Results of Topic Selection Process & Next Steps

- Terbutaline pump for the prevention of preterm birth will go forward for refinement as an update to or expansion of an existing AHRQ comparative effectiveness review. The scope of this topic, including populations, interventions, comparators, and outcomes, will be further developed in the refinement phase.

- When key questions have been drafted, they will be posted on the AHRQ Web site and open for public comment. To sign up for notification when this and other Effective Health Care (EHC) Program topics are posted for public comment, please go to http://effectivehealthcare.ahrq.gov/getInvolved.cfm?involvetype=subscribe.

- This topic could also be considered for a potential new research project within the EHC Program.

Topic Description

**Nominator:** Public payer

**Nomination Summary:** The nominator is interested in the efficacy and effectiveness of terbutaline for the prevention of preterm birth.

**Key Questions from Nominator:** None

Considerations

- The topic meets all EHC Program selection criteria. (For more information, see http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/.)

- This topic was found to be best suited to move forward as an update to or expansion of the existing AHRQ report published in 2000 titled Management of Preterm Labor. Key Questions are listed below. Specifically, this nomination relates to an update of Key Question number 2.

  1. The appropriate criteria for diagnosing preterm labor, specifically with respect to the use of three biologic markers and their positive and negative predictive value.
2. The efficacy and effectiveness of tocolytics (pharmaceutical agents that arrest uterine contractions).
3. The efficacy and effectiveness of antibiotics (with respect to covert infections that might prompt preterm labor).
4. The efficacy of home uterine activity monitoring in decreasing adverse outcomes in women who are experiencing preterm labor.

- Terbutaline as well as other tocolytics have been shown to delay delivery; however, significant maternal side effects and no effect on perinatal outcomes have been shown. Despite the evidence for harms, clinicians may still be prescribing and using the terbutaline pump and other tocolytic agents. Potential new research on this topic could encompass an analysis of existing data on the frequency of tocolytic use across states, variation in practice, and harmful impacts, which may give a clearer picture of the current practice surrounding the use of tocolytics.