ABSTRACT
A busy, urban academic health care facility implemented a quality improvement project to improve identification, communication and management of Category II fetal heart rate (FHR) tracings.

Case reviews from January through March, 2019 revealed that in 60% of cases with Category II FHR tracings, the required Category II algorithm for management was documented in the electronic health record. In 30% of cases there was inconsistent use and documentation of the category II algorithm. In 10% of cases, the category II algorithm was not followed.

The quality improvement project action steps required education for all team members caring for laboring patients and the introduction of standardized communication tools and team huddles to improve collaboration and communication of the multi-disciplinary team when managing category II FHR tracings.

BACKGROUND/ PRE-INTERVENTION
Objective: In the Fall of 2018 a multi-disciplinary team of obstetric providers and nurses determined that there was inconsistent use of an algorithm to guide care of patients with a Category II fetal heart rate (FHR) tracing in the intrapartum setting. Results of case reviews concluded:

- **Algorithm followed:** 18/30 60%
- **Algorithm NOT followed:** 3/30 10%
- **Other:** 9/30 30%
  - The primary diagnosis took priority over the algorithm
  - Unable to determine algorithm use due of unclear/inadequate documentation
  - Absent or inadequate discussion of intratuerine resuscitation measures including steps to resolve uterine tachysystole
  - Absent discussion of labor progress or phase of labor r/t determination of plan

INTERVENTION
A multi-disciplinary team comprised of MFM, OB, CNM, OB resident, student, nurse midwife, practice, education and operations developed a plan to improve team management of category II FHR tracings. Recommendations included:

- A one-hour required in-person course was developed for all nurses and providers. Content included definitions, physiologic significance of category II FHR tracings, interventions to improve the FHR, clinical management, and strategies for communication and documentation (see Teamwork/Communication Strategies)
- Multiple sessions at various dates and times were offered and included an OB Grand Rounds session.
- A few team members, unable to attend an in-person session, viewed the recorded Grand Rounds session and completed an attestation documenting course completion.

METHODS
Strategies to improve utilization of the Algorithm included:

- Posting the Algorithm on the unit and placing in resource manuals in patient rooms
- Development of standard documentation templates (Smartphase) in the medical record to document communication and plan of care for Category II FHR tracings.
- Advancing the concept of team huddles to include Category II Team Huddles. Category II Team Huddles:
  - occur when escalating concerns about the FHR warrants an immediate evaluation by the team
  - create the opportunity to determine the plan of care and timing for delivery with input from the entire team
  - occur at a location convenient for the team while maintaining confidentiality
- are initiated by anyone on the unit who is concerned about a FHR tracing
  - include nursing, anesthesia, delivering providers, residents and students
  - utilize Teamwork/Communication Strategies

CATEGORY II TEAM HUDDLE

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REFERENCE


**SUMMARY**
- 100% of L&D Birthplace RNs and delivering providers completed the required education.
- Quality improvement data regarding documentation and management of Category II FHR tracings is being collected at this time.
- Class evaluations demonstrated that attending the education session would result in significant practice changes for 75% of attendees and would improve patient outcomes for 97% of attendees.
- Qualitative evaluation feedback reinforced the benefits of utilizing huddles & Teamwork/Communication Strategies

**REFERENCES**