STRATEGIES FOR REDUCING UNNECESSARY CESAREAN SECTION

GENERAL

- **Education to staff**
  - An important component to any cesarean reduction program is that all of the professionals be educated about the reason your organization has chosen to reduce unnecessary abdominal deliveries. This includes the education of physicians, nurses and other support personnel. It is important to obtain buy in from all of these parties to be successful.
- **Physician leadership/ownership: local champion**
  - Similar to other quality improvement efforts choosing a position leader and can be the local champion is critical to success. This person must strongly support the changes and present a vision to your institution. In collaboratives, this has been shown to be a critical element to success.
- **Provider feedback**
  - Provider feedback is a critical component to most successful programs. Detailed data regarding cesarean section rates and risk factor rates should be given in a timely and regular fashion. These reports must be accurate and the providers must have confidence in the information presented. Many programs have chosen to distribute such reports with accompanying recommendations of changes which can lead to further improvement. Most reports have comparative data for both their group and institutional results. The reports can be given in a confidential fashion and typically the results of all providers are shared, but in a confidential fashion.
- **Peer review/2nd opinion**
  - Many institutions have required a second opinion for non-of urgent cesarean deliveries, particularly in the case of elective primary cesarean. Another strategy is to review all cesarean sections a case review committee's to make sure the reason for the abdominal delivery is well documented in the surgeon used good clinical judgment.
- **CBE: induction risks, labor support, VBAC class**
  - This strategy involves utilizing childbirth education classes to educa te patients on their role and choices involving cesarean delivery. Many providers report significant pressure from patient's, particularly near term, to proceed with unnecessary inductions and cesarean delivery. These classes can also described choose addresses the institution's labor support techniques that they can expect during their labor. To specifically addresses the special concerns of vaginal birth after cesarean, institutions utilize a detailed education on the risk and benefits of both a trial of labor and scheduled elective repeat cesarean section. These sessions are typically combined with labor refresh her courses. In addition, the institution's consent form for prior cesarean can be reviewed.

- **Hospitalist/Laborist**
    - The presence of hospitalist and obstetrical units is thought to be a good strategy for reducing cesarean sections by relieving some of the pressures of the community obstetrician attempting to cover a busy office, difficult call schedule and other pressures a moderate practice. Hospital was also provided a readily available assistant should the need for cesarean arise.
- **Midwives, Doulas and specialized support staff**
    - Labor support specialists can provide coaching and other labor techniques which support the mother in labor. Midwives and doulas have extensive training in labor support. Most are strong advocates for vaginal delivery and encourage the patient to continue difficult labors. For most institutions, they will need to adopt careful guidelines outlining the scope to which patients can use these individuals since often risk management issues may arise. Since they are typically independent contractor's there has to be agreed upon protocols.
- **Call schedule changes**
    - This change involves the formation of the larger call groups so there is less pressure for individual physicians to proceed with cesarean sections. This is obviously a clinical an economical challenge in many cases. Nonetheless, there is evidence that this can improve care.

LABOR

- **RN labor support and technique changes**
    - This involves labor support training for nurses which includes alternative positioning, ambulation, introduction of telemetry and techniques for second stage pushing techniques. The added benefit is this often allows nurses to be more involved with their patients and increases patient satisfaction.
- **Anesthesia/Comfort Measures**
    - Many techniques for various none medical analgesia such as aromatherapy, acupuncture and hypnosis. There is not strong literature to support their effectiveness but many report an improvement in patient satisfaction. In addition to these techniques there are changes in her regional anesthesia such as" walking epidurals" which have been utilized.
- **Oxytocin protocols**
    - Oxytocin protocols which had been implemented in an effort to standardize usage and make safer labors have also been described as lowering cesarean section rates. For this reason, these are often implemented and can also be described as a patient safety measure.
- **Active Management**
    - The Irish for the first to describe Active Management protocols for labor and described success in lowering cesarean section rates. The classic technique involves frequent cervical examinations, aggressive oxytocin utilization and tight admission criteria.

- **FHR interpretation training**
    - In some institutions there are significant numbers of cesarean sections performed for fetal intervention based upon heart rate interpretations. Improvement in heart rate evaluation can often lead to a reduction in the overall cesarean rates and more appropriate interventions for those fetuses who are being compromised.
- **Vaginal birth after cesarean**
    - Most recent studies have confirmed the safety of this technique in the institutions which have appropriate response available. Since the measures to respond to a possible uterine rupture should probably be given to all laboring patients, many institutions R. implementing such changes and offering trials of labor to patients with a prior cesarean section. Trial rates can be augmented by a VBAC education program which incorporates the risk and benefits.

PRE-LABOR

- **Reducing unnecessary inductions**
    - Recent realization that neonates have improved outcome if elective deliveries are postponed to or greater than 39 weeks have led to a number of institutions implementing induction criteria. These typically involved strict dating criteria and the necessity for having a specific indication at the time of scheduling. The added benefit to the institution is that this often reduces the demands on the labor staff and allows him to focus and give more attention to laboring patients. In addition, indicated inductions are easier to schedule. The literature is conflicted on the degree at which this reduces the overall cesarean rate but nearly all studies show a shortening of laboring times.
- **Macrosomia management changes**
    - Randomized control trials have failed to demonstrate benefit for an attempted labor based upon the ultrasound diagnosis of macrosomia in the nondiabetic patient. Therefore protocols which require careful assessment of the specific weight, quality of the ultrasound estimate and patient counseling can be used to reduce unnecessary interventions. The protocol can also include specific criteria for the diabetic patient.
- **Management of “oligohydramnios”**
    - No literature supports induction of labor for" pending oligohydramnios". Studies have shown that there can be resolution of the decreased fluid, particularly if it is a borderline amniotic fluid index. Therefore careful protocols regarding the management of these patients, including independent assessment of the ultrasound measurement, can be helpful in reducing unnecessary interventions.
- **No admission prior to 3 cm and other labor evaluation techniques**
    - This is thought to be a critical element to active management of labor. This involves retraining of staff and protocols which give alternatives to the admission low risk patients presenting in labor who have not documented significant cervical change.

- **Breech detection and version**
    - Breach version has shown to be successful and approximately 2/3 of attempts and is particularly more successful in patients who are parous. Approximately 85% of successfully turned fetuses will go on to deliver vaginally. Therefore programs where this technique is encouraged and offered to patients have demonstrated lower rates of cesarean section for breech presentation. Offering her version can be combined with an aggressive program to detect all breech fetuses at term including specific protocols on the examination during prenatal visits and liberal utilization of ultrasound to detect all such fetuses.