Appendix A. Search Strategies Used in the Systematic Review

Set Number	Concept	Search Statement [Pubmed] [CINAHL, PsycINFO] [Popline]	Number of Hits - PubMed	Number of Hits – CINAHL; PsycINFO	Number of Hits - Popline
1	Family Planning	"family planning services"[Mesh] OR "family planning policy"[Mesh] OR “reproductive health services”[Mesh] OR "family planning"[All fields] OR "Title X"[All fields] OR “planned parenthood” “family planning services" OR "family planning policy" OR “reproductive health services” OR "family planning" OR "Title X" OR “planned parenthood” "family planning"/"family planning centers"/"family planning education"/"family planning information centers"/"family planning organizations"/"family planning training"	30,340	4,972	48,846
2	Contraception	"contraception"[Mesh] OR "contraceptive agents"[Mesh] OR "contraceptive devices"[Mesh] OR “contraception behavior”[Mesh] OR "birth control"[All fields] "contraception" OR "contraceptive agents" OR	37,828	8,896	N/A

		"contraceptive devices" OR "contraception behavior" OR "birth control" Contraception is an included term under "family planning"			
3	Adolescents	"adolescent"[Mesh] OR "adolescent behavior"[Mesh] OR "adolescent development"[Mesh] OR "pregnancy in adolescence"[Mesh] "adolescent" OR "adolescent behavior" OR "adolescent development" OR "pregnancy in adolescence" OR adolescence OR "adolescent care" OR "adolescent parents" OR "adolescent attitudes" OR "adolescent fathers" OR "adolescent mothers" youth/"adolescent health"/"adolescent health services"	945,331	288,909	32,957
4	Confidentiality/ Privacy	"confidentiality"[Mesh] OR "privacy"[Mesh] OR "confidentiality"[All Fields] OR "privileged communication"[all fields] ("privacy and confidentiality") OR "privileged communication" OR privacy OR confidentiality	23,648	19,355	1,065

		privacy/"confidential information"			
5	Combined sets – General	(#1 OR #2) AND #3	13,498	3,938	6,043
6	Combined sets confidentiality/ privacy	#5 AND #4	317	156	89

Appendix B. Electronic Databases Searched in the Systematic Review

Database	URL for Search Platform
Cumulative Index to Nursing and Allied Health Literature	http://ebscohost.com/
The Campbell Library	http://www.campbellcollaboration.org/library.php
The Cochrane Library	www.thecochranelibrary.com
Database of Abstracts of Reviews of Effects	http://www.crd.york.ac.uk/crdweb/
EMBASE	http://ebscohost.com/
MEDLINE	http://ebscohost.com/
PsycINFO	www.apa.org/psychinfo
PubMed (pre MEDLINE)	http://ebscohost.com/
U.K. National Health Service Economic Evaluation Database	http://www.crd.york.ac.uk/crdweb/
U.S. National Guideline Clearinghouse	www.guidelines.gov
HealthSTAR	http://www.kfinder.com/newweb/Products/hstar.html
POPLINE	http://www.popline.org/
Education Resource Information Center	http://www.eric.ed.gov/
UK National Institute of Clinical Excellence	http://www.nice.org.uk/
Evidence for Policy and Practice Information and Coordinating Centre	http://eppi.ioe.ac.uk/cms/
TRIP	http://tripdatabase.com/

Appendix C. Summary of Articles Describing Perspectives on Confidentiality and/or Clinical Barriers and Facilitators for Assuring Confidentiality

Reference/ Funding Source	Study aim	Study Population	Observational Method	Results
Studies that Described Perspectives of Young People on Confidentiality				
(See Ford et al., 2001 in Appendix Table 1)	(See Ford et al., 2001 in Appendix Table 1)	(See Ford et al., 2001 in Appendix Table 1)	(See Ford et al., 2001 in Appendix Table 1)	Adolescents suggested the following would be helpful in explaining confidentiality guidelines: physician emphasis on the protections of confidentiality during conditional assurances, particularly those services for which privacy is well protected: provider careful word selection and behaviors that convey trustworthiness; information about confidential adolescent health care conveyed through media, schools, and peer opinion leaders to supplement physician discussions
Garside et al., 2002, UK Funding source: NHS S&W R&D Directorate October 1997-September 2000	To examine GP services offered and obtain attitudes of rural young people and GPs 3 groups: grade 11 and grade 9 students; GPs	Students in rural Devon secondary school; GPs in North and East Devon % female, Race, Age NR All students present on the day completed the questionnaire (n=430): *Year 1999* - Grade 11 students = 119	Collected data from GPs via mailed questionnaires; data from young people collected via questionnaires and focus groups; focus group sessions were tape-recorded and transcribed	For rural teenagers, confidentiality is a concern at many stages of sexual health care services, including the waiting room, seeing the doctor, and going to the pharmacy.

Reference/ Funding Source	Study aim	Study Population	Observational Method	Results
		Grade 9 students = 152 *Year 2000 –* Grade 9 students = 159 Focus Group: 18 groups between 4 and 9 students either under or over 16 years GP Questionnaire: 235/321 GPs in North and East Devon sent questionnaire responded		
Rainey et al., 2000, U.S. Funding source: NR	To determine adolescents' receptivity to confidential billing accounts 1 group	Adolescents attending a large suburban private adolescents practice who wished to keep all or part of the charges for their office visit confidential; Female = 93% Ethnicity= NR Age range = 12-19 years	Adolescents were offered individual billing accounts to which guardians or parents did not have access; all non-payers were verbally asked to complete a brief satisfaction survey	40/42 patients offered accounts enrolled. 15/ 40 participants made some payment by 3 months; 10/ 25 non-payers were confidentially contacted to complete non-payer satisfaction survey; none felt uncomfortable returning to the office because of an unpaid balance; all stated that these accounts allowed better access to confidential care.

Reference/ Funding Source	Study aim	Study Population	Observational Method	Results
		40/42 adolescents offered confidential account enrolled		
Thomas et al., 2006, UK Funding source: NR	To determine the importance of confidentiality in SH clinics among young people and their preferences for service provision 1 group	9th grade students aged 13-14, in community comprehensive schools in urban and rural SES-deprived areas 51.5% female; 92% W, NH 295 completed Participation rate NR 4/7 educational establishments contacted agreed to participate	A questionnaire was given to school attenders	The importance of confidentiality (asked about in two differently worded questions) was rated as 8.84 and 8.59 (mean) on a scale of 1 (not important) to 10 (very important) 56.3% youth rated confidentiality as the most important feature of services 86.1% youth reported that they were more likely to use a service if it was confidential 54.6% youth reported that they would not use a service if it was not confidential
Thrall et al., 2000, U.S.	(see Thrall, 2000, in Appendix Table 1)	(see Thrall, 2000, in Appendix Table 1)	(see Thrall, 2000, in Appendix Table 1)	75% of all teens reported that they would like to be able to go for health care without parents knowing about it for some of all health concerns. There were no significant differences between the two groups
Studies that Described Barriers and Facilitators Facing Clinics in Assuring Confidentiality				
Akinbami et al., 2003, U.S.	To assess self-reported availability of services for	Reception staff and physicians from 170 pediatric, internal and family medicine practices	A telephone survey to office staff; physicians received the same questions via a mail survey; surveys asked about availability of	**Barriers** Authors discuss: limited time for office visits; lack of training on adolescent issues; billing challenges;

Reference/ Funding Source	Study aim	Study Population	Observational Method	Results
Funding source: NR	medically emancipated conditions and confidential care in primary care practices, to compare physician responses to those from office staff who answer appointment lines, and to compare availability in pediatric practices to other primary care practice types	that provide primary care within a 25-mile radius of Washington, D.C. <u>170 office staff:</u> Gender, Ethnicity, Age= NR <u>264 physicians:</u> Pediatrics: 47% female Family medicine: 35% female Internal medicine: 30% female Ethnicity & Age NR Recruitment: randomly selected practices identified through listings in the *Washington Physicians Directory*	services for pelvic examinations, contraception, and STD testing; assessed agreement between office staff and physician responses for each practice type by calculating percentage agreement and discordant responses; constructed logistic regression models to assess the association between availability of services and practice characteristics	and the sensitive nature of confidential health care for adolescents **<u>Facilitators</u>** Having an office policy positively associated with agreement between office staff and physicians about whether adolescents could get confidential contraceptive services AOR of 3.5 (95% CI: 1.2–10.6) and confidential STD testing AOR 4.5 (95% CI: 1.5-13.6); Authors recommend office policy include ongoing education about laws and regulations about adolescent confidentially; that providers inform adolescents and their parents about provider-patient relationship as the adolescent matures; providers should discuss conditions under which information will be shared with others, e.g., physical or sexual abuse
Garside, 2002	See Garside, 2002 above	See Garside, 2002 above	See Garside, 2002 above	**<u>Facilitators</u>** Authors suggest providers should explicitly discuss the nature of a confidential consultation to help teenagers understand the scope and limits of confidentiality and should secure private time with patients; Provider awareness of need for anonymity and locations that ensure anonymity seen as beneficial
Lawrence et al., 2011,	To assess how OB/GYNs	Practicing US general OB/GYNs aged 65 or	Mailed a confidential self-administered questionnaire to a	**<u>Facilitators</u>**

Reference/ Funding Source	Study aim	Study Population	Observational Method	Results
U.S. Funding source: grants from the Greenwall Foundation, the John Templeton Foundation, and the National Center for Complementary and Alternative Medicine	respond to requests for confidential contraceptive services 1 group	younger; 47% female; 69% W, NH = 69%, 18% A or PI Age: 25-40 = 25%; 41-47 = 26%; 48-55 = 24%; 56-65 = 24% Eligible OB/GYNs = 1,760 Responded = 1154 Sample was generated from the American Medical Association Physician Masterfile and validated surname lists were used to increase minority representation	stratified random sample asking whether they would confidentially provide birth control pills to a 17-year-old college freshman and how they would counsel the patient	Authors suggest that the following could motivate physicians to provide contraceptives confidentially: a belief among physicians that access to contraceptives may improve public health; concern that teenagers may not seek contraceptive services if their parents are notified

A or PI, Asian or Pacific Islander; AI, American Indian; B, NH, Black, Non-Hispanic; FP, family planning; GP, general practitioner; HCP, health care provider; H or L, Hispanic or Latino; MCHB, Maternal Child Health Bureau; MN, mean; NA, not applicable; NR=not reported; OB/GYNs, obstetricians/gynecologists; NY, New York; RH, reproductive health; SH, sexual health; STD, sexually transmitted disease; UK, United Kingdom; W, NH=White, Non-Hispanic

Appendix D. Summary of Studies Examining Effects of Assurances of Confidentiality on Reproductive Health Outcomes

Reference/ Funding	Study design / Aim	Population	Methods	Results	Study Quality
Medium-term outcomes					
Thrall et al.,[8] 2000, U.S. Funding source: Carnegie Corporation of NY, Jessie B. Cox Charitable Corporation, NY, and MCHB	Cross-sectional study to examine the relationship between adolescent perceptions of confidentiality of care provided by their regular HCP and having discussed sex-related topics with that HCP in the last year or received pelvic exam within the past two years 2 groups: Teens with perceived confidentiality; Teens without perceived confidentiality	Public high schools students, grades 9 and 12, Massachusetts 49% female; 78% W, NH; age NR Enrolled: teens who had a regular HCP checkup within last year = 1,715 Teens who had perceptions of confidentiality = 778 Teens who did not have perceptions	Written, self-administered survey	Teens who perceived their provider to be confidential were significantly more frequently reported having obtained health care within the last year without parental knowledge than those without perceived confidentiality (13% vs. 6%, ***P*<0.001*)** Female teens who perceived their provider to be confidential (compared to those who did not perceive confidentiality) had significantly increased odds of having had a pelvic examination in the last 2 years (OR=3.3; 95%CI, 2.1-5.5) 8% of all teens reported having forgone health care in the last year due to fear that parents would find out; there were no significant differences between the two groups	Level III; Moderate risk for bias <u>Strengths</u> Survey instrument reviewed by experts and focus groups Conducted statistical tests of significance <u>Weaknesses</u> Recall bias Self-report bias Low response rate (51%)[64% school participation rate combined with 80% student participation rate= 51% originally intended sample]

		of confidentiality = 937			Cross-sectional design prevents causal claims about effect
Short-term Outcomes					
Ford et al.,[5] 1997, U.S. Funding source: MCHB and the Norman Schlossberger Memorial Fund, San Francisco, CA	RCT to investigate the influence of physician assurances of confidentiality on adolescent willingness to seek future health care; 3 groups Students randomized to 1 of 3 groups; listened to a standardized audiotape depiction of an office visit during which they heard a physician who: 1) assured unconditional confidentiality (n=190); 2) assured conditional	Public high school students in San Francisco, grades 9-11 48% female; 77% W, NH; MN Age=14.9 562/615 students enrolled in class and were present on data collection date	Participants completed an anonymous written questionnaire reporting their willingness to disclose sensitive information and seek future health care for routine and sensitive issues from the physician depicted in the scenario immediately after listening to the audiotape	Adolescents who were assured of confidentiality (the conditional and unconditional groups combined) more frequently (***p*<0.001***) reported willingness to return to see that physician in the future (67%; 259/386), compared with adolescents who heard no mention of confidentiality (53%; 93/175)[a] Adolescents who were assured of unconditional confidentiality more frequently (***p*=0.001***) reported willingness to return to see that physician in the future (72%; 137/190) compared with adolescents who were assured of	Level I; Low risk for bias <u>Strengths</u> Random assignment Research team members blinded to group assignment High rating of internal consistency of measurement tools High participation rates Conducted statistical tests of significance

	confidentiality (n=196); or 3) did not mention confidentiality (n=175)	agreed to participate		conditional confidentiality (62%; 122/196) Adolescents who were assured of confidentiality (the conditional and unconditional groups combined) more frequently (***p*=0.02**)** reported willingness to disclose sensitive information about sexuality (46.5%; 178/383) compared with adolescents who heard no mention of confidentiality (39%; 68/175)[a]	<u>Weaknesses</u> Self-report bias No behavioral outcomes assessed
Ford et al.[21] 2001 U.S. Funding source: partial funding was provided by a University of North Carolina Junior Faculty Development Award	Pre- post study to explore adolescents' interpretations of a confidentiality statement explaining the protections and limitations of confidentiality and to elicit suggestions for explaining conditional confidentiality in a way adolescents understand and trust	Public school students in grades 9 and 12 64% female; 75% W, NH; age NR All students in grade 9 and 12 mandatory classes in one public school were invited to participate 53/171 students invited completed interview	Private, semi-structured interviews conducted during which cards with topics related to sexuality, tobacco/alcohol use, or mental health were sorted based on whether teens believed doctors would or would not tell parents or if they did not know Cards were resorted after hearing conditional assurance of confidentiality that a doctor would hypothetically give to an adolescent Researchers also asked for suggestions for ways physicians might effectively	After hearing a provider confidentiality assurance statement, percentage of students that believed a doctor would keep certain services confidential increased: getting birth control shots (49% to 72%); being tested for HIV (45%- 70%); being tested for STDs (45%- 76%); STD diagnosis (6%-28%); STD treatment (11%-36%)	Level III; Moderate risk for bias <u>Weaknesses</u> Self-report bias Small sample size Convenience sample Did not conduct statistical tests of significance Low recruitment rate Comparison of characteristics of responders and non-responders not examined

			convey confidential adolescent health care guidelines to adolescent patients		
Lerand et al.,[24] 2007, U.S. Funding source: Bureau of Health Professions, HRSA & MCHB)	Cross-sectional study to evaluate whether confidential services impact adolescent communication with parents about their reproductive health 2 groups: those seeking confidential services (42%) and those seeking non-confidential services (58%)	59 adolescents seeking health services in an urban teen clinic in Minneapolis, Minnesota 88% female; 37% black, NH; 23% W, NH; 37% other Age=12 – 21 years; 70% > 16	Anonymous survey at the time of appointment check-in completed in waiting room and placed in a drop box to assure anonymity; bivariate evaluations were conducted for each pair of dependent and independent variables	No statistical differences in parental communication between those seeking confidential services vs. non-confidential services: told parent(s) they were coming to clinic (53.6% vs. 46.4%); told parent(s) all the reasons they were coming to clinic (46.4% versus 53.6%); would tell parent(s) if had a serious or sensitive health problem (48.0% vs. 52%)	Level III; High risk for bias <u>Strengths</u> Conducted statistical tests of significance <u>Weaknesses</u> Selection bias Self-report bias Cross-sectional design prevents causal claims about effect

					Small sample size Participation rate not assessed
Thrall et al.,[8] 2000, U.S.	(see Thrall, 2000, above)	(see Thrall, 2000, above)	(see Thrall, 2000, above)	The perception of confidentiality was significantly associated with increased odds of teens of having discussed sex-related topics with the HCP in past year after taking into account a range of other important predictors (OR=2.7; 95% CI, 2.2-3.4)	(see Thrall, 2000, above)

Note: Boldface indicates statistical significance (**p*<0.001, ***p*<0.02)

[a] Denominators may vary due to missing data

A or PI, Asian or Pacific Islander; AI, American Indian; B, NH, Black, Non-Hispanic; FP, family planning; HCP, health care provider; H or L, Hispanic or Latino; HRSA, Health Resources and Services Administration; MD, Maryland; MCHB, Maternal Child Health Bureau; MN, mean; NY, New York; NR, not reported; RH, reproductive health; SH, sexual health; STD, sexually transmitted disease; UK, United Kingdom; W, NH, White, Non-Hispanic