



Effective Health Care Risk Assessment, Prophylaxis, and Monitoring of Venous Thromboembolism Around Cesarean Delivery

Results of Topic Selection Process & Next Steps

The nominator, Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN), is interested in a new evidence review to update their 2011 clinical practice guidelines on the perioperative care of the pregnant woman, specifically related to risk assessment tools, prevention and prophylaxis, and monitoring for Venous Thromboembolism (VTE) around Cesarean delivery. Due to limited program resources, the program is unable to develop a review at this time. No further activity on this topic will be undertaken by the Effective Health Care (EHC) Program.

Topic Brief

Topic Name: Risk Assessment, Prophylaxis, and Monitoring of Venous Thromboembolism Around Cesarean Delivery

Topic #: 0687

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Conflicts of Interest: None of the investigators have any affiliations or financial involvement that conflicts with the material presented in this report.

Summary of Key Findings

- **Appropriateness and importance:** The nomination is both appropriate and important.
- **Duplication:** An AHRQ evidence review on the topic would not be duplicative. We identified a [2014 Cochrane review](#) that examined prophylaxis for preventing VTEs in pregnant and antenatal women; however, authors only identified evidence on pharmacological prophylaxis. We identified no reviews on the effectiveness of nonpharmacological prophylaxis (KQ2), risk assessment tools (KQ1) or the effectiveness of monitoring clinical signs and symptoms (KQ3).
- **Impact:** It is unclear what the impact of a new evidence review would be, as there is limited new evidence on the risk assessment, effectiveness of preventative and prophylactic interventions, and effectiveness of monitoring clinical signs and symptoms among women undergoing Cesarean delivery.
- **Feasibility:** A new AHRQ evidence review on the topic is feasible.
 - *Size/scope of the review:* We identified two studies on the effectiveness of risk assessment tools and patient safety checklists (KQ1) and six studies on the effectiveness of prophylaxis interventions, all of which examined

pharmacological interventions (KQ2). We identified no studies on the effectiveness of monitoring the typical clinical signs and symptoms for VTE, although we did identify a study examining the measurement of fibrin monomer complex concentration to screen for VTE (KQ3).

- *ClinicalTrials.gov*: We identified one ongoing study examining the use of compression ultrasound to identify asymptomatic deep vein thrombosis (DVTs) (KQ3).
- Value: The potential for value is high, as AWHONN plans to update their 2011 clinical practice guidelines with the most updated information on this topic. This organization has previously produced evidence based guidelines.

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Introduction

Venous thromboembolism (VTE) occurs in 0.6 to 1.7 of every 1,000 deliveries¹ and is one of the leading causes of maternal mortality in the developed world.² Women who deliver by Cesarean are twice as likely to experience a VTE as women who have vaginal deliveries.³ Clinical practice guidelines (2011) recommend the use of compression devices for women undergoing Cesarean delivery,^{4,5} and additional prophylaxis interventions such as anti-coagulants or placement of retrievable vena caval filter in the presence of additional risk factors.⁵ However, these recommendations are based on relatively small and underpowered studies,⁵ and there continue to be questions as to what interventions are most effective, for which subpopulations, and when and how long they should be administered.

Topic nomination #0687 was received on June 28, 2016. It was nominated by Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN). Due to the broad scope of the original nomination, AWHONN narrowed the scope to focus on risk assessment, prophylaxis and monitoring of VTEs for women undergoing Cesarean delivery. The questions for this nomination are:

Key Question 1. Among pregnant women undergoing a cesarean delivery, is the use of any risk-assessment tool effective in reducing the incidence of VTE compared with other risk assessment tools, clinical judgement alone, and/or usual care?

Key Question 2. Among pregnant women undergoing a cesarean delivery, what are the benefits and harms of preventative and prophylaxis interventions for VTE, and do the benefits and harms vary by patient and intervention factors, including:

- a. Patient risk of VTE (low, moderate, or high)
- b. Timing of intervention
- c. Duration of intervention

Key Question 3. Among pregnant women undergoing a cesarean delivery, what is the effectiveness of monitoring clinical signs and symptoms for VTE before, during, and after surgery, and do the effects vary by:

- a. Timing of monitoring
- b. Duration of monitoring

To define the inclusion criteria for the key questions we specify the population, interventions, comparators, outcomes, and timing (PICOTs) of interest. See Table 1.

Table 1. Key Questions and PICOTs

Key Question	1. Among pregnant women undergoing a cesarean delivery, is the use of any risk-assessment tool effective in reducing the incidence of VTE compared with other risk assessment tools, clinical judgement alone, and/or usual care?	2. Among pregnant women undergoing a cesarean delivery, what are the benefits and harms of preventative and prophylaxis interventions for VTE, and do the benefits and harms vary by patient and intervention factors, including: a) Patient risk of VTE (low, moderate, or high) b) Timing of intervention c) Duration of intervention	3. Among pregnant women undergoing a cesarean delivery, what is the effectiveness of monitoring clinical signs and symptoms for VTE before, during, and after surgery, and do the effects vary by: a) Timing of monitoring b) Duration of monitoring
Population	Women undergoing cesarean delivery	Women undergoing cesarean delivery	Women undergoing cesarean delivery
Interventions	Any risk assessment tool (eg, patient safety checklists)	Interventions to prevent VTE, including: 1. Pre-operative (eg, education interventions, anticoagulant therapy [heparin, warfarin]) 2. Intraoperative (eg, pneumatic compression devices, anticoagulant therapy [heparin, warfarin]) 3. Post-operative (eg, graduated compression stockings, ambulation after surgical procedure, anticoagulant therapy)	Interventions to monitor for the development of VTE, including: 1. Pre-operative (eg, vital signs [BP, pulse, level of consciousness, neurological signs, temperature]) 2. Intraoperative (eg, vital signs, [BP, pulse, level of consciousness, neurological signs, temperature]) 3. Post-operative (eg, vital signs, [BP, pulse, level of consciousness, neurological signs, temperature], clinical features of DVT [pain or swelling in an extremity, tenderness over a deep vein, skin is warm to touch], clinical features of PE [dyspnea, tachypnea, cyanosis, air hunger, anxiety, chest pain, tachycardia, cough, changes in heart and lung sounds, chest tightness, shortness of breath, hypotension])
Comparators	Other risk assessment tool, clinical judgement, and/or usual care	Usual care	Usual care
Outcomes	Incidence of VTE	Incidence of VTE, adverse events associated with prophylaxis (ie, bleeding complications), hospital length of stay, hospital readmissions	Incidence of VTE, hospital length of stay, hospital readmissions
Timing	Pre-operative	Pre-operative, intra-operative, post-operative [up to 6 weeks post-partum]	Pre-operative, intra-operative, post-operative [up to 6 weeks post-partum]

Abbreviations: BP=Blood Pressure; DVT=Deep Vein Thrombosis; PE=Pulmonary Embolism; VTE=Venous Thromboembolism

Methods

To assess topic nomination #0687 *Risk Assessment, Prophylaxis, and Monitoring of Venous Thromboembolism Around Cesarean Delivery*, for priority for a systematic review or other AHRQ EHC report, we used a modified process based on established criteria. Our assessment is hierarchical in nature, with the findings of our assessment determining the need for further evaluation. Details related to our assessment are provided in Appendix A.

1. Determine the *appropriateness* of the nominated topic for inclusion in the EHC program.
2. Establish the overall *importance* of a potential topic as representing a health or healthcare issue in the United States.
3. Determine the *desirability of new evidence review* by examining whether a new systematic review or other AHRQ product would be duplicative.
4. Assess the *potential impact* a new systematic review or other AHRQ product.
5. Assess whether the *current state of the evidence* allows for a systematic review or other AHRQ product (feasibility).
6. Determine the *potential value* of a new systematic review or other AHRQ product.

Appropriateness and Importance

We assessed the nomination for appropriateness and importance (see Appendix A).

Desirability of New Review/Duplication

We searched for high-quality, completed or in-process evidence reviews pertaining to the key questions of the nomination. Table 2 includes the citations for the reviews that were determined to address the key questions. Appendix B includes the list of the sources searched and potentially relevant titles identified by our research librarian.

Impact of a New Evidence Review

The impact of a new evidence review was assessed by analyzing the current standard of care, the existence of potential knowledge gaps, and practice variation. We considered whether it was hypothetically possible for this review to influence the current state of practice through various dissemination pathways (practice recommendation, clinical guidelines, etc.).

Feasibility of a New Evidence Review

We conducted a literature search in PubMed and PsycInfo from August 2011 and August 2016. Because a small number of articles were identified, we reviewed all abstracts for inclusion and classified identified studies by study design, to assess the size and scope of a potential evidence review. See *Table 2, Feasibility Column, Size/Scope of Review Section* for the citations of included studies. See Appendix C for the PubMed search strategy and links to the ClinicalTrials.gov search.

Value

We assessed the nomination for value (see Appendix A). We considered whether or not the topic would inform clinical policy in community and/or clinical settings, and if there was a partner organization that would use this evidence review to change practice.

Compilation of Findings

We constructed a table outlining the selection criteria as they pertain to this nomination (see Appendix A).

Results

Appropriateness and Importance

This is an appropriate and important topic. This topic impacts a small proportion of the population; between 0.6 to 1.7 of every 1,000 deliveries¹ results in a VTE. However, it remains one of the leading causes of maternal mortality in the developed world.² VTEs result in \$1.5 billion in health care costs each year; DVT costs between \$7,712-\$10,804 per patient and PE costs can total \$9,566 to \$16,644 per patient.⁶ See Appendix A for details.

Desirability of New Review/Duplication

A comprehensive evidence review examining risk assessment, prophylaxis, and monitoring of VTE around cesarean delivery would not be duplicative. We identified a 2014 Cochrane review⁷ that examined prophylaxis for preventing VTEs in pregnant and antenatal women; however, authors only identified evidence on pharmacological prophylaxis (KQ 2), including duration (KQ 2c). We identified no reviews on risk assessment tools (KQ1), the effectiveness of nonpharmacological prophylaxis (KQ2), or the effectiveness of monitoring clinical signs and symptoms (KQ3). For more detail see Appendix B.

Impact of a New Evidence Review

The impact of a new systematic review on risk assessment, prophylaxis, and monitoring VTE around cesarean delivery may be limited. While there is some practice variation, the standard of care is clear for prevention and prophylaxis of VTEs.

Feasibility of a New Evidence Review

A comprehensive evidence review examining the assessment, prevention, and treatment of PTSD in children and adolescents would be feasible. We identified two studies^{8,9} pertinent to KQ 1 (risk assessment tools); six studies¹⁰⁻¹⁵ related across KQ 2 (pharmacological and non-pharmacological interventions for VTE prevention and prophylaxis); and one study relevant to KQ 3 (monitoring clinical signs and symptoms).¹⁶ All studies were observational. Only pharmacologic interventions were found for key question 2. For more detail see Appendix C.

We identified one ongoing study¹⁷ examining the use of compression ultrasound to identify asymptomatic deep vein thrombosis (DVTs) (KQ3).

Table 2. Key Questions from Nomination and Findings from Duplication and Feasibility Search

Key Question	Duplication (Completed or In-Process Evidence Reviews)	Feasibility (Published and Ongoing Research)
KQ 1. Among pregnant women undergoing a cesarean delivery, is the use of any risk-assessment tool effective in reducing the incidence of VTE compared with other risk assessment tools, clinical judgement alone, and/or usual care?	None identified.	<p><u>Size/scope of review</u> Relevant Studies Identified: 2</p> <ul style="list-style-type: none"> • Prospective cohort: 1⁸ • Retrospective cohort: 1⁹ <p><u>ClinicalTrials.gov</u> None identified.</p>
KQ 2. Among pregnant women undergoing a cesarean delivery, what are the benefits and harms of preventative and prophylaxis interventions for VTE?	<p>Total number of completed and in-progress systematic reviews: 1</p> <ul style="list-style-type: none"> • Cochrane: 1⁷ 	<p><u>Size/scope of review</u> Relevant Studies Identified: 6</p> <ul style="list-style-type: none"> • Non-randomized comparative study: 1¹⁰ • Retrospective cohort: 1¹¹ • Prospective cohort: 4¹²⁻¹⁵ <p><u>ClinicalTrials.gov</u> None identified.</p>

Key Question	Duplication (Completed or In-Process Evidence Reviews)	Feasibility (Published and Ongoing Research)
2a. Do benefits and harms vary by patient risk of VTE (low, moderate, or high)?	None identified.	<u>Size/scope of review</u> Relevant Studies Identified: 4 <ul style="list-style-type: none"> • Prospective cohort: 3^{12,13,15} • Retrospective case-control: 1¹⁸ <u>ClinicalTrials.gov</u> None identified.
2b. Do benefits and harms vary by timing of the intervention?	None identified.	<u>Size/scope of review</u> Relevant Studies Identified: 1 <ul style="list-style-type: none"> • Retrospective case-control: 1¹⁸ <u>ClinicalTrials.gov</u> None identified.
2c. Do benefits and harms vary by duration of the intervention?	Total number of completed and in-progress systematic reviews: 1 <ul style="list-style-type: none"> • Cochrane: 1⁷ 	<u>Size/scope of review</u> None identified. <u>ClinicalTrials.gov</u> None identified.
KQ 3. Among pregnant women undergoing a cesarean delivery, what is the effectiveness of monitoring clinical signs and symptoms for VTE before, during, and after surgery?	None identified.	<u>Size/scope of review</u> Relevant Studies Identified: 1 <ul style="list-style-type: none"> • Prospective cohort: 1¹⁶ <u>ClinicalTrials.gov</u> <ul style="list-style-type: none"> • Recruiting: 1¹⁷
KQ 3a. Do the effects vary by timing of monitoring?	None identified.	<u>Size/scope of review</u> None identified. <u>ClinicalTrials.gov</u> None identified.
KQ 3b. Do the effects vary by duration of monitoring?	None identified.	<u>Size/scope of review</u> None identified. <u>ClinicalTrials.gov</u> None identified.

Abbreviations: DVT= Deep vein thrombosis; PE= Pulmonary embolism; VTE= Venous Thromboembolism

Value

The potential for value is high, as AWHONN plans to update their 2011 clinical practice guidelines with the most updated information on this topic. This organization has previously produced evidence based guidelines.

Summary of Findings

- Appropriateness and importance: The nomination is both appropriate and important.
- Duplication: An AHRQ evidence review on the topic would not be duplicative. We identified a [2014 Cochrane review](#) that examined prophylaxis for preventing VTEs in pregnant and antenatal women; however, authors only identified evidence on pharmacological prophylaxis. We identified no reviews on the effectiveness of

nonpharmacological prophylaxis (KQ2), risk assessment tools (KQ1) or the effectiveness of monitoring clinical signs and symptoms (KQ3).

- Impact: It is unclear what the impact of a new evidence review would be, as there is limited new evidence on the risk assessment, effectiveness of preventative and prophylactic interventions, and effectiveness of monitoring clinical signs and symptoms among women undergoing Cesarean delivery.
- Feasibility: A new AHRQ evidence review on the topic is feasible.
 - *Size/scope of the review*: We identified two studies on the effectiveness of risk assessment tools and patient safety checklists (KQ1) and six studies on the effectiveness of prophylaxis interventions, all of which examined pharmacological interventions (KQ2). We identified no studies on the effectiveness of monitoring the typical clinical signs and symptoms for VTE, although we did identify a study examining the measurement of fibrin monomer complex concentration to screen for VTE (KQ3).
 - *ClinicalTrials.gov*: We identified one ongoing study examining the use of compression ultrasound to identify asymptomatic deep vein thrombosis (DVTs) (KQ3).
- Value: The potential for value is high, as AWHONN plans to update their 2011 clinical practice guidelines with the most updated information on this topic. This organization has previously produced evidence based guidelines.

References

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Appendices

Appendix A: Selection Criteria Summary

Appendix B: Search for Systematic Reviews (Duplication)

Appendix C: Search Strategy & Results (Feasibility)

Appendix A. Selection Criteria Summary

Selection Criteria	Supporting Data
1. Appropriateness	
1a. Does the nomination represent a health care drug, intervention, device, technology, or health care system/setting available (or soon to be available) in the U.S.?	Yes, this topic represents a health care drug and intervention available in the U.S.
1b. Is the nomination a request for a systematic review?	Yes, this topic is a request for a systematic review.
1c. Is the focus on effectiveness or comparative effectiveness?	The focus of this review is on effectiveness.
1d. Is the nomination focus supported by a logic model or biologic plausibility? Is it consistent or coherent with what is known about the topic?	Yes, it is biologically plausible. Yes, it is consistent with what is known about the topic.
2. Importance	
2a. Represents a significant disease burden; large proportion of the population	This topic impacts a small proportion of the population; between 0.6 to 1.7 of every 1,000 deliveries ¹ results in a VTE. However, it remains one of the leading causes of maternal mortality in the developed world. ²
2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the US population or for a vulnerable population	Yes, this topic affects health care decisions for a vulnerable population.
2c. Represents important uncertainty for decision makers	Yes, this topic represents important uncertainty for decision makers.
2d. Incorporates issues around both clinical benefits and potential clinical harms	Yes, this nomination addresses both benefits and potential harms of prevention, prophylaxis, and monitoring of VTEs.
2e. Represents high costs due to common use, high unit costs, or high associated costs to consumers, to patients, to health care systems, or to payers	VTEs result in \$1.5 billion in health care costs each year; DVT costs between \$7,712-\$10,804 per patient and PE costs \$9,566 to \$16,644 per patient. ⁶
3. Desirability of a New Evidence Review/Duplication	
3. Would not be redundant (i.e., the proposed topic is not already covered by available or soon-to-be available high-quality systematic review by AHRQ or others)	We identified a 2014 Cochrane review ⁷ that examined prophylaxis for preventing VTEs in pregnant and antenatal women; however, authors only identified evidence on pharmacological prophylaxis. We identified no reviews on the effectiveness of nonpharmacological prophylaxis (KQ2), risk assessment tools (KQ1) or the effectiveness of monitoring clinical signs and symptoms (KQ3).
4. Impact of a New Evidence Review	
4a. Is the standard of care unclear (guidelines not available or guidelines inconsistent, indicating an information gap that may be addressed by a new evidence review)?	Although the standard of care is clear for prevention and prophylaxis for VTEs, it is based on limited evidence.

4b. Is there practice variation (guideline inconsistent with current practice, indicating a potential implementation gap and not best addressed by a new evidence review)?	Yes, there is some practice variation on the use of prophylaxis in women undergoing Cesarean delivery.
5. Primary Research	
5. Effectively utilizes existing research and knowledge by considering: - Adequacy (type and volume) of research for conducting a systematic review - Newly available evidence (particularly for updates or new technologies)	We identified two studies ^{8 9} pertinent to KQ 1, six studies ^{10 11-15} pertinent to KQ 2, and one study pertinent to KQ 3. ¹⁶ All studies were observational.
6. Value	
6a. The proposed topic exists within a clinical, consumer, or policy-making context that is amenable to evidence-based change	Yes, this topic exists in a clinical context that is amenable to evidence-based change.
6b. Identified partner who will use the systematic review to influence practice (such as a guideline or recommendation)	Yes, AWHONN plans to update their 2011 clinical practice guidelines based on the results of an AHRQ evidence review.

Abbreviations: AWHONN= Association of Women's Health, Obstetric, and Neonatal Nurses; DVT= Deep vein thrombosis; PE= Pulmonary embolism; VTE= Venous Thromboembolism

Appendix B. Search for Systematic Reviews (Duplication)

Listed below are the sources searched and results of our search for existing guidance. A research librarian conducted the search and selected potentially relevant evidence based on the key question in the nomination and the associated PICOTS. An investigator reviewed each of the links to evidence below for inclusion. The links below do not represent the evidence selected for inclusion (see main topic brief).

	Risk assessment, monitoring and prophylaxis for venous thromboembolism in Cesarean delivery
Source	Evidence
Search for Duplication: August 5, 2016	
AHRQ and Other Federal Products	
AHRQ: Evidence reports and technology assessments, USPSTF recommendations, and related DEcIDE projects, and Horizon Scan	None.
VA Products: PBM, and HSR&D (ESP) publications, and VA/DoD EBCPG Program	None.
Cochrane Systematic Reviews and Protocols http://www.cochranelibrary.com/	<i>Prophylaxis for venous thromboembolic disease in pregnancy and the early postnatal period</i> 2014 http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001689.pub3/full
PubMed Health http://www.ncbi.nlm.nih.gov/pubmedhealth/	<i>Postpartum practice: guidelines for clinical practice from the French College of Gynaecologists and Obstetricians (CNGOF)</i> . 2016 http://www.ncbi.nlm.nih.gov/pubmed/27155443
HTA (CRD database): Health Technology Assessments http://www.crd.york.ac.uk/crdweb/	<i>Factor V (F5) HR2 haplotype testing for hypercoagulability</i> 2012 http://www.crd.york.ac.uk/CRDWeb/ShowRecord.asp?AccessionNumber=32012000579&UserID=0
PROSPERO Database (international prospective register of systematic reviews and protocols) http://www.crd.york.ac.uk/prospero/	<i>A systematic review and meta-analysis assessing the risk of venous thromboembolism in pregnant women with essential thrombocythemia</i> http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42016039194 <i>An individual patient data meta-analysis of low molecular weight heparin for prevention of placenta-mediated pregnancy complications (AFFIRM)</i> http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42013006249 <i>Anticoagulants for VTE prevention in the hospital setting</i> http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42015026946 <i>Effects of perioperative statins use on cardiovascular complications in patients submitted to non-cardiac surgery: protocol for a systematic review, meta-analysis and trial sequential analysis</i>

	<p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42016035987</p> <p><i>Efficacy and safety of novel oral anticoagulants compared to standard therapy for acute treatment of venous thromboembolism</i></p> <p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42014008671</p> <p><i>Efficacy and safety of pharmacological thromboprophylactic agents for the prevention of venous thromboembolism after major abdominal surgery</i></p> <p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42014013559</p> <p><i>Graduated compression stockings for the prevention of deep vein thrombosis in postoperative surgical patients</i></p> <p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42014007202</p> <p><i>Intermediate dose low-molecular-weight heparin for thromboprophylaxis: a systematic review with meta-analysis and trial sequential analysis</i></p> <p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42016036951</p> <p><i>Neuromuscular electrical stimulation for the prevention of venous thromboembolism [Cochrane Protocol]</i></p> <p>To assess the effectiveness of neuromuscular electrical stimulation in the prevention of venous thromboembolism.</p> <p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42015027147</p> <p><i>Pharmacokinetics and pharmacodynamics of heparin in pregnancy: a systematic review and meta-analysis</i></p> <p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42016042244</p> <p><i>Statins and venous thromboembolism: meta-analysis of prospective cohort and randomised intervention studies</i></p> <p>http://www.crd.york.ac.uk/prospero/display_record.asp?ID=CRD42016035622</p>
<p>CADTH (Canadian Agency for Drugs and Technologies in Health)</p> <p>https://www.cadth.ca/</p>	<p>None.</p>
<p>DoPHER (Database of promoting health effectiveness reviews)</p> <p>http://eppi.ioe.ac.uk/webdatabases4/Intro.aspx?ID=9</p>	<p>None.</p>
<p>ECRI institute</p> <p>https://www.ecri.org/Pages/default.aspx</p>	<p>None.</p>

Appendix C. Search Strategy & Results (Feasibility)

Topic: Risk Assessment, monitoring and prophylaxis for venous thromboembolism in Cesarean delivery Date: August 17, 2016 Database Searched: MEDLINE (PubMed)	
Concept	Search String
Cesarean delivery	("Cesarean Section"[Mesh]) OR ((Cesarean[Title/Abstract] OR C-Section[Title/Abstract] OR "C Section"[Title/Abstract]))
AND	
Venous Thromboembolism	(("Venous Thromboembolism"[Mesh]) OR "Pulmonary Embolism"[Mesh]) OR "Venous Thrombosis"[Mesh]
NOT	
Editorials, etc.	(((((("Letter"[Publication Type]) OR "News"[Publication Type]) OR "Patient Education Handout"[Publication Type]) OR "Comment"[Publication Type]) OR "Editorial"[Publication Type])) OR "Newspaper Article"[Publication Type]
Limit to last 5 years ; Human ; English	Filters activated: published in the last 5 years, Humans, English
N= 78	
Systematic Review N=1	PubMed subsection "Systematic [sb]"
Randomized Controlled Trials N=24	Cochrane Sensitive Search Strategy for RCT's "(((((((groups[tiab]) OR (trial[tiab]) OR (randomly[tiab]) OR (drug therapy[sh]) OR (placebo[tiab]) OR (randomized[tiab]) OR (controlled clinical trial[pt]) OR (randomized controlled trial[pt])"
Other N=53	

Clinicaltrials.gov searched on August 17, 2016

1 study found for: Cesarean | **Recruiting** | thromboembolism OR embolism OR thrombosis | Studies with Female Participants | Adult | Studies received from 08/17/2011 to 08/17/2016
https://clinicaltrials.gov/ct2/results?term=Cesarean&recr=Recruiting&type=&rslt=&age_v=&age=1&gndr=Female&cond=thromboembolism+OR+embolism+OR+thrombosis&intr=&titles=&outc=&spons=&lead=&id=&state1=&cntry1=&state2=&cntry2=&state3=&cntry3=&locn=&rcv_s=08%2F17%2F11&rcv_e=08%2F17%2F16&lup_s=&lup_e=

no studies found for: Cesarean | **Active, not recruiting** | thromboembolism OR embolism OR thrombosis | Studies with Female Participants | Adult | Studies received from 08/17/2011 to 08/17/2016

2 studies found for: Cesarean | **Completed** | thromboembolism OR embolism OR thrombosis | Studies with Female Participants | Adult | Studies received from 08/17/2011 to 08/17/2016
https://clinicaltrials.gov/ct2/results?term=Cesarean&recr=Completed&type=&rslt=&age_v=&age=1&gndr=Female&cond=thromboembolism+OR+embolism+OR+thrombosis&intr=&titles=&outc=&spons=&lead=&id=&state1=&cntry1=&state2=&cntry2=&state3=&cntry3=&locn=&rcv_s=08%2F17%2F2011&rcv_e=08%2F17%2F2016&lup_s=&lup_e=