.7) vs. 10.5 (2.6)	NR	NR

Author, Year	Clinical Outcomes	Patient Reported Outcomes	Harms/Adverse Events
Saftlas, 2014[17]	I vs C, CES-D score from baseline to 6 months: Intervention, 15.7 vs. 11.7, p<0.001; control, 14.3 vs. 11.8, p<0.0001 I vs. C, adjusted mean change (SE) from baseline to followup CES-D score, Depressive symptoms: -4.2 (0.6) vs.-2.6 (0.6), p=0.07 Self-efficacy: 6.1 (1.6) vs. 3.7 (1.5), p=0.255 State of readiness to change, OR (95% CI) (precontemplation as reference), I vs. C Contemplation/panning: 1.45 (0.36 to 5.80) Action/maintenance: 2.0 (0.86 to 4.57)	NR	NR

Abbreviations: C=comparison group; CESDS-R=Center for Epidemiologic Studies Depression Scale-Revised; CI=confidence interval; GSES=General Self-Efficacy-Schwarzer; HR=hazard ratio; I=intervention group; IPV=interpersonal violence; ITT=intention-to-treat; LARC=long-acting reversible contraceptive; NR=not reported; OCP=oral contraceptive pill; OR=odds ratio; S=standard care; SD=standard deviation; SE=standard error; VAS=visual analogue scale; WEB=Women's Experiences with Battering Scale

Table E-4. Characteristics of Studies of the Impact of the COVID-19 Pandemic on Telehealth for Women

Author, Year	Study Characteristics	Telehealth model; Time period	Inclusion and Exclusion criteria	Baseline Population Characteristics
Contraception				
Hill, 2021[5]	N=3,142 Study design: Cross-sectional at 4 timepoints Setting: Unclear, U.S. ROB: Moderate	Telehealth visits (n=1,257) vs. in-person visits (n=1,885) based on electronic medical records from April 1, 2020 to July 31, 2020	Inclusion: Women receiving sexual and reproductive health care (in clinic or telehealth) Exclusion: Patients requesting injectable contraception, long-acting reversible contraception (i.e. implant and IUD), and/or confirmatory pregnancy testing	Age, mean (SD): 33.7 (8.48) years Non-white: 42% Visits: Contraception: 1712/3142 (54.5%) STI-related: 897/3142 (28.5%) General gynecological concerns: 533/3142 (17.0%)
Steiner, 2021[7] Clinicians	N=791 Study design: Cross-sectional survey Setting: Mix of urban and rural, U.S. ROB: Low	Survey: proportion using telehealth before vs during pandemic September 14, 2020 to October 26, 2020	Inclusion: General primary care physicians and pediatricians in the U.S. providing care to ≥1 adolescent patient per week Exclusion: OBGYN providers	Age, median: 47 Male: 47% Non-white: 40%
Stifani, 2021[9] Patients	N=86 Study design: Cross-sectional survey Setting: Urban, U.S. ROB: Moderate	Quantitative survey to elicit patients' satisfaction and experience; in-depth interviews	Inclusion: Patients ≥18 years, who had a telehealth visit between April and June 2020 primarily focused on contraceptive counseling or other issues related to contraception Exclusion: NR	Age 18-25: 27% Age 26-35: 49% Age 36-45: 19% Age >45: 6% Non-white: 88%
Stifani, 2021[8] Clinicians	N=172 Study design: Cross-sectional Setting: Urban/suburban, U.S. ROB: Moderate	Survey: telehealth delivery reflecting on prior/during pandemic timepoints June, 2020 to July, 2020	Inclusion: Physicians, NPs, PAs, CNMs, who practice in the U.S. and provide abortion or contraception Exclusion: NR	Age, mean (SD): 39.9 (8.3) years Non-white: 31% From academic centers: 76% Urban practice: 76% In practice <5 years: 42%

Author, Year	Study Characteristics	Telehealth model; Time period	Inclusion and Exclusion criteria	Baseline Population Characteristics
Contraception				
Zapata, 2021[10] Clinicians	N=1,063 Study design: Cross-sectional survey Setting: Mix of urban and rural, U.S. ROB: Moderate	Survey: family planning service delivery during Covid-19 pandemic September, 2020 to October, 2020	Inclusion: Primary care physicians providing family planning services who had responded to an online survey Exclusion: Non-responders, responders who did not provide family planning services	Age >45 years: 59.3% Male: 62% Non-white: 39% Urban/Suburban/Rural: 35%/53%/12% Specialty: Family practice: 34% Internist: 28.7% Pediatrician: 14.7% OB/GYN: 22.7%
IPV				
Krishnamurti, 2021[14]	N=959 Study design: Before-after Setting: Urban, U.S. ROB: Moderate	Hybrid model: patients completed IPV screening during their first prenatal appointment Prior to shelter-in place order: January 23, 2020 to March 22, 2020 (n=443) During shelter-in place order: March 23, 2020 to May 15 2020 (n=552)	Inclusion: Pregnant residents of Allegheny County, Pennsylvania who were prescribed the MyHealthyPregnancy app during an in-person visit that filled the IPV screening module Exclusion: NR	Age, mean: NR Non-white: ~11%
Sabri, 2021[16]	N=62 Study design: Cross-sectional, qualitative survey Setting: Unclear, U.S. ROB: High	Survey: barriers/facilitator to use of IPV services using virtual platform 45 women and 17 providers	Inclusion: Immigrant women residing in the U.S. with experiences of IPV with the last year, providers were those who had ≥2 years of experience serving immigrant survivors of IPV Exclusion: NR	Age, mean: NR Non-white: NR

Abbreviations: CDC= Centers for Disease Control and Prevention; CNM=certified nurse midwife; HRSA=Health research and services administration; IPV=interpersonal violence; IUD=intrauterine device; MCHB= Maternal and Child Health Bureau; NICHD=National Institute of Child Health and Development ; NIH=National Institutes of Health; NP=nurse practitioner; NR=not reported; OBGYN=obstetricians/gynecologists; PA=physician's assistant; SD=standard deviation; U.S.=United States

Table E-5. Outcomes of Studies of the Impact of the COVID-19 Pandemic on Telehealth for Women

Author, Year	Comparisons	Main Results
Contraception		
Hill, 2021[5]	Telehealth visits during COVID-19 pandemic vs. in-person visits during COVID-19 pandemic by race/ethnicity	TH vs. in-person visits during COVID-19 pandemic Overall visits: 40.0% (1257/3142) vs. 60.0% (1885/3142) Visits for contraception: 63.5% (798/1257) vs.48.5% (914/1885), p<0.001 Use by race: Black: 31.6% (242/765), p<0.05 Multiracial: 29.2% (31/106) , p<0.05 Unknown race: 54.9% (162/295) , p<0.05 White: 41.2% (771/1870) , p<0.05 All other race identities: 48.1% (51/106) , p<0.05 Latinx: 39.6% (108/273), p=NS <u>Within group comparison of TH visits by race/ethnicity:</u> Black: 19.3% (242/1257) vs. 27.7% (523/1885), p<0.001 Multiracial: 2.5% (31/1257) vs. 4.0% (75/1257), p=0.03) Unknown race: 12.9% (162/1257) vs.7.1% (133/1885), p<0.001 Latinx: 8.6% (108/1257) vs. 8.8% (165/1885), p=NS White: 14% (771/1257) vs. 99% (1870/1885), p=NR
Steiner, 2021[7]	Just before the COVID-19 pandemic vs. during the COVID-19 pandemic	Utilization of services just before the COVID-19 pandemic vs. during the COVID-19 pandemic: TH for contraception use: 35.2% (278/791) vs. 60.7% (480/791), p<0.001 TH for STI services: 21.7% (172/791) vs. 43.5% (344/791), p<0.001 During COVID-19 pandemic: TH for contraception discontinued: 6.8% (19/278) TH for contraception initiated: 43.1% (221/513) TH for STI services discontinued: 5.8% (10/172) TH for STI services initiated: 29.4% (182/619)
Stifani, 2021[9] Patients	Telehealth visits for contraception counseling during the COVID-19 pandemic	Satisfaction with TH visits: - Very satisfied: 86% (74/86) - Somewhat satisfied: 12% (10/86) - Somewhat dissatisfied: 0% - Very dissatisfied: 2% (2/86) TH visit met needs: - Needs were completely met: 63% (54/86) - Met for the moment but will need in-person visit later: 24% (21/86) - Met some needs but still needed in-person visit after: 11% (9/86) - Did not meet any needs and needed in-person visit: 2% (2/86)

Author, Year	Comparisons	Main Results
Contraception		
Stifani, 2021[8] Providers	Before COVID-19 pandemic vs. during the COVID-19 pandemic	Before vs. during COVID-19 pandemic: TH for contraception use (often or sometimes): 54.3% (19/35) vs. 30.8% (48/156) Satisfaction with TH during COVID-19 pandemic: -TH is effective (strongly agree): 79.5% (124/156) -TH role should be expanded (strongly agree): 84.0% (131/156) -TH became routine would feel very happy: 63.5% (99/156) Referral to in-person visits during COVID-19 pandemic: -≤25%: 53.2% (83/156) -26 to 50%: 25.6% (40/156) ->50%: 8.3% (13/156) Preferred TH type: -Video: 59.6% (93/156) -Phone: 13.5% (21/156) -No strong preference: 25.6% (40/156) Reason for referral to in-person visits during COVID-19 pandemic: -LARC insertion: 52.6% (82/156) -LARC removal: 9.6% (15/156) -Depo: 10.3% (16/156) -Other reason: 3.8% (6/156)
Zapata, 2021[10]	Before COVID-19 pandemic vs. during COVID-19 pandemic	Before vs. during COVID-19 pandemic (n for each group=1063, same providers): LARC placement: 41.2% (438) vs. 36.3% (386), p<0.05 LARC removal: 45.1% (479) vs. 40.1% (426), p<0.05 TH for contraception initiation: 27.6% (293) vs. 55.8% (593), p<0.05 TH for contraception continuation: 29.4% (313) vs. 60.1% (639), p<0.05 Renewed contraception prescriptions without requiring an office visit: 54.9% (584) vs. 62.2% (661), p<0.05 Allowed curbside pickup/mail delivery of contraception: 18.5% (197) vs. 29.5% (314), p<0.05 Supported self-administration of subcutaneous injectable contraception: 15.6% (166) vs. 15.5% (165), p=NS Counseled on extending use of LARC beyond their FDA-approved duration: 26.3% (280) vs. 25.8% (274), p=NS Provided or prescribed emergency contraceptive pills in advance: 33.8% (359) vs. 35.4% (376), p=NS Provided or prescribed a year's worth of OCP: 52.0% (553) vs. 52.3% (556), p=NS Sent patient reminders about DMPA injections or LARC removal or replacement: 22.8% (242) vs. 22.1% (235), p=NS
IPV		
Krishnamurti, 2021[14]	MyHealthyPregnancy app; includes an optional IPV screening module vs. pre-COVID-19 use	IPV screening increased post COVID: from 67% to 85%, IPV incidence did not increase

Author, Year	Comparisons	Main Results
IPV		
Sabri, 2021[16]	Use of IPV services during COVID-19 pandemic	Barriers to TH: lack of resources to engage in virtual services, lack of comfort with virtual platform, access to internet, preference for face-to-face interaction. Facilitators: use of text messages, emails, and video conference with safety plan (code word); use of telephone or text message check-ins; use of various safety plan, when using virtual platform, were needed: code work, hand gesture, secure text that need pin to be read

Abbreviations: COVID-19=novel coronavirus pandemic 2019; FDA=U.S. Food and Drug Administration; IPV=interpersonal violence; LARC=long-acting reversible contraceptive; NS=not significant; OCP=oral contraceptive pills; TH=telehealth

Table E-6. Barriers and Facilitators to Telehealth for Reproductive and IPV Services

Topic Number of studies	Intervention	Method N* Location	Facilitators	Barriers	Impact
Family Planning	NA	No studies	No studies	No studies	No studies
Contraception K=4[5,6,8-10]	Telephone or video nurse contacts for contraception counseling and support	Telephone or video N=4,737 U.S. & U.K.	• None	• Fewer females seeking care (49%)[10] • Technical challenges with contraceptive care via telehealth (45.8%)[10] • Confidentiality concerns (21.8%)[10] • Billing concerns (32.7%)[10] • Patient discomfort (31.2%)[10] • Geographic regions[5]	• Very satisfied with telehealth visits: 86% (74/86)[9] • Satisfaction with chosen contraceptive method at 6 months: 87% (116/134) vs. 79% (111/140); mean difference 7 (95% CI, -1.5 to 16.1)[6] • Needs were completely met: 63% (54/86)[9]
STI counseling	NA	No studies	No studies	No studies	No studies
IPV K=2[11,16]	Interactive, tailored online safety and health intervention; and use of IPV services during the COVID-19 pandemic	Online or unclear N=524 U.S & Canada	• Use of text messages, emails, and video conference with safety plan (code word)[16] • Use of telephone or text message check-ins[16] • Use of various safety plans when using virtual platform[16]	• Lack of resources to engage in virtual services[16] • Lack of comfort with virtual platform[16] • Lack of access to the internet • Preference for face-to-face interaction[16]	• Would recommend the online tool to other women, mean (SD) on VAS: 4.62 (0.599) vs. 4.47 (0.766), p=0.038 [11]

*N is used here to represent the unit of analysis, which may be number of individual participants or may be number of health care sites or systems.

Abbreviations: CI=confidence interval; COVID-19=novel coronavirus 2019; K=number of studies N=number of subjects; NA=not applicable; SD=standard deviation; U.K=United Kingdom; U.S.=United States

Appendix F. Risk of Bias Assessment

Table F-1. Risk of Bias Assessment for Included Randomized Controlled Trials

Author	Was the assignment to the treatment groups really random?	Was allocation adequately concealed?	Were groups similar at baseline in terms of prognostic factors?	Were patients blinded?	Were healthcare providers blinded?	Were outcome assessors blinded?	Was the rate of overall attrition within acceptable levels?	Was the rate of differential attrition within acceptable levels?	Did the article analyze people in the groups in which they were randomized (intention-to-treat, no crossovers between groups in analysis)?	Was the funding source reported?	Assessment of Bias
Berenson, 2012[4]	Yes	Unclear	Yes	No	No	Yes	No	Yes	Yes	Yes	Moderate
Ford-Gilboe, 2020[11]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Moderate
Gilbert, 2015[12]	Yes	Unclear	Yes	Yes	Not Reported	Unclear	Yes	Yes	Yes	Yes	Moderate
Hegarty, 2019[13]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low
Kumar, 2019[6]	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Moderate
Saftlas, 2014[17]	No	Unclear	Yes	Unclear	No	Unclear	No	Yes	Yes	Yes	Moderate

Table F-2. Risk of Bias Assessment for the Included Nonrandomized Controlled Study

Author, year	Did the study attempt to enroll all (or a random sample of) patients meeting inclusion criteria (inception cohort)?	Were the groups comparable at baseline on key prognostic factors (e.g., by restriction or matching)?	Did the study use accurate methods for ascertaining exposures and potential confounders (i.e., age, sex, other medications)?	Were outcome assessors and/or data analysts blinded to the exposure being studied?	Did the article report attrition or missing data?	Is there important differential loss to followup or overall high loss to followup or missing data?	Did the study perform appropriate statistical analyses on potential confounders (i.e., age, sex, other medications)?	Were outcomes prespecified and defined, and ascertained using accurate methods?	Assessment of Bias
McFarlane, 2004[15]	Yes	Yes	Yes	Not reported	Yes	No	Unclear	Yes	Moderate

Table F-3. Risk of Bias Assessment for the Included Before-After Study*

Author, year	Were all eligible participants that met the prespecified entry criteria enrolled?	Were the outcome measures prespecified, clearly defined, valid, reliable, and assessed consistently across all study participants?	Were the people assessing the outcomes blinded to the participants' exposures/ interventions?	Were outcome measures of interest taken multiple times before the intervention and multiple times after the intervention (i.e., did they use an interrupted time-series design)? (this is also about the same patients)	Were temporal trends considered or controlled for (e.g. statistical adjustment, comparison with another hospital in same time period)? Compared with other hospital?	Assessment of Bias
Krishnamurti, 2021[14]	Yes	Yes	No	Yes	Yes	Moderate

*National Institutes of Health (NIH) quality assessment tool for before-after (Pre-Post) study with no control group, https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools

Table F-4. Risk of Bias Assessment for Included Cross-sectional Studies*

Author, year	Is the sampling strategy or selection criteria reported and appropriate?	Are the response or participation rates reported and are they acceptable given the type of study?	Are characteristics (e.g., demographics) of respondents/participants reported?	Is how the questions were developed/selected reported and is it appropriate?	Were confounders considered? (Could be in analysis or presentation, such as stratifying results)	Is analysis appropriate? (given the type of data)	Assessment of Bias
Hill, 2021[5]	Yes	NA	No	NA	Yes	Yes	Moderate
Sabri, 2020[16]	Yes	No	No	Yes	Unclear	Unclear	High
Steiner, 2021[7]	Yes	Yes	Yes	Yes	Yes	Yes	Low
Stifani, 2021a[8]	Yes	Yes	Yes	Yes	Unclear	Yes	Moderate
Stifani, 2021b[9]	Yes	Yes	Yes	Yes	Unclear	Yes	Moderate
Zapata, 2021[10]	Unclear	Yes	Yes	Yes	Yes	Yes	Moderate

*Source: Hersh W, Totten A, Eden K, et al. Health Information Exchange. Evid Rep Technol Assess (Full Rep). 2015 (220):1-465. doi: 10.23970/ahrqepcerta220. PMID: 30307736.

Appendix G. Details on Strength of Evidence

Appendix Table G-1. Strength of Evidence

Preventive service	Outcome	Studies; observations (n); study Designs	Directness	Consistency and Precision	Limitations	Summary of Findings	Strength of Evidence
Contraception	Contraceptive use	2 RCTs (1,724)[4,6]	Direct	Consistent; precise	Moderate: lack of blinding; high participant attrition or loss to followup	Similar rates of oral contraceptive continuation at 12 months (19.8% [76/384] vs. 19.8% [77/388] vs. 18.0% [69/383]; p=0.77); similar rates of contraceptive use (p=0.17) or LARC use at 6 months postabortion (42% [60/142] vs. 32% [48/148]; mean difference 10 (95% CI, -1.3 to 20.9); p=0.08)	Moderate
	STI incidence	1 RCT (1,155)[4]	Direct	NA; imprecise	Moderate: See above	Similar rates of STI for intervention and control groups (13 [3.4%] vs. 18 [4.6%] vs. 12 [3.1%]; p=0.50)	Low
	Pregnancy	1 RCT (1,155)[4]	Direct	NA; precise	Moderate: See above	Similar pregnancy rates for intervention and control groups (HR [95% CI]: 1.07 [0.72 to 1.59] vs. 1.00 vs. 1.39 [0.95 to 2.03], p=0.22)	Low
	Abortion rates	1 RCT (569)[6]	Direct	NA; imprecise	Moderate: Significant loss to followup	Similar abortion rates at 1 year for intervention and control groups (10% [26/270] vs. 10% [28/281]; p=0.10)	Insufficient
Family planning	Delivery of family planning services	1 cross sectional study[5]	NA	NA	NA	NA	Insufficient
STI Screening	NA	No studies	NA	NA	NA	NA	Insufficient
Intimate Partner Violence (IPV)	IPV rates	No studies	NA	NA	NA	NA	Insufficient
	Depression scores	3 RCTs (1,190)[11,13,17]	Direct	Inconsistent; precise	Moderate: few studies; heterogeneous interventions and comparisons	Significantly improved measures of depression (CES-D) for both groups with in-person interviews followed by phone calls vs. referral in 1 trial (intervention, 15.7 vs. 11.7, p<0.001; control, 14.3 vs. 11.8, p<0.0001; adjusted mean change [SE],-4.2 [0.6] vs.-2.6 [0.6], p=0.07). No differences between interactive vs. noninteractive online tools in 2 other trials.	Low

Preventive service	Outcome	Studies; observations (n); study Designs	Directness	Consistency and Precision	Limitations	Summary of Findings	Strength of Evidence
Intimate Partner Violence (IPV), continued	PTSD scores	1 RCT (462)[11]	Direct	NA; imprecise	Moderate: few studies	No differences in PTSD symptoms between interactive vs. noninteractive online tools (baseline vs. 12-months: tailored, 53.00 vs. 43.29, p<0.001; non-tailored, 51.69 vs. 44.45; p<0.001; tailored vs. non-tailored, p=0.269). .	Insufficient
	Fear, coercion	2 RCTs (884)[13,17]	Direct	Consistent; imprecise	Moderate: few studies; clinical relevance of measures unclear	No differences between interactive vs. noninteractive online tools for fear (mean [SD], 3.0 [2.7] vs. 3.5 [2.5]; mean difference 0.4 [95% CI, -0.3 to 1.0]); or coercion (baseline vs. 12-months: tailored, 53.00 vs. 43.29, p<0.001; non-tailored, 51.69 vs. 44.45; p<0.001; tailored vs. non-tailored, p=0.269).	Low
	Self-efficacy	3 RCTs (919)[12,13,17]	Direct	Inconsistent; imprecise	Moderate: few studies; comparison intervention may be an inadequate control; clinical relevance of measures unclear	Significantly greater improvement in self-efficacy scores for noninteractive (control group) versus interactive online tool (intervention, 27.0 vs. 27.8; control, 26.3 vs. 29.0; p=0.0023). No differences in scores in the two other trials (adjusted mean change [SE], 6.1 [1.6] vs. 3.7 [1.5]; p=0.255).	Low
	Safety behaviors	3 RCTs (763)[12,13,15]	Indirect	Inconsistent; imprecise	Moderate: few studies; heterogeneous interventions and comparisons; clinical relevance of measures unclear	Significantly more safety behaviors with telephone calls vs. usual care ($F_{4,144}$=5.45, p<0.001). No differences between groups in 2 other trials.	Low
	Harms	1 RCT (231)[11]	Indirect	NA; imprecise	Moderate	No difference in patient reported anxiety between a tailored, online safety tool versus a static version (mean [SD] 3.22 [1.25] vs. 3.33 [1.21], p=0.380).	Insufficient

Abbreviations: CES-D=Center for Epidemiologic Studies Depression Scale; CI=confidence interval; IPV=interpersonal violence; LARC=long-acting reversible contraception; PTSD=posttraumatic stress disorder; NA=not applicable; PTSD=posttraumatic stress disorder; RCT=randomized controlled trial; SD=standard deviation; SE=standard error; STI=sexually transmitted infection

Appendix H. References

1. Agency for Healthcare Research and Quality. Methods guide for effectiveness and comparative effectiveness reviews. Rockville, MD: Agency for Healthcare Research and Quality (US); January 2014.
2. Hersh W, Totten A, Eden K, et al. Health information exchange. Evid Rep Technol Assess (Full Rep). 2015 (220):1-465. doi: 10.23970/ahrqepcerta220. PMID: 30307736.
3. Lewin S, Booth A, Glenton C, et al. Applying GRADE-CERQual to qualitative evidence synthesis findings: introduction to the series. Implement Sci. 2018;13(Suppl 1):2. doi: 10.1186/s13012-017-0688-3. PMID: 29384079.
4. Berenson AB, Rahman M. A randomized controlled study of two educational interventions on adherence with oral contraceptives and condoms. Contraception. 2012;86(6):716-24. doi: 10.1016/j.contraception.2012.06.007. PMID: 22840278.
5. Hill BJ, Lock L, Anderson B. Racial and ethnic differences in family planning telehealth use during the onset of the COVID-19 response in Arkansas, Kansas, Missouri, and Oklahoma. Contraception. 2021;104(3):262-4. doi: 10.1016/j.contraception.2021.05.016. PMID: 34058223.
6. Kumar U, Pollard L, Campbell L, et al. Specialist follow-up contraceptive support after abortion-Impact on effective contraceptive use at six months and subsequent abortions: A randomised controlled trial. PLoS ONE [Electronic Resource]. 2019;14(6):e0217902. doi: 10.1371/journal.pone.0217902. PMID: 31185058.
7. Steiner RJ, Zapata LB, Curtis KM, et al. COVID-19 and sexual and reproductive health care: findings from primary care providers who serve adolescents. J Adolesc Health. 2021;69(3):375-82. doi: 10.1016/j.jadohealth.2021.06.002. PMID: 34301467.
8. Stifani BM, Avila K, Levi EE. Telemedicine for contraceptive counseling: an exploratory survey of US family planning providers following rapid adoption of services during the COVID-19 pandemic. Contraception. 2021;103(3):157-62. doi: 10.1016/j.contraception.2020.11.006. PMID: 33212033.
9. Stifani BM, Smith A, Avila K, et al. Telemedicine for contraceptive counseling: patient experiences during the early phase of the COVID-19 pandemic in New York City. Contraception. 2021;104(3):254-61. doi: 10.1016/j.contraception.2021.04.006. PMID: 33861981.
10. Zapata LB, Curtis KM, Steiner RJ, et al. COVID-19 and family planning service delivery: findings from a survey of U.S. physicians. Prev Med. 2021;150:106664. doi: 10.1016/j.ypmed.2021.106664. PMID: 34081938.
11. Ford-Gilboe M, Varcoe C, Scott-Storey K, et al. Longitudinal impacts of an online safety and health intervention for women experiencing intimate partner violence: randomized controlled trial. BMC Public Health. 2020;20(1):260. doi: 10.1186/s12889-020-8152-8. PMID: 32098633.
12. Gilbert L, Shaw SA, Goddard-Eckrich D, et al. Project WINGS (Women Initiating New Goals of Safety): A randomised controlled trial of a screening, brief intervention and referral to treatment (SBIRT) service to identify and address intimate partner violence victimisation among substance-using

women receiving community supervision. Crim Behav Ment Health. 2015;25(4):314-29. doi: 10.1002/cbm.1979. PMID: 26482019.

13. Hegarty K, Tarzia L, Valpied J, et al. An online healthy relationship tool and safety decision aid for women experiencing intimate partner violence (I-DECIDE): a randomised controlled trial. Lancet Public Health. 2019;4(6):e301-e10. doi: 10.1016/s2468-2667(19)30079-9. PMID: 31155223.

14. Krishnamurti T, Davis AL, Quinn B, et al. Mobile remote monitoring of intimate partner violence among pregnant patients during the COVID-19 shelter-in-place order: quality improvement pilot study. J Med Internet Res. 2021;23(2):e22790. doi: 10.2196/22790. PMID: 33605898.

15. McFarlane J, Malecha A, Gist J, et al. Increasing the safety-promoting behaviors of abused women. Am J Nurs. 2004;104(3):40-50; quiz -1. doi: 10.1097/00000446-200403000-00019. PMID: 15108570.

16. Sabri B, Hartley M, Saha J, et al. Effect of COVID-19 pandemic on women's health and safety: a study of immigrant survivors of intimate partner violence. Health Care Women Int. 2020;41(11-12):1294-312. doi: 10.1080/07399332.2020.1833012. PMID: 33085577.

17. Saftlas AF, Harland KK, Wallis AB, et al. Motivational interviewing and intimate partner violence: a randomized trial. Ann Epidemiol. 2014;24(2):144-50. doi: 10.1016/j.annepidem.2013.10.006. PMID: 24252714.