FAMILY PLANNING SIMS SCHOOL:
D&E HEMORRHAGE SIMULATION CLINICAL SCENARIO
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Supplies:
Mama Natalie (http://www.laerdal.com/us/mamaNatalie)
- Fake Blood (Can purchase from Mama Natalie website)
- Styrofoam peanuts or stale bread (D&E "products of conception")

D&E equipment
- Speculum
- Tenaculum
- (Cervical dilators)
- Suction Canula (with MVA/EVA)
- Forceps (e.g. Sopher or Bierer)

Paracervical Block Equipment
- Spinal needle
- Syringe
- "lidocaine"

"Ultrasound" (ultrasound images)
"Vital monitor" (vitals on display cards)

Location:
Any clinic setting with exam bed

Man Power:
2 Clinical instructors (observer and 'Nurse')
3-4 learners
1 Simulated patient

Clinical Background (the following paragraph will be read to the resident upon starting the scenario):

Rebecca Ryan is a 29 yo G2P1001 who was diagnosed yesterday with a second trimester IUFD. She presented for a routine anatomy scan at which time the IUFD was diagnosed. She is 19 weeks by dates and 18+3 by u/s. She has been talking with her husband and her obstetrician about her delivery options including expectant management, induction of labor, and D&E. She is obese with a h/o mild asthma. She had a c-section without complications 2 years ago. She presented at FCC pre-op clinic on Wednesday where she was counseled and decided to proceed with the D&E. She had 6 laminaria placed uneventfully. She presents today for her procedure at the outpatient clinic where these procedures are typically done under moderate sedation.

Clinical Scenario:	*Key Points:*
The resident and attending perform a standard D&E. The attending will monitor the steps performed and coach when necessary. The uterus feels empty and the u/s demonstrates a moderately thin endometrial stripe. (show thin stripe on ultrasound)	Did the resident do the following: • Surgical pause (Time Out) • Confirm appropriate level of sedation before starting • Confirm need for cervical block +/- vassopresin • Overall D&E simulated
Uterine atony develops with brisk bleeding noted (attending comments "that's quite a bit of bleeding). VS: HR 110, RR20, BP 120/70 The u/s image changes to indicate a thickened stripe	
Attending prompts resident for a DDx list and medical management of atony.	Did the resident demonstrates complete DDx of hemorrhage • Atony • Retained POCs • Perforation • Cervical/vaginal laceration • DIC • Placenta accreta
The uterus feels a little boggy. Bleeding continues	Did the resident demonstrates knowledge of medical management of atony • Methergine • Cytotec • Hemabate • Pitocin
The nurse asks for an update and how she can help. Continued bleeding VS: HR 128, RR20, BP 100/50 Nurse asks if she should call for blood or for help Attending prompts resident for other interventions (foley vs. Bakri vs. transfer), prompt resident for labs that might be desired	Did the resident : • Request for additional help from nurse • Demonstrates ability to update nurse • Demonstrate/communicate need for fluid resuscitation/ blood products • Demonstrate conservative interventions for uterine atony - Bimanual massage - Foley bulb - Bakri Balloon
Continued bleeding VS: HR 140, RR22, BP 90/40 Bleeding through catheter of foley vs. Bakri	Scenario ends when resident calls for transfer to Main OR for hysterectomy or to IR

Examples of ultrasound pictures can use: