

Second Trimester: Best Practices for Uterine Evacuation

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Disclosures

- No financial disclosures
- We will discuss off-label use of mifepristone for cervical preparation and adjunctive medication for medical induction in the second trimester.

Objectives

- Learn how to counsel patients on options for interruption of pregnancy in the second trimester.
- Become familiar with second trimester uterine evacuation and appreciate evidence-based recommendations for care.
- Review cervical preparation and induction protocols in the second trimester as well as how to manage complications.
- Discuss potential ways to enshrine and protect essential abortion care and surgical uterine evacuation access at institutional levels.

How to counsel patients on options for interruption of pregnancy in the second trimester.

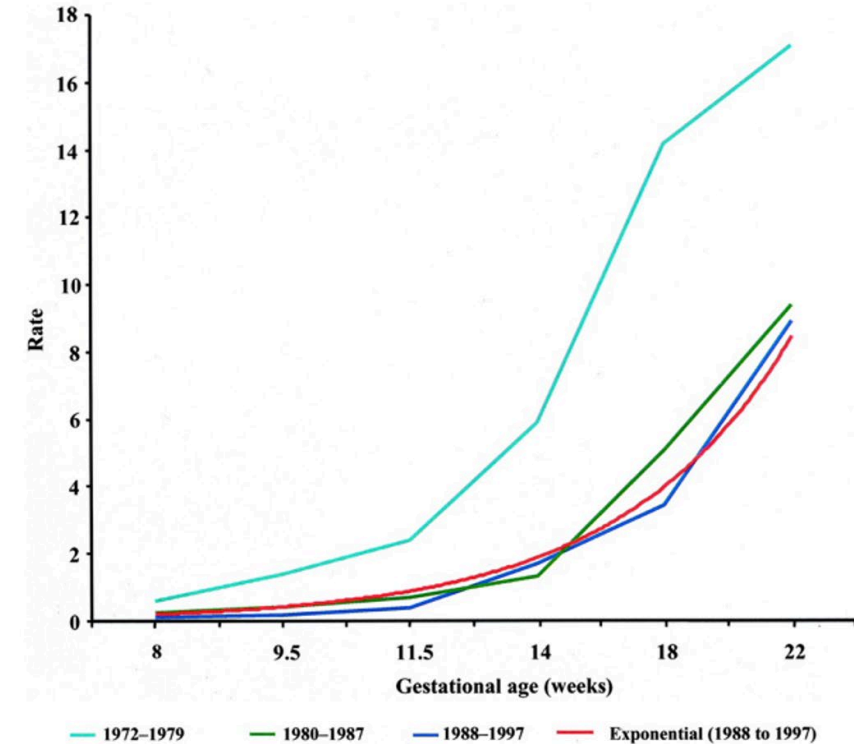
Interruption of pregnancy in 2nd Trimester

- Translatable care
- Uncommon
- Options for management may be limited
- Patient goals are of primary importance
- Options counseling
- Language matters

Safety

- Termination vs continued pregnancy
 - Abortion mortality 0.6/100,000
 - Maternal mortality 32.9/100,000
- Medical Termination vs surgical procedure (D&E)
 - 24% complication rate in IOL group
 - 3% complication rate for D&E
- Delays in & legality care matter

Figure 1: Legal induced abortion mortality rates with plot of exponential model, by gestational age—United States, 1972–1979, 1980–1987, and 1988–1997. *Bartlett. Abortion-Related Mortality. Obstet Gynecol 2004.*



Legal induced abortion mortality rates with plot of exponential model, by gestational age—United States, 1972–1979, 1980–1987, and 1988–1997. *Bartlett. Abortion-Related Mortality. Obstet Gynecol 2004.*

Importance of patient choice

- Integral to patient satisfaction
- Choice has positive effect on psychological outcomes



Become familiar with second trimester uterine evacuation and appreciate evidence-based recommendations for care.

2nd Trimester Uterine Evacuation

- Management options
 - Medical
 - Surgical (D&E)

Induced Fetal Demise

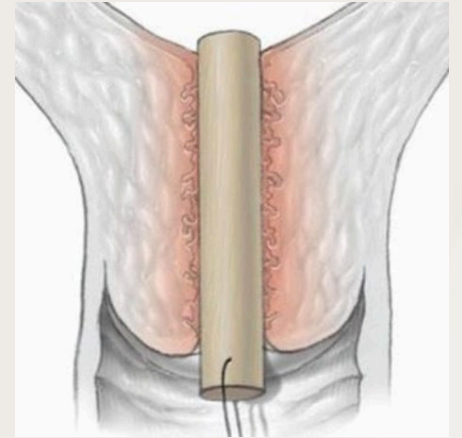
- Commonly done for legal reasons and patient preference
- Methods:
 - Intra-cardiac KCL
 - Intra-amniotic or intra-fetal digoxin
 - Transection of umbilical cord
- Not recommended for improved safety
 - Increased risk extramural delivery
 - Exception: Placenta previa
 - D&E: no difference
 - IOL: possibly quicker IOL (if no mife)

Dilation and Evacuation (D&E)

- Procedure:
 - Cervical dilation
 - Uterine evacuation with suction and forceps
- Patient selection:
 - Informed consent
 - Able to access the pregnancy
 - Available provider
 - Safer option in sicker patients

Cervical prep

- In your toolbox:
 - Misoprostol
 - Mifepristone
 - Laminaria
 - Laminaria: 3x diameter @ 12-24h
 - Dilapan: 4x diameter @ 12-24 hours, significant diameter by 4h, \$\$
 - Foley bulb
 - Surgical dilators



Cervical prep- minimum

- **14 0/7 – 17 6/7:**

- Pre-procedure misoprostol OR
- Same-day osmotic dilators

- **≥18 weeks:**

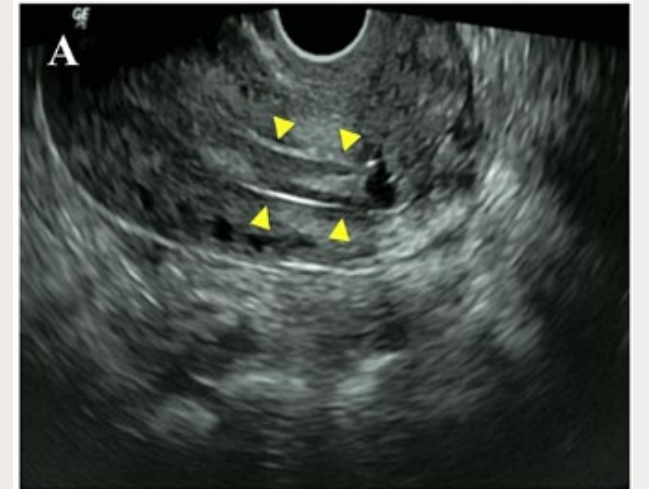
- Overnight laminaria = 2 day procedure

Osmotic dilator placement

- Office procedure with paracervical block
 - Tenaculum
 - +/- mechanical dilation (~29F)
 - Lams flush with external os
 - Sponges (2)
 - Precautions
- No perfect protocol
 - Increase # for increasing GA or challenging cases
 - Dilapan = 2 lams (they do dumbbell!)
- Duration:
 - 3-4 hours if same day < 18 wga
 - Overnight recommended if ≥ 18 wga
 - Multiday protocol

Osmotic dilators- special considerations

- Infection
 - Packing suggests antibiotics
 - Doxycycline 200 mg PO with lams
- Incorrect count
 - Fracture, migrate, fall out
 - You must account for everything!
- Placenta previa
- PROM
- Request for dilators to be removed
 - 30-80% incidence of healthy, term deliveries in case series



Osmotic dilators

- Dilators + mifepristone ❤️
- Dilators + mifepristone + **misoprostol** → **increased risk of delivery**

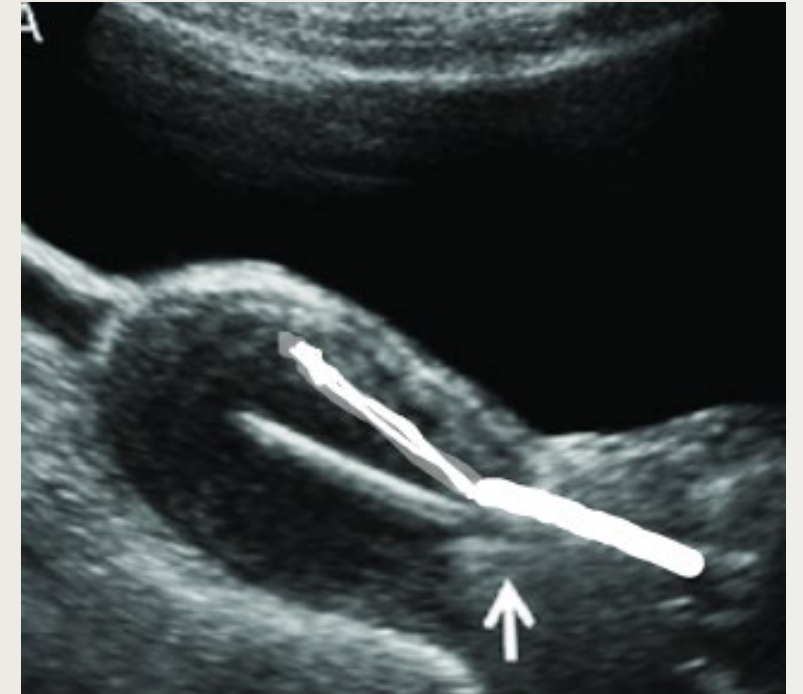


Cervical prep

- Absorb the data → use clinical judgement to individualize.
- My practice:
 - 600 mcg of buccal miso ~90m prior to procedure for pts 14-17w6d.
 - For primips and adolescents, @ 12w0d if time allows.
 - Place overnight laminaria in those 18w and greater.
 - Add Mifepristone @ 20w and above.
 - I do NOT give adjunct preop misoprostol to patients who have laminaria in place unless laminaria placement extremely difficult/ few # AND no mifepristone given.

Extraction

- Antibiotics
 - 200 mg Doxycycline once (Metronidazole if allergic)
- US guidance advised
- AROM for AFE risk reduction (Theoretical)
- Open forceps in the AP direction
- Placental removal with forceps
- Suction curettage



Medical Management

- Again, translatable to IUFD
- Compared to D&E
 - Less cost effective
 - More risk of complication
 - May be prolonged*
- Advantage to D&E
 - Intact fetus

Method

- Use mifepristone (if available) before misoprostol
 - Pregnancy continuation rate at 24 hours:
 - Misoprostol only: 23%
 - Mifepristone-misoprostol: 4%
 - Shortens mean time to expulsion (5.8-8h)
 - 48h advantage
- Serial misoprostol
 - Loading dose of no benefit
 - Frequency
 - Vaginal route



Mifepristone Provider
Agreement

ACOG Practice Bulletin (2013)

- Recommends:
 - Mifepristone
 - Loading dose misoprostol
 - Misoprostol “break” @ 5 doses

Box 1: Regimens for Second-Trimester Medical Abortion ↵

- Mifepristone, 200 mg, administered orally, followed in 24–48 hours by
 - Misoprostol, 800 micrograms, administered vaginally, followed by 400 micrograms administered vaginally or sublingually every 3 hours for up to a maximum of five doses.*
 - Misoprostol, 400 micrograms, administered buccally every 3 hours for up to a maximum of five doses also may be used.
- If mifepristone is not available:
 - Misoprostol, 400 micrograms, administered vaginally or sublingually every 3 hours for up to five doses.* Vaginal dosage is superior to sublingual dosage for nulliparous women.
 - A vaginal loading dose of 600–800 micrograms of misoprostol followed by 400 micrograms administered vaginally or sublingually every 3 hours may be more effective.
- If misoprostol is not available:
 - Oxytocin, 20–100 units, infused intravenously over 3 hours, followed by 1 hour without oxytocin to allow diuresis. Oxytocin dosage may be slowly increased to a maximum of 300 units over 3 hours.†

SFP: Medication abortion between 14 0/7 and 27 6/7 weeks of gestation

Society of Family Planning Recommends:

14 0/7 – 23 6/7

400 mcg

Give mifepristone 200mg 24-48h before misoprostol followed by misoprostol 400 mcg q3 hours vaginally, sublingually, or buccally. (1A)

When Mifepristone is not available in advance, **co-administer** mifepristone with misoprostol. (1B).

If mifepristone NOT available, 400 mcg miso every 3. A loading dose is NOT recommended as it does not hasten abortion times or improve outcomes. (1B).

24 0/7 – 27 6/7

200 mcg

Give mifepristone 200mg 24-48h before misoprostol followed by misoprostol 200 mcg q3 hours. (2C)

When Mifepristone is not available in advance, we **co-administer** mifepristone with misoprostol. (1B).

If mifepristone NOT available, 200 mcg misoprostol every 3 hours. A loading dose is NOT recommended as it does not hasten abortion times or improve outcomes. (1B)

IOL termination- special considerations

- Misoprostol:
 - Pyrexia 5-10%
- TOLACs
 - Rupture risk with miso for 2T IOL:
 - Background risk: ~0.01%
 - One prior CD 1.1%
 - 3/12 required hysterectomy
 - > 1 prior CD 2.5% (RR 17.55, 95% CI 3.0-102.8)
 - SFP : more than one prior CD is NOT a contraindication to medication abortion regimens using miso, particularly when alternative may be hysterotomy. Recommend shared decision.

IOLE termination- special considerations

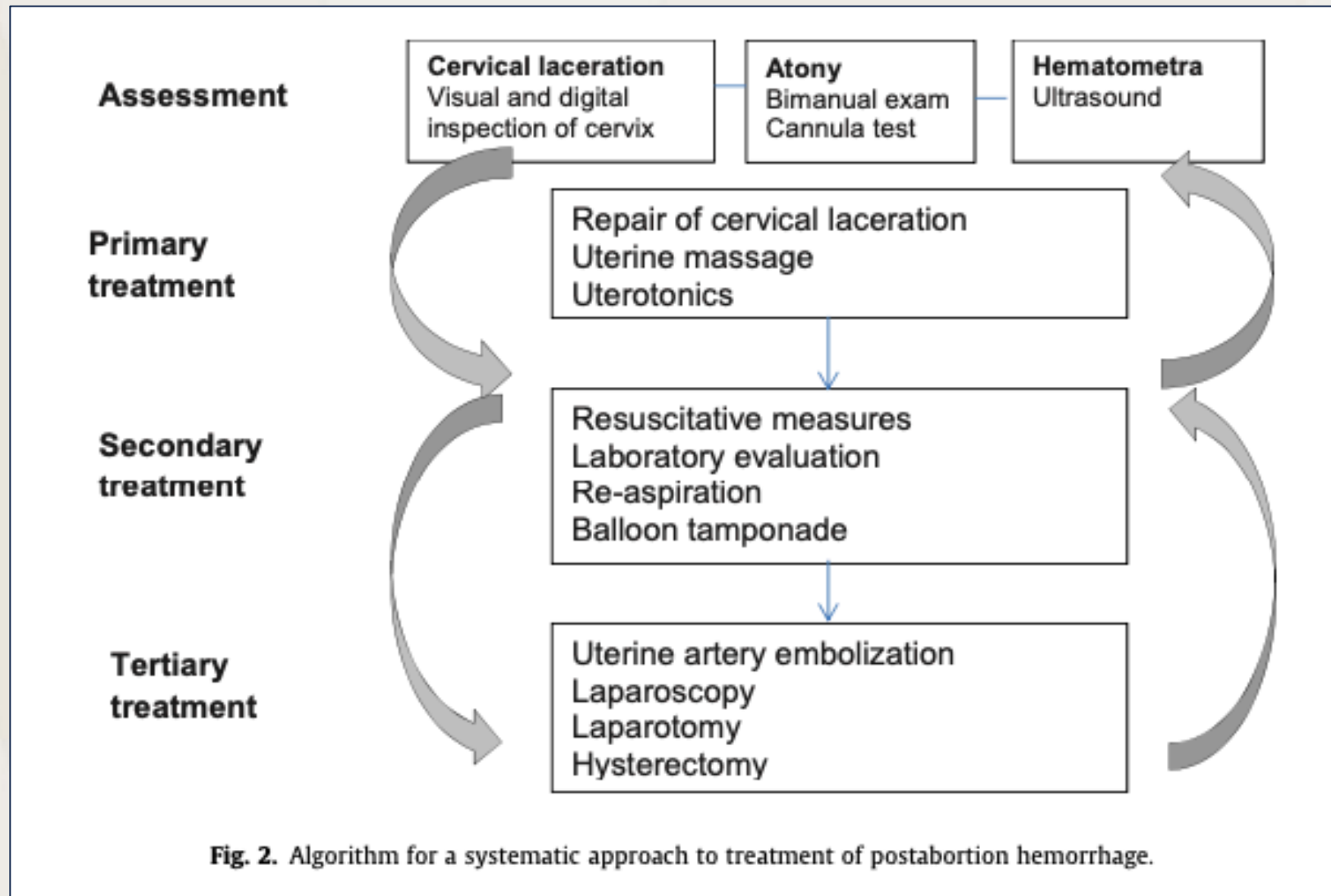
- Prolonged IOLE:
 - Consider rescanning
- Unlimited dosing advised
- Retained placenta:
 - Incidence 8-33%
 - Decreased risk if mifepristone used
 - Ok to wait 4 hours → 6% operative incidence
 - Consider 10 units Pitocin IM or hemabate with delivery as opposed to more miso

Best practice for minimizing complications:

- Good dating & localize placenta
 - Previa and > 14 weeks--> MFM scan
- Vasopressin in paracervical block
 - 4u in 20 cc of 1% lidocaine or injectable saline ≥ 15 weeks or @ risk of bleeding
- Adequate provider training
- Adequate cervical dilation
- Oxytocin
 - 30u oxytocin in 500 IVF @ 300 ml/hr with speculum ≥ 18 weeks
- Perform D&E under US guidance

Post-Abortion Hemorrhage

- Clinical response to excessive bleeding or **EBL > 500 ml.**
 - Underestimated EBL likely
 - If you draw labs → **red top tube**



Speaking of bleeding...

- Severe anemia, bleeding disorder or anticoagulated
 - D&E recommended over IOL
- Patients with bleeding disorder or anticoagulated
 - **1st Trimester D&C:** anticoagulation can be continued without interruption
 - d/c antiplatelet therapy with specialist
 - **2nd Trimester D&E:** Holding anticoagulation should be individualized.
 - SFP has guidelines for Anticoagulation discontinuation and re-initiation in peri-abortion time period.

Be systematic:

- Make rules (and stick to them)
 - Labs:
 - CBC before all D&Es
 - Coags if demise > 3 weeks
 - Creatinine for D&E's over 20 weeks (or high risk)
 - Vasopressin in PCB if ≥ 15 weeks
 - Pitocin infusion if ≥ 18 weeks
 - Always use US!
 - Step in and then step aside when trouble shooting needed
 - Red top blood draw for all PPH's
 - Re-aspirate only once → Balloon next.

Lactation Suppression

- Common after 18 weeks (97% with breast symptoms)
- Supportive management
- Medical management
 - Cabergoline 1 mg given within one day (after uterine evacuation at 19-28w)
 - Must avoid in uncontrolled HTN and those with valvular disease.

Discuss potential ways in which to enshrine and protect essential abortion care access at institutional levels.

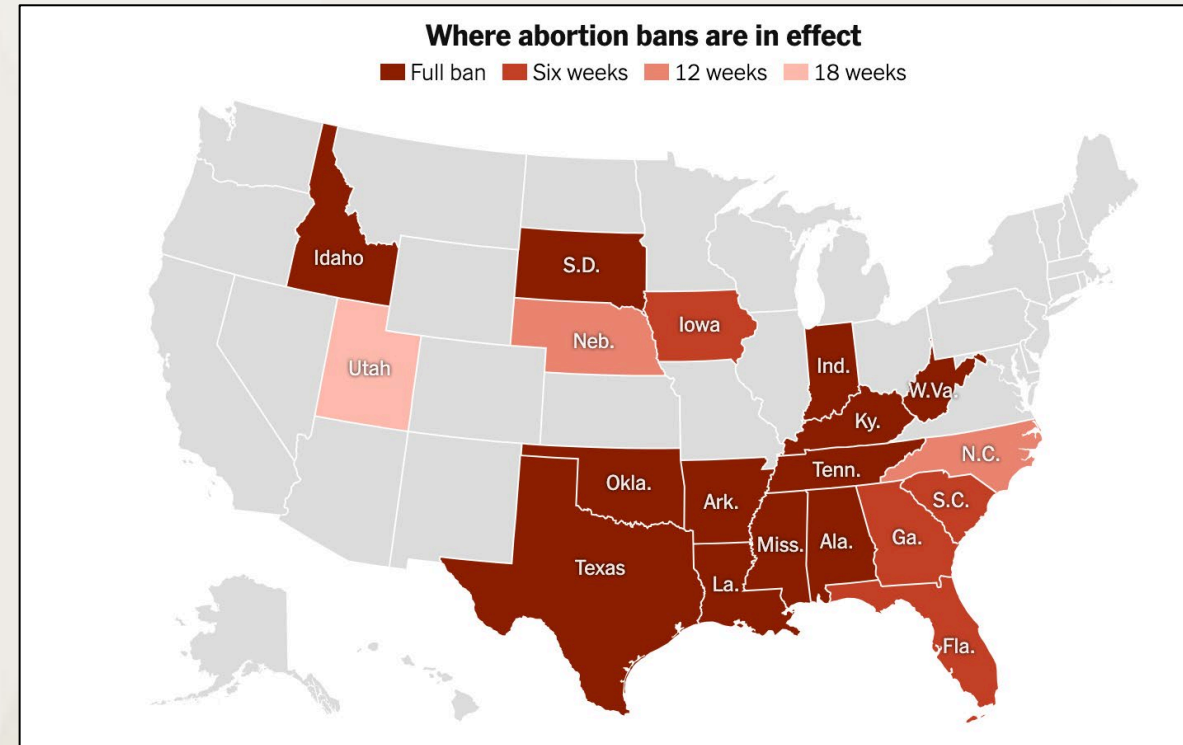
Interpreting exceptions

- How much risk is enough risk?
- Who gets to decide
 - Patient?
 - Clinician?
 - Attorney General?
 - Courts?
- Consequences if I get it wrong?
 - Criminal
 - Medical malpractice
 - Moral injury



Protecting access to care

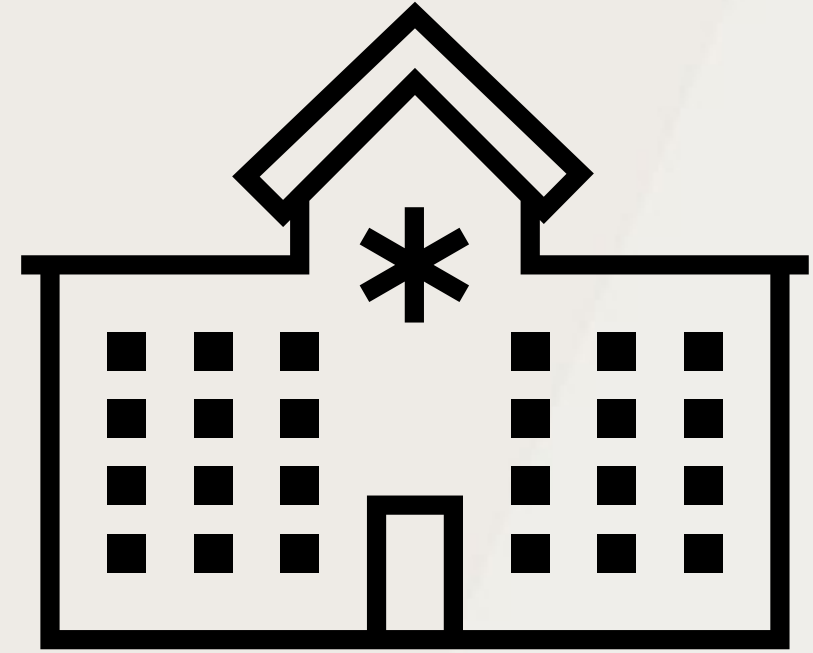
- Know your laws
- Resist over-compliance/withholding of indicated care
- Build consensus
 - Institutional
 - Community
 - State
 - Medical Society



NYT. As of May 29, 2025

Institutional

- Ethical framework for establishing maternal risk
- Formalize an Abortion Policy or SOP
 - Consider naming what is NOT ABORTION
- Consider pros/cons of **non-exhaustive** list of some conditions
 - Previaible PPRROM
 - Inevitable AB
- Ensure criminal defense for care provided within the institution's policy
- Insulate your deliberations



Regional

- Engaging and partner with regional institutions
- Share interpretations of law and implications for clinical practice.
- Enhance consistency in practice and minimize variation
 - Which may in turn reduce legal risk

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