AIM eModule 5: Maternal Venous Thromboembolism (VTE) Prevention: Recognition & Prevention ~ Every Patient

Welcome to the Recognition domain of AIM eModule 5: Where we will review VTE Recognition and Prevention; for Every Patient

Learning objectives
Upon completion of this activity you will:
1. Learn strategies and recommendations for prevention of obstetric thromboembolism.
2. Review use of standardized tools to identify appropriate patients for thromboprophylaxis.
3. Identify methods to support patient, family and provider education.

Recognition and prevention ~ Every patient
The “Recognition” component of the Maternal VTE bundle emphasizes that risk should be recognized and that routine screening of obstetric patients for venous thromboembolism risk factors will identify patients at high risk for thromboembolic events.

1. Recognition through VTE risk assessment
The first element of the Recognition domain is to apply a standardized tool to every patient to assess VTE risk at time points designated under the “Readiness” domain to include:
- Outpatient prenatal care
- Antepartum hospitalization
- Hospitalization after cesarean or vaginal deliveries
- Postpartum period (up to 6 weeks after delivery)

Each center should use educational initiatives and guidelines to identify patients at increased risk for thromboembolism and who therefore might benefit from pharmacologic or mechanical thromboprophylaxis or both.

2. Thromboprophylaxis
The second element of the Recognition domain outlines the need to apply a standardized tool to identify appropriate patients for thromboprophylaxis. The suggested tools and criteria to support Recognition are based on recommendations from major society guidelines outlined by American College of Chest Physicians (ACCP), the Royal College of Obstetricians and Gynecologists (RCOG) and American College of Obstetricians and Gynecologists (ACOG). Each of these resources are available using the resource link in this slide or downloadable in the resource section at the end of this eLearning module.

The Prenatal outpatient and postpartum discharge thromboprophylaxis recommendations are based primarily on American College of Chest Physicians and ACOG recommendations.
And inpatient prophylaxis is based primarily on RCOG recommendations

In the subsequent “Response” domain of the VTE Prevention Maternal Safety Bundle we will include specific thromboprophylaxis recommendations from the VTE Work group.

3. Provide patient education
The third element of the Recognition Domain is providing patient education. Both provider offices and healthcare facilities should adopt standards for educating women on signs and symptoms of VTE, including DVT and PE. The standard should outline how to inform women of the signs and symptoms of VTE and when to notify their provider.

There are multiple opportunities throughout the continuum of care including during prenatal visits, when attending childbirth class admission to hospital and before discharge.

Maternal recognition improves outcomes. Patient factors such as failure to understand the severity of her illness or delays in reporting symptoms have been shown to contribute to preventable maternal deaths.

Facility-wide standards for educating women
Solid patient education strategies are foundational to improved compliance and success with VTE prevention strategies. Venous thromboembolism is a condition that can be minimized when clinicians take the lead with patient education to ensure they better adhere to treatment.

Providing patient education improves their recognition of symptoms, leading women to seek care allowing for timely interventions and improved outcomes.

Knowledge of symptoms
The symptoms of VTE are often non-specific and thus may not be recognized by the woman and her family as special concerns in pregnancy.

Women and their families should be familiar with knowledge of specific symptoms to support seeking appropriate care. For DVT patients may have symptoms of:

- Warmth or tenderness
- Pain
- Sudden swelling
- Redness of the skin
- Constant pain in one leg
PE can be life-threatening and patients should contact their health provider or go to the emergency room if they have symptoms which may include:

- A sudden cough which may produce blood
- Sudden unexplained shortness of breath
- Pain in ribs when breathing
- Sharp chest pain under the breast or on one side
- Burning, aching or heavy feeling in chest
- Rapid breathing or increased pulse

When women know how to recognize the signs and symptoms and they understand the information offered, they have the opportunity to report symptoms more promptly, request appropriate investigations and follow up leading to improved outcomes for the mother and her baby.

Patients and families can be provided or directed to education resources found on professional sites, such as the ACOG Frequently Asked Questions patient resource link on Preventing Deep Vein Thrombosis.

4. Provider education
The 4th element of the Recognition domain is to provide all healthcare providers with education regarding risk assessment tools and recommended thromboprophylaxis.

To improve patient safety, regulatory and professional organizations have endorsed practice guidelines for VTE prophylaxis.

Some strategies to bridge the knowledge gap for providers on risk assessment tools and recommended thromboprophylaxis include:

- Inclusion of professional education and continuing education on current evidenced based VTE prevention literature
- Incorporating interprofessional training for all healthcare providers on VTE prevention strategies
- And through the creating a culture of transparency for hospital and provider level data on the use of adopted VTE protocols, orders and outcomes

Summary
In summary: The second domain of the Maternal VTE Prevention Safety Bundle, Recognition, includes: 4 key elements:

1. Application of standardized tools to all patient to assess VTE risk at time point designated under “Readiness” and includes:
   - During outpatient prenatal care
• During Antepartum hospitalization
• During Hospitalization after cesarean or vaginal deliveries
• And during the Postpartum period for up to 6 weeks after delivery

2. Application of standardized VTE risk tools to identify patients for thromboprophylaxis
3. The provision of patient education including the adoption of facility standards for educating women on signs and symptoms of VTE, including DVT and PE
4. Providing all healthcare providers education on adopted VTE risk assessment tools and recommended thromboprophylaxis to support the prevention of maternal VTE.

Resources and references: Maternal Venous Thromboembolism (VTE) prevention
Please download the resources to support the VTE Maternal Safety Bundle by accessing the link at the top of this page

AIM program contact
Please contact AIM directly with any questions on the materials provided or how we can better support your needs.