



Duke University Medical Center

Obstetrics & Gynecology
Resident Handbook

Duke Phone Numbers

Main Number: 684-8111

Information (in house): 113

OB Emergency/Fluid Exposure: 115

Clinic Numbers

OB/Gyn Clinic (Appt Line)	684-2471
OB/Gyn Triage Line	684-6677
HROB Nurse (MD line)	668-7430/1
HROB Nurse (Patient line)	684-6327
HROB Clinic workroom	668-7428
Ryan Clinic (Sally) / Cervix	668-7888
Gyn Clinic 1J RN (Bernadette/Dinah)	684-6688
Gyn Clinic 1J workroom	668-7416
Gyn Clinic 1J fax	681-7857
Oncology Clinic	684-3765
Oncology OR Scheduling	684-6565
Oncology Appointments	668-6688
Oncology Clinic workroom	660-1272/0
VA WHC Clinic	286-0411
Patterson Place Urogyn Nurses	401-1000x6
Patterson Place Urogyn	401-1000
Patterson Place DWHA	687-4688
Duke Perinatal Raleigh	783-4299

Units

5400 (OB Triage HUC)	681-6070
5400 (OB Triage Workroom)	681-5021
5700 (L&D HUC)	681-5741
5700 (L&D workroom)	681-1065
5800 (Postpartum)	681-5841
OB Main OR	681-5670
MFM office fax	681-4244
7700	681-7741
NICU	681-5551
Pediatric Cardiac ICU	613-5400
CCU	681-7241
MICU	681-8241
SICU	681-2241
ER Acute Side	684-4461
ER Non-acute Side	684-4462
ER residents	4407/4408
ER Triage RN	681-4410
6300 fax	681-8182
DRH Nursery	470-4228
DRH OR	470-6188

Surgery/OR

Anesthesiology	970-9111
ASC	668-2000
ASC Scheduling	668-2045
ASC OR (___ = OR Room number)	668-23__
Duke North OR	681-2255
Duke North OR Scheduling	681-5099
Pre-op Holding	684-4718
PACU	681-3002
ASC recovery center	668-2000

Ancillary Services

Spanish Interpreter	681-3007
Bed Control	681-4300
Employee/Occ Health	681-3136
Infection Control	684-5457
Medical Records	684-5525
Risk Management	681-0601
OIT	684-2200
6300 Pharmacy	681-6344
5700 Pharmacy	681-9916
Duke North OR Pharmacy	681-2555
PICC RN	681-1398

Labs

Blood Gases	681-3223
Central lab support	681-2620
Chemistry/Evening lab support	681-2545
Coagulation	684-6366
CPED (Pediatrics)	681-3602
Cytology	613-9414
Microbiology	684-2089
Phlebotomy	681-6933
Surgical Pathology	681-3133
Transfusion	681-2644

Consults

Cardiology	970-1489
Dermatology	970-3376
Diabetes Mgmt	970-6533
Dialysis Access	970-GORE

Endocrine	970-6533	Durham Regional Hospital	470-4000
ENT	970-1320	DRH call room	470-4215
Feeding Tubes	970-FOOD	Franklin Regional Hospital	496-5131
General Surgery	970-2222	Pitt County Mem Hospital	252-816-4100
GI	970-1858	Raleigh Community Hospital	954-3000
Hematology	970-2414	UNC Hospital	966-4131
Hyperbarics	970-2909	UNC L&D	966-3422
ID	970-GERM	UNC L&D fax	966-3429
Internal Medicine	970-7777	VA Hospital	286-0411
Intervent/Vasc Radiology	970-7930	Wake Medical Center	350-8000
Neurology	970-4662		
Microbiology Fellow	970-8885		
Oncology	970-7972		
Ophthalmology	970-8040	<u>Administrative</u>	
Pain Team	970-8506/7	GME	684-3491
Orthopaedic	970-0356	Susan Knerr	668-2591
Otolaryngology	970-1320	Dr. Brown's Office	668-3948
Palliative Care	970-CARE		
Path (FNA)	970-4525		
Plastic Surgery	970-3383		
Psychiatry	970-PSYC		
Pulmonary	970-6266		
Radiation Oncology	660-2160		
Renal	970-7746		
Thoracic Surgery	970-3333		
Urology	970-3765		
Vascular Radiology	970-7930		
Wound Management	970-5022		
<u>Health Departments</u>			
Lincoln Com Health Center	956-4000		
LCHC Prenatal Clinic	956-4052		
Durham County	560-7600		
Franklin County	919-496-2533		
Person County	336-597-2204		
Warren County	252-257-1185		
<u>Hospitals</u>			
Cape Fear Valley MC	910-609-1000		
CFV L&D	910-609-6397		
Carolina's Medical Center	704-355-2000		

Pager/Coverage Information

<u>FUNCTIONAL PAGERS</u>	<u>DAY COVERAGE</u> <u>6:30a – 6:00p</u>	<u>NIGHT COVERAGE</u> <u>6:00p – 6:30a</u>
GYN-ONCOLOGY 970-7700	PGY1 Onc	PGY2 NF
BENIGN GYN 970-4962	PGY1 Gyn	PGY2 NF
OB ANTEPARTUM 970-2233	PGY2/3 Antepartum	PGY2* NF
UROGYNECOLOGY 970-9976	PGY2 or 4 Urogyn	PGY2 NF
REI 970-9285	PGY2 or 4 REI	PGY2 NF
OB/GYN CONSULTS 970-7066	PGY3 or 4 Gyn	PGY4 until midnight PGY2 after midnight

*On weekends the PGY3 will cover the OB Antepartum pager

How to sign on to a functional pager

Call functional pager

Press * #, then 151, then enter your pager number

How to sign out to the operating room

Call your personal pager number

Hit * #, then your unique ID number, then #, then 18, then your OR phone number

How to sign back to “on page” status

Call your personal pager number

Hit * #, then your unique ID number, then #, then 12

Miscellaneous Tip

** If you have a smart phone – you can program it in as a contact, just hit send and it will sign you in → 919 -970-xxxx,,*#151,your pager #

** All phones at Duke are set up to call long distance – no codes needed

EMAIL CONTACTS

For Follow-up visits: also include pt name, MRN, Date of birth, one liner, when you want follow up and with what MD (esp for HROB and ONC patients) and ICD 9 code for labs.

mfmnurses@duke.edu → This is for high risk OB follow up (usually after AP discharge or triage visit)

PRMO-Gyn Nursing → for GYN follow up (ED consults, GYN in-patients,

PRMO ONCOAG → for ONC pt follow up

Duke Raleigh Onc follow up: email Sonja Blake / Debra Gooch

Beta Book Patients: Email Bernadette Mazzoli, Dinah Moore

WEEKEND COVERAGE

Please try to anticipate and complete discharge papers for patients expected to go home over the weekend. Email the residents on the primary team re: discharges and Home Health planning so care can be coordinated and f/u appointments scheduled. There is a work sheet for f/u appts that need to be scheduled for pt being discharged on weekends – it lives on the rack of 5700 charts.

PATIENT LISTS

All lists can be accessed via ebrowser by going to Rounding -> Physician Handoff and then selecting the list for your respective service.

Responsibilities:

PGY-1 ONC/GYN and PGY-2 on REI/Urogyn:

Update respective lists throughout the day

PGY-2 and PGY-4 on Sat Night Call and Regular Night team:

Updating HD#, POD# and/or EGA# on all lists at midnight every night

Update all lists throughout the night with relevant events

Have updates entered by 5:30am so all information is available to day teams

For OB Patients

Admitting MD: Big 11 listed and patient information entered on list

Delivering MD: Update Big 11 (i.e. add sex-circ/feed/contracept/follow-up site)

CALL TEAMS

Four Person Call Team

PGY-1 rounds on postpartum in the AM with post-call intern. Then cover triage, deliveries, postpartum calls, some 1' cesareans

PGY-2 rounds on GynOnc with post-call PGY-2 (who is on pagers). Then signs on to Oncology, Urogyn, REI, Benign Gyn. Get remaining team signout and finish ONC/other service tasks. Contact GynOnc fellow in the afternoon for PM rounds over the phone. After things have settled down, cover consult pager.

PGY-3 rounds on Antepartum with post-call PGY-3. Receives L&D signout from post-call PGY-3. Covers the Antepartum pager.

PGY-4 round on Gyn Services (REI, Urogyn, Benign). Cover consult pager until the evening and PGY-2 is done with tasks. Then perform cesarean sections with PGY-2 and support the PGY-2 with GYN consults.

Prescriptions

- Narcotics (no refills!)
 - Percocet 5/325 one tablet PO q4Hr prn pain Disp #20 (twenty)
 - Oxycodone 5mg 1-2tablets po q4hrs prn pain Disp #20 (twenty)
 - Dilaudid 1mg po q4hrs prn pain Disp #20 (twenty)
 - Ultram (tramadol) 50-100mg 1-2tab po q4-6hrs Disp #20
 - Good for people with strong reactions to narcotics
 - Vicodin (tylenol/hydrocodone) 5/500 1 tab po q4-6hrs prn pain Disp #20
 - Zydane (hydrocodone/Tylenol) 10/400 1 tab po q4-6hrs prn pain, Disp #20
- NSAIDs
 - Motrin (Ibuprofen) 600mg po q6hrs prn pain
 - Naproxen (Alleve) 500mg po BID prn pain, disp QS x1 month
- OCPs
 - Micronor 1 tab po qday, at same time every day, disp QS x3 months, refill x3 – start in 3wks if PP
 - Ocella or Yaz 1 tab po qday, disp QS x3 months refill x3 (start in 3wk of PP and NOT breast feeding, 6wks if breast feeding)
 - Plan B: 1 tab po (within 5 days of intercourse), then 1 tab 12 hrs later or two tabs po at one time. Disp: 2 tabs, refill x6
- Bowel
 - Simethicone 80mg po TID prn constipation, disp qs x1month refill x3
 - Milk of Magensia 30 ml po daily prn constipation disp qs x1month refill x3
 - Mylanta 15ml po TID prn heart burn / constipation disp qs x1month refill x3
- Nausea
 - Zofran 8mg q8hrs prn nausea Disp #20, 2 refills (there is also an ODT formula that dissolves under the tongue in 4mg)
 - Phenergan 12.5mg or 25mg po Q8hrs prn nausea, Disp #20, 2 refills
 - Compazine 5-10mg po q6-8hrs prn nausea Disp#20 2 refills
 - Reglan 10mg po q6hrs prn Disp#20, refill x2
- Antibiotics / Anti-fungals
 - Flagyl 500po bid x7d (for BV), 2g x1 dose now (trichamonas)
 - Macrobid 100mg po bid x7d (for UTI)
 - Keflex 500po BID x 7-14d (for UTI)
 - Ampicillin 500mg po qid x7d (for UTI)
 - Diflucan 150mg po x1 dose (yeast infection)
 - Ceftriaxone 250mg IM now x1 (Gonorrhea)
 - Azithromycin 1g po x1 dose now (Chlamydia)
- Sleep
 - Hydroxyzine (adarax) 50 or 100mg po QHS, Disp: #5 no refills
 - Ambien 10mg po QHS disp #10 refill x1
- Other
 - Fioricet 1-2tabs po q4hrs prn Head ache, disp #10, no refills, Needs DEA #
 - Flexeril 10mg po bid prn muscle spasm disp # 10 NO refills

Gynecology

Recommended Reading:

TeLinde's Operative Gynecology.

Chapters on pre/peri/post-op management are helpful!

Comprehensive Gynecology:

Chapter 3 – Reproductive Anatomy

Chapter 7 – History, Physical Examination, and Preventive Health Care

Chapter 8 – Differential Diagnosis of Major Gynecologic Problems by Age Groups

Chapter 11 – Diagnostic Procedures

Chapter 17 – Ectopic Pregnancy

Chapter 24 – Preoperative Counseling and Management

Chapter 25 – Postoperative Counseling and Management

Chapter 37 – Abnormal Uterine Bleeding

Weekly Schedule:

Monday	Tuesday	Wednesday	Thursday	Friday
1: Pre-op Clinic 4: CC in am Pre-op Conference	OR at DRH	Conference 1: Pre-op Clinic 4: VA clinic	1: AC or CC in AM 3: DWHA OR 4: VA OR	ASC

Major responsibilities:

Intern – pre-op clinic, floor patients

3rd year – Beta book (see “Beta Book Protocol” section) and consult pager

4th year – Run the service, VA stuff, consult pager

Benign Gyn Pager: (970-4962)

Intern signs on every morning at 6:30am, the night team will sign on at 6:15pm

Consult Pager: IT SUCKS (970-7066)

3rd/4th year signs on every morning at 6:30am, the night team will sign on at 6:15pm

You can NOT sign it out to the OR!

HINT: It's a good idea to look up the patient before you call the ED back

Preoperative Conference

Monday afternoon the intern will present the patients that will be operated on at DRH on Tuesday. At least one upper level resident should be present and the operating attending.

VA Information for the PGY-4

Pre/Post Op Clinic (Phone number #5073)

Wednesday afternoon in Women's Health Center. You will see pre and postop patients.

For the preop patients you need to complete (send 1, 2 & 3 to Livengood and Chireau):

1. GYN H&P
2. Surgery Attending/Resident Pre-op Note
3. Pre Admission Screen
4. Consent (tools -> consent -> search gyn and edit prn), you and pt sign electronically

OR

Thursdays at 8:00am (OR schedule is in Livengood's green book in his cubicle at WHC). Arrive early to make sure all paperwork is correct. To get to the OR take the green elevators to the 5th floor, turn right, then right again. The door is C5046 but is otherwise unmarked. After you go in there is a door on the right with a key pad. The code is 6940*. The locker rooms are inside. The OR is down the stairs. You do not get a locker but there is a refrigerator.

Dictations: Call 6638, location code is 558#, enter your dictation code, choose 3 for op note, enter pt's SSN...dictate (pause, rewind, etc. are same as Duke)... Press 5 at the end to get your job number. You will need to call to get your dictation code activated – you can call transcription or try extension 7393.

Op Note: On the computer – type in “brief” and it will come up. Fill it out.

Outpatients: Enter orders in the computer. All regular home meds (including vicodin!) are under outpatient meds but scripts must be written for controlled substances (i.e. oxycodone) so get a VA script pad from Livengood when you start. You need to a VA DEA number from Curtis/Pharmacy (hint: have Chireau call Melissa Durkey for you and go see her); they will **not** accept your normal DEA number. You must write “D/C pt home when meets 4B criteria,” other orders will not be accepted, and they will not accept a verbal D/C order.

Inpatients: Entered in the computer. For some reason they are not admitted until they actually arrive on the floor, so click “Write delayed orders” and choose to delay the orders until the patient arrives on the floor. It will take you through the admission orders. Admit the pt to GSU since GYN apparently does not exist. Then under “Instructions” (right under attending), type “Admit to GYN.” Also type a text order and a note on the chart stating, “Pt is on GYN service—please call ___ or 970-7066 for questions/concerns.” Any narcotics for discharge will require a script; non-narcotics are ordered in the computer. Type in your discharge instructions as a text order. There is a “return to clinic” tab on the left-hand side of the screen. Do all this on the day of surgery (they do not do scheduling on the weekend!).

Postop Care/Rounding: As the GYN Chief, you round on VA patients during the week, enter notes under “GYN Inpatient.” Sign out to the night team. On the weekend, the on-call chief covers (unless your class wants to change it) and he/she should update Chireau/Livengood.

D/C Summaries: You do not need to dictate d/c summaries! There is a discharge summary tab at the bottom of the screen. Fill in the blanks, copy and paste the H&P and the op note, then type at the bottom: “No postoperative complications. Discharged home on POD 2; RTC in 6 weeks.” Do this before the weekend so everything is set for the weekend on-call chief.

Remote Access: Contact Leon Clark (x7190), fill out the required paperwork with him, call Latoya (x6973) or Ernest Simel (x6939) once all paperwork is done to get access.

Beta Book Protocol

GENERAL POLICIES

- Every patient entered in the BB MUST be clinically evaluated by an OB/GYN resident
- A consult note MUST be dictated on every patient entered into the BB
- Document all patient interactions (calls/letters) in BB and in ebrowser by entering communication notes through Lotus Notes application "Beta Book on Banquo".

Who is in charge of it?

The PGY-3 on GYN and PGY-3 on DRH are responsible for the beta book. The BB resident should review the BB every one to two days during the week and at least once on the weekend. If the third year is away/on vacation, the Chief of the service will cover.

Who goes in it?

Patients to be placed in the BB are those who require observation and follow-up due to:

- Early pregnancy of unknown location
- Ectopic pregnancy
- GTD

****Patients with a confirmed IUPs do NOT go in the BB****

How do I get access to it?

All 2nd, 3rd and 4th year residents should have access to the BB on Lotus Notes. If not, email the Administrative Chiefs to get access.

How do I enter someone in it?

To enter a patient via Lotus Notes:

- Go to BB on Lotus Notes under workspace -> Create -> Beta Form
 - o Enter name + MRN under heading and select category (DRH/Duke, depending on where you do the consult), and fill in the columns (*hint: get two phone numbers from the patient when you see her and not from ebrowser record).
 - o When finished go under File -> Save to save it

What do I do for follow-up?

- CLINIC: email GYN Nurses (prmo-gyn) for follow-up appointments and state if patient needs repeat β hcg /MD visit/etc as well as ICD-9 code
 - o ICD-9: 633.9 = ectopic, 640.03 = threatened abortion, 630 = molar pregnancy
- LABS: schedule in Clinic 1J (*hint: if patient is possible MTX candidate and does not have recent CMP, please order a CMP with STAT β hcg for clinic labs). If over the weekend, give the patient a written prescription for "STAT β hcg lab draw, please page GYN resident on call with results" and tell them to bring this the lab/ED over the weekend. Explain that they do not need an MD evaluation at that time.

EVALUATION AND WORK-UP

****All patients need serum β hcg, pelvic US and Rh type at time of initial consult****

Discriminatory Zone Markers

- Serum β hcg Values
 - o 2,000 to 2,500 - should see IUP
 - o 5000 - should see cardiac activity
- Mean gestational sac diameter
 - o At 8mm - should see yolk sac
 - o At 18mm - should see embryo
- CRL \geq 5mm should have cardiac activity

Early pregnancy of unknown location

- β hcg \leq 2000-2500 (below discriminatory zone)
 - o Repeat β hcg q48hrs
 - o Expect rise \geq 50% / 48hrs
 - If doubles -> viability scan with MD visit to if no IUP is visualized
 - If $<50\%$ / 48hrs -> may indicate ectopic or nonviable IUP, discuss D&C/MVA with frozen path and possible MTX if no villi seen
- β hcg \geq 2000-2500 and no IUP
 - o If a complex adnexal mass is seen -> treat as ectopic!
 - o If no complex adnexal mass -> treat based on clinical evaluation, consider repeat β hcg in 48hrs or if undesired pregnancy consider MVA and if no villi give MTX
 - o If falling β hcg -> likely failed pregnancy -> follow serial betas until negative
- If pathology specimen obtained
 - o Follow-up result, if POCs confirmed and β hcg is falling, need to follow until β hcg near negative pending Attending (must follow to negative if concern for GTD!)

Certified Letters

- Send for all patients who fail to follow-up
- Email Lacey Lloyd and Vickie Bailey to request letters
- If patient has failed to follow-up and/or is unable to be contacted by phone
 - o Email to request Ectopic Letter #1 to be sent to patient
 - o Wait two weeks and send letter#2 if patient has not come in or letter was undelivered
 - o If no further response or letters undelivered then d/c from BB (recategorize under Certified Letters) and enter note in medical record (can do so via communications in ConInbox) stating we are release from care, etc.

MANAGEMENT OF ECTOPIC PREGNANCY

Methotrexate Therapy

- ABSOLUTE contraindications
 - Hemodynamically unstable
 - Signs of ongoing or impending rupture
 - Peptic ulcer disease, liver disease (LFT > 50), renal disease (Cr >1.3), alcoholism, active pulmonary disease
 - Allergy to MTX
 - Immunodeficiency
 - Coexistent viable pregnancy / breastfeeding
 - **Unwilling to follow-up or does not have access to nearby hospital**
- Relative contraindications
 - β hcg >5000
 - Fetal cardiac activity
 - Ectopic size > 3.5cm
 - Peritoneal fluid
- Single Dose Protocol
 - Methotrexate $50\text{mg}/\text{m}^2 \times 1$ dose IM (calculate BSA online)
 - Check levels Day 1, (4) and 7 (NOTE: commonly increase from Day 1 -> 4)
 - Levels Day 4 -> Day 7
 - If >15% decrease -> weekly β hcg until negative
 - If <15% decrease -> consider second dose and repeat protocol
 - Levels Day 1 -> Day 7
 - If >25% decrease -> weekly β hcg until negative (level < 5)
 - If <25% decrease -> consider second dose and repeat protocol
 - NOTE: most attendings will want Day 4 β hcg so always clarify
 - Precautions while on MTX:
 - Avoid sun exposure
 - Avoid NSAIDs!!!
 - Avoid foods and vitamins containing folic acid
 - No intercourse until β hcg undetectable
 - Side effects (estimated 2-3% of patients have mild side effects)
 - Impaired liver function
 - Ulcerative stomatitis
 - Gastroenteritis (hemorrhagic enteritis)
 - Bone marrow suppression (risk for bleeding/infections)
 - Also nephrotoxicity, interstitial pneumonitis, alopecia dermatitis and anaphylactic reaction
- Follow-up
 - Follow β hcg as above
 - May consider HSG to assess tubal patency with HSG

Surgical Therapy

- Absolute indications
 - Hemodynamic instability
 - Suspected impending or ongoing rupture
 - Failed medical therapy
 - Unwilling to comply with medical therapy follow-up
 - Lack access to nearby hospital in case of rupture
- Approach
 - Laparoscopy is preferred
 - Indications for laparotomy
 - Extensive intraperitoneal bleeding with hemodynamic instability
 - Severe pelvic adhesive disease
 - Intra-abdominal or extra-tubal gestations
 - Salpingostomy vs salpingectomy
 - Unclear benefit to either approach
 - Best to make decision intraoperatively (i.e. consent patient for both!)
 - Salpingectomy if ruptured, obvious tubal damage or if this is second ectopic in that tube
 - Consider salpingostomy if other tube missing/damaged, etc.
- Follow-up
 - Routine post-operative care – do not forget to discuss contraception!
 - If ruptured or if salpingostomy:
 - Serial serum β hcg until negative (level < 5)
 - If not ruptured:
 - Follow-up pathology to confirm ectopic/POCs
 - If salpingectomy -> follow serum β hcg to ~negative (low double digits)
 - If beta plateaus consider MTX
 - If salpingostomy -> follow serum β hcg to negative (level < 5)

GESTATIONAL TROPHOBLASTIC DISEASE

Possible Molar Pregnancy/GTD

- Suspect if β hcg higher than expected for EGA (for complete 40% have β hcg >100,000)
- Ultrasound findings (depend on type)
 - o Complete mole (46, XX or 46, XY)
 - Absence of embryo, no amniotic fluid
 - Theca lutein cysts present
 - “Snowstorm pattern” (central heterogenous mass with numerous discrete anechoic spaces)
 - o Partial mole (69, XXX or 69, XXY or 69, XYY)
 - Fetus present, often FGR with low/normal amniotic fluid
 - “Swiss cheese pattern” (focal anechoic spaces and/or increased echogenicity of chorionic villi)
 - Theca lutein cysts usually absent
 - o Invasive mole: ≥ 1 uterine mass with anechoic areas with high vascular flow and possible myometrial invasion
 - o Choriocarcinoma and PSTT: Hypervascular uterine mass and enlarged uterus

Management

- Suction D&C
- Considerations during surgery
 - o High risk of hemorrhage, usually there is heavy bleeding encountered upon dilation of cervix until specimen removed
 - o IV Pitocin during procedure
 - o Have T&C and good IV access available
- Follow-up pathology results
- Rhogam to all Rh negative patients

Follow-up After Treatment

- Weekly until negative
- Once negative, obtain monthly BHCG levels for at least 6 months after evacuation
- Suspect persistent (malignant) GTD if:
 - o BHCG plateaus (declines < 10% in 4 values obtained over three weeks)
 - o BHCG rises (> 10% rise in 3 values obtained over 2 consecutive weeks)
 - o Persistence of detectable BHCG > 6 months after evacuation

Gynecologic Potpourri

Uterine Bleeding:

Could be anatomic (fibroids, retained POC, incomplete AB) or anovulatory.

DUB is by definition bleeding with no anatomic cause.

Always check CBC and VS!

Does the patient need endometrial sampling and/or pelvic US?

Transfuse PRN symptoms and hemodynamic stability. Is she acutely bleeding or is it a chronic condition? If it is acute, does she need a D&C?

Treatment:

- IV conjugated estrogens (Premarin 25mg IV q 6 hr x 24hr), reassess, OR treat with IV progesterone (Aygestin) 50-100mg
- OCP taper:
 - One tab TID x 3 days -> BID x 2 days -> daily continuous
 - Must use a monophasic OCP like Lo-Ovral
- Ensure patient is not a smoker or doesn't have poorly controlled HTN, as it is a contraindication for estrogen treatment!

Tubo-Ovarian Abscess:

Presumed organism gains access to ovarian stroma through ovulation site, and bowel can become involved

Often becomes loculated with persistent inflammation and destruction of organs

Clinical diagnosis of TOA:

- h/o PID
- Palpable adnexal mass
- Order U/S or CT to evaluate/observe mass

Microbiology of PID: *Neisseria gonorrhea*, *Chlamydia trachomatis*, *Haemophilus influenzae*, polymicrobial infections (aerobes/anaerobes), *actinomyces* (rare), *Mycoplasma hominis* (rare), *Mycoplasma tuberculosis* (rare)

Treatment:

- Outpatient:
 - Levofloxacin 500 mg po q day X 14 days AND
 - Metronidazole 500 mg po BID X 14 days
- Inpatient:
 - Cefoxitin 2 gm IV q 6 and Doxycycline 100 mg IV q 12 hr OR
 - Moxifloxacin 400 mg IV q day and Metronidazole 500 mg IV q 8 hr
- Drainage (CT guided, L-scope)

Sequelae:

- Infertility (6-27%)
- Ectopic pregnancy (4-8x)
- Pelvic pain (20%)
- Recurrent infection (25%)

Continuity Clinic

Access the Continuity Clinic Schedule here:

<https://docs.google.com/spreadsheet/ccc?key=0AiQfHJUuSL3cdG1tYXFGNGI4QIVaNFJfVJTand4Y1E>

Paperwork

- Notes: Write your notes in Con inbox on Lotus notes within 24 hours the visit for billing.
 - o Note formats:
 - Annual exam → for annual exams
 - New patient → IE never been seen by GYN in clinic OR in the ED
 - Return Visit / Follow up → pts who are coming back to re-address an issue
 - Post op → for f/u after surgery
 - Communications Note → if you talk over phone/email
 - o Finish your notes within **24 HOURS!**
- Routing sheet (the sheet with 3 pages – pink, white, yellow – that pt brings after checking in)
 - o If you want to order a lab / imaging
 - Mark it on the routing sheet or write it in
 - You need to find the ICD-9 dx code and write at the top of the sheet
 - o Follow Up / imaging
 - For all new patients – write “Make Dr. your name here primary OB/GYN”
 - If you want to see pt again – write “With Dr. your name here”
 - This is also from consults – ie if they need to see another provider
- Billing:
 - o Program is called MD everywhere (white oval with letter MD in purple OR click on desktop and type M.D.E. and enter)
 - o Select Provider and choose the attending with you in clinic
 - o Find the patient that you saw and double click over her name
 - o If the dx is there click add, if the dx you want is not there, click on diagnosis
 - Searching by keyword is easiest – once you find the ICD9 you want – double click, then click save to encounter
 - o If you did a wet prep or other procedure use the “25 modifier” and add the procedure below
 - Click on procedure, again search by keyword as above
 - o Once you are done, click save → it will prompt you that not everything has been filled out – click NO
- Follow up folders
 - o Every resident has a folder with their last name on it in a box above the “to shred”
 - o When you see a patient and order a lab
 - Fill out the official letter as best you can and add into the folder
 - Follow-up the following week to add results and then place in file to they are sent to the patient OR / and release in Portal. If they are not eligible for release, type an update in eBrowser for each lab reviewed.
 - o When you order a study, add it to the “study” sheet on the clip board

Helpful Hints: Just a few basics on the common stuff...

Paps (use this website when in doubt: <http://www.asccp.org/>)

- Age Less Than 21 (20 yrs old and younger)
 - Pap smears are no longer recommended in this group (new guidelines),
 - Pap and IUD management:
 - Should not have had a pap, But if one was done and the result was:
Normal or ASCUS, neg HPV, ASCUS, Pos HPV or **LSIL** → May Place IUD
HSIL → Needs to have an initial colposcopy prior to placing IUD. If they have had the initial colposcopy already, then they may have the IUD.
- Ages 21 and Older
 - Pap smears are done every 2 years if normal (check the reflex HPV is ASCUS box)
 - After age 30 → all paps should be reflex HPV
 - If pap was done and result was:
 - **Pap management:** Above 22-30 →
 h/o abnl → yearly, and refer to cx clinic
 no abnl → every 2years
 - **pap management:** Older than 30
 h/o abnl – yearly until 3 nl, then q3yrs
 no abnl – q3yrs
 - IUDs and Paps
 - **Normal or ASCUS, neg HPV** → May place IUD
ASCUS, Pos HPV → Needs colposcopy prior to IUD placement, then may have IUD placed. If they have already had a colposcopy (in pregnancy or otherwise, ie they are in surveillance mode), they may have the IUD placed.
LSIL → Needs colposcopy prior to IUD placement, then may have IUD placed. If they have already had a colposcopy (in pregnancy or otherwise, ie they are in surveillance mode), they may have the IUD placed.
HSIL → Needs treatment prior to IUD placement, then may have IUD placed
 - Still need to have bimanual EVERY year
- **Birth control**
 - ACOG has a great practice bulletin about contraception with co-exisiting medical conditions, can also ALWAYS ask!
 - OCPs
 - Combined (great for endometriosis)
 - Yaz/Ocela – nice middle of the road 24d pill
 - Great for women with heavy periods, endo, menstrual migraines
 - Sprintec/ortho-tri-cyclen/monessa – 21d pills
 - Progesterone only
 - Micronor – good for pts who are breast feeding or can't use estrogen

- Nuva Ring
 - Combined Estrogen and progesterone – in vagina for 3wks, then remove and have a period (can remove for up to 3 hours for intercourse)
- The Patch
 - Contains both estrogen and progesterone, change weekly
- Depoprovera
 - Lasts three months, will often cause amenorrhea
 - Sfx: increases appetite – so many people eat more and thus gain weight – NOTE does NOT actually cause weight gain
- IUD
 - Mirena → released progesterone locally, 1/3 women no bleeding, 1/3 light spotting, 1/3 no change in menses, lasts five years
 - Paragaurd → copper IUD, good 10 years, makes menses heavier and crampier
- Implanon/Nexplanon
 - Progesterone implant, lasts 3 years – can cause irregular bleeding
- **Dysfunctional uterine bleeding**
 - Up to date has a GREAT simple article about causes, w/u and tx.
 - Work up generally includes STD screen, pap smear, endometrial bx, and TVUS
- **Pelvic pain**
 - This is a very hard one, key is to try and find the cause
 - Endometriosis is a frequent culprit → OCP cyclic, then try OCP continuous, then Lupron, a hard dx to treat
 - UNC has a chronic pelvic pain clinic that is very good
 - If pt has insurance – there is pelvic floor physical therapy that also can be helpful
- **Annual exams**
 - See pap guidelines above
 - Breast exam yearly
 - Mammograms
 - Start at 40 or 35 if strong family history
 - +Fhx → every year from 40 on
 - -Fhx → every other year 40-50, then yearly 50+
 - Colonoscopy: starts at 50, q10years, unless +pathology → then as indicated
 - Ask about diet and exercise and depression

Gynecologic Oncology

Comprehensive Gynecology

Katz, Lentz, Lobo, Gershenson; Fifth Edition; Mosby 2007

TeLinde's Operative Gynecology

Rock, Tenth Edition, Lippincott Williams and Wilkins, 2008

Chapter 10 – Water, Electrolytes, and Acid – Base Metabolism

Comprehensive Gynecology

Chapter 28 – Intraepithelial Neoplasia of the Lower Genital Tract (Cervix, Vulva)

Chapter 29 – Malignant Diseases of the Cervix

Chapter 32 – Neoplastic Diseases of the Uterus

Chapter 3 – Neoplastic Diseases of the Ovary

Chapter 35 – Gestational Trophoblastic Disease

Attendings: Berchuck, Havrilesky, Lee, Secord, Valea

Physician Assistant: Kim Nolte PA, pager 970-0254

Onc Nurses Line: 684-0123

Onc Nurses:

Havrilesky and Valea: Kim Camp, phone 684-5911, pager 970-9439

Secord: Teresa Douglas, phone 684-3788, pager 970-8054

Berchuck and Lee: Charlotte Gilbert, phone 684-3937, pager 970-9590

Ancillary:

Appointments (Duke): email PRMO ONCOAG or call 668-6688 (Clinic 1A)

Duke Raleigh: 954-3096 (Deb Gooch p 970-9538, Teri Tassler 970-5595)

Patricia Houser: email return patient notes to her if not dictated

Schedule:

Monday	Tuesday	Wednesday	Thursday	Friday
Tumor Board 4: CC am 3: CC pm	Berchuck OR 2: CC pm	Conference at 7:30am LEE/HAV OR 1:AC/CC PM	Valea OR 2: Cx clinic pm	Secord OR

*Rounds daily at 6:30am (or per Fellows) and in afternoon when fellows finish in OR/clinic.

**Pick up New Patient packets from Clinic 1A. Prepare Surgical Workup packets before clinic

Weekly Conferences:

Tumor Board – Monday 7:30am. The intern should bring 10-12 copies of the team lists to the meeting. 2nd/3rd/4th year residents present patients.

PRM/SW – Intern will Meet daily around 8 or 8:30am (or when back from conference) as well as at 3pm daily

How to supplement Electrolytes:

KCl 10 mEq IV = 0.1 increase in K⁺

KCl given IV is painful. If the patient is tolerating po, try KCl oral solution or tablets. If patient has central line KCl can be run faster.

If patient is having nausea do not give PO KCl as it will increase nausea and confuse the picture. If need to give PO use Kaochlor is better tolerated than Kdur.

If K significantly low (especially post op) better to give IV.

Magnesium Sulfate 2 gm IV or Magnesium Oxide 400 mg po. If needing to supplement daily can give more than 2gm IV

Calcium Carbonate 1250 mg po or Calcium Gluconate 1 gm IV. if supplementing daily give more than 1gm IV

Neutra-Phos 1 packet po (has phosphorus, potassium, and sodium)

If K > 4.5, then Sodium Phosphate 30 mMoles IV

If K < 4.5, then Potassium Phosphate 20 mMoles IV

Check labs early and try to make sure supplement orders are in before noon.

When to transfuse: Is very attending and pt dependent, but generally

HCT = 26 or less gets 2 units prbcs

Tandem + Ovoid need Hct greater than 29.

High INR – fix with FFP fast or Vit K slow

Called to see patient

Fever (over 38.3) needs an evaluation and full written note in chart

- See the patient and perform an exam. Try to find a clinical source for the fever.
- Lab evaluation includes: CBC with manual differential, chest XR, UA and urine culture, blood cultures (2 sets). Don't repeat blood cultures if they were done within 24 hrs.
- You do not have to start antibiotics until you identify a source. However, if the patient looks sick, or you think you can identify a source – go ahead and start the antibiotics. Use the Duke CustomID webpage if you have questions about which antibiotic to use for treatment. Notify upper level that you are starting antibx !
- Abx choices
 - Wound infections: Keflex
 - Lung infections: Azithromycin and ceftriaxone
 - Urinary tract infections: Ciprofloxacin
 - Anaerobic coverage: Metronidazole
 - Polymicrobial infections, Gram pos and Gram neg coverage: Zosyn (piperacillin tazobactam)
 - Neutropenic patients with fever: Ceftazidime -- Check an ANC with CBC and diff. If spiking through Ceftazidime, exchanging Ceftazidime with Zosyn is a good option
- If there is an obvious source – deal with it; if questions – page upper level

Chest pain: has multiple causes including reflux, MI, PE, pneumonia.

- See the patient and perform an exam.
- Order cardiac enzymes (CK, CK-MB, Troponin) 3 sets 8 hrs apart.
- Order EKG with each set of cardiac enzymes
- If there is concern for PE, chest CT. Call radiology so that they know it is happening.
- Radiology typically requires a CXR before CT scan and for younger women will only do a VQ scan to limit radiation exposure to breasts.

Pain control - If there is not IV breakthrough write for it, if this is even with IV break through – go see patient and assess cause/source

- Many Onc patients have been on a lot of pain meds and have a high tolerance – don't be stingy

Nausea / vomiting –

- Zofran, compazine, phenergan all work well
- If recently post-op- check incision

Update the list

IMPORTANT as this is how we communicate with day team/night float/call team

For in pts

- Update “24hr events / to do” column
- Update dx / rads etc

For new pts – fill in as much as possible

Coming from clinic → Add them to the list and fill in as much as possible

From OR → resident in the case will add pt

Discharges

Planning

- Identify patient likely to be d/c'd the next day. Notify PRM.
- Complete d/c paperwork (in ebrowser) and scripts the day prior to discharge.

Ideally give oxycodone rather than Percocet for pain control so that it is easier to titrate the medication. Give all patients on narcotics a script for colace.

Order any labs, treatments or consult the night before or ASAP early morning on the day of discharge to facilitate discharge by 11am.

-For robotic cases and Secord/Lee laparoscopic cases: check Hct at 11pm and d/c foley 6-8 hours post-op. (If pt had radical hyst, leave foley in.)

Make all return appointments the night before or early morning on day of discharge.

Guidelines for F/U appointments

- Staples should be removed 10-14 days after surgery.
- If path is benign, pt follows up in 4-6 weeks (6 weeks for Secord patients, 4 weeks for Lee patients)
- If patient has cancer, pt follows up in 2-3 weeks with the operating surgeon.
- Email for appointments: PRMO ONCOAG (responses typically within 15-30 min) or call appt line 668-6688 to make appointments. If the attending's schedule is full, email Kim Foreman, and Stacey Eakes with the name, hx #, and date the patient needs to be seen.

- For chemo follow-up appts, contact the chemo nurses. They will arrange the f/u.
- If patient needs teaching for anything (i.e. lovenox, drain care, diabetes), place a nursing order in CPOE before the day of discharge.

All pts that are on “in pt” status need dictated d/c summaries

- You are only responsible for dictating on those patients that you are following.
However, as the intern you know all of the patients very well and if there is time – it is never bad to dictate on pt’s other people are following.

Home health f/u – all arranged by IDA, you just need to give her the RX – she will tell you what to write

- Also, will need Rx and d/c instructions from browser

Post-Op Management:

Diabetes: If the patient is NPO, perform accuchecks Q 6 and cover with sliding scale. Once the patient is eating a regular diet, restart home diabetic meds. Generally don’t restart metformin until the patient goes home. Perform accuchecks ACHS when patient is eating.

Hypertension: Hold anti-hypertensives on the day of surgery. Start home meds on POD 1. If a patient has high creatinine, caution with ACE inhibitors. Know who is on diuretics.

Post-op ileus/Small bowel obstruction: Get an Abdominal XR/KUB to eval dilation of bowel and air/fluid levels. Place and NGT and make the patient NPO. Be sure the patient is on GI prophylaxis: Pepcid 20mg IV BID. Once the patient is starting to pass flatus, start clamp trials of NGT. Advance diet to sips of clears around the tube. If patient tolerates clears, then consider pulling the NGT.

Low UOP: Adequate UOP is 30 cc/hr although it may be lower in elderly women.

- Immediately post-op, the most frequent reason is hypovolemia or BLEEDING.
- Try a 500 cc normal saline bolus, consider checking a hematocrit. FENa – order a Chem-7, Urine creatinine, Urine sodium. If the FENa < 1%, it is pre-renal (i.e. give fluids). If the FENa > 3%, it is renal and start considering other differentials. If the patient was just given Lasix, the FENa won’t be accurate.

Radiology:

When ordering studies, always include reason

CXR – Basic film, shows pneumonia, atelectasis, pleural effusions, nodules. Before you order a V/Q scan, you need a clean CXR.

KUB – Shows air/fluid levels, dilated loops of bowel, obstruction

Spiral CT – used to diagnose PE. The patient needs to have an antecubital IV. If you can’t get a CT, V/Q scan is the next option. Note: all CT studies are ‘spiral’, so just write Chest CT.

Barium Enema – Shows obstruction from the large bowel through the anus.

Small Bowel Follow Through – Shows obstruction between the small bowel and large bowel. If the patient previously had a barium enema or some kind of contrast, you need to make sure they are clean (i.e. soap suds enema until clear).

Interventional Radiology – Place PCNs and other drains as well as port-a-caths. Prior to having anything done by interventional, the patient needs recent coags and NPO after midnight. You need to contact IR (970-7930) regarding the procedure you want do and what

you are looking for. This helps make sure the patient is on the schedule and that IR does not need anything else that could delay the procedure.

Patients with an allergy to contrast need a steroid prep before their CT scan. The 24 hour prep is Prednisone 20 mg po Q 6 hrs X 5 doses.

How to place an NGT:

Supplies: NGT, suction canister, water with straw, towels, KY Jelly, tape. Some patients may need a little Ativan to help them relax.

1. Tell the patient what you are about to do. It is an uncomfortable procedure and she may gag.
2. Have the patient sit straight up on the edge of the bed with their feet on the floor (easier to reach the nose and control the patients head) . Adjust the bed as necessary. Tuck chin to chest (patient reflex will be to jerk head backwards when tube reaches nose). Helps to have someone assisting who can hold an emesis basin (just in case) and the cup of water (nurses and med students are great for this task)
3. Lube the NGT and place in the nostril (Did you know that in the majority of the population the left nostril is bigger? Can ask patients to occlude each side one at a time to see which nostril seems more open and use the one they say)
4. As you advance the tube, have the patient sip water continuously. As she swallows, the tube goes down easier. Continue to advance the tube until it is the proper length.
5. Push air down the clear tube with a 60 cc syringe. If you hear air gurgle in the stomach with your stethoscope, you are in!
6. Tape the tube to the patient's nose securely. Pin the NGT to her gown.
7. The tube is a sump system and needs to be on continuous low wall suction with the blue sump connector attached. (It won't work properly if it is on intermittent suction.
8. May get a KUB to ensure proper placement.
9. Orders: Cetacaine spray to bedside (or Cepacol lozenges), Pepcid 20mg IV BID, NPO, Replace every 1mL NGT output with ½ mL D5 NS + 40 meq KCl.

OR TIPS

READ about the patients BEFORE going to the OR

Please arrive on time, to help roll patient back to OR.

Post op orders – there is order set in ebrowser for this

- D5NS or LR for standard fluids; (D5 1/2NS +40meq KCl for NGT replacement fluids)
- PO pain meds for laparoscopic procedures (oxycodone with pain scale)
- PCA morphine for open procedures unless renal/nausea issues
- Order labs appropriately based on surgery and patient
- Valea pts may eat POD 0 unless otherwise directed; For laparoscopic patients discuss use of Celebrex (400mg day of surgery, followed by 200mg BID x3 days) and for laparotomy patients discuss use of Entereg (12mg PO BID preop for ileus).
- GI prophylaxis- IV pepcid for NGT patients only (infusion is painful); PO zantac for pts taking in Pos
- DVT prophylaxis – SCDs for all patients (unless active DVT); lovenox for cancer patients if ok'd by attending/fellow; make sure to write on daily progress note that pt has SCDs on for prophylaxis or getting lovenox (if appropriate for that patient)

Important People:

Ida Fleming, MSN: Ida is the PRM for gyn oncology only. She is a great resource for coordinating discharge needs, skilled nursing facility placement, hospice, family needs, etc. Pager **970-0384**. Ida rounds with the floor JAR in the morning every day to touch base about pt needs.

Kim Nolte, PA: Kim is the Gyn Oncology PA who works for all oncologists. She functions as an upper level resident, assisting in OR and clinic when needed but also helps out on the floor. She knows the patients and attendings very well. Kim will carry pt call pager during the day and calls patients about path results. She also will prepare the OR cases for the following day (but good for the intern to know as well as she is not always able to stay for afternoon rounds). Kim is also very skilled in wound care, wound vacs, colostomies, fistulae, etc. She is always very willing to help out. It is a good idea to develop frequent communication with her as she is in communication with the attending and may have information that could be helpful for afternoon rounds.

Renea Valea MSW: Besides being Dr. Valea's wife, Renea is also responsible for all social work for gyn oncology inpatients. She also checks in with residents about their emotional needs when caring for these patients. She also rounds with the intern, Ida and the charge nurse every morning after rounds.

Contact numbers:

Kim Nolte 970-0254

Chemo nurses main # 684-0123

Charlotte Gilbert 684-3937

Teresa Douglas 684-3788

Kim Camp 684-5911

Chemo nurse fax 681-7689

6300 RX: 681-6344

Aultney Cozart/Kim Forman 684-6565

Stacey Eakes 684-4808

Onc Clinic 660-1274

Raleigh appts 954-3096

Ida Fleming 681-2182, 970-0384

Renea Valea 970-9685

Obstetrics

Obstetrics: Normal and Problem Pregnancy (Gabbe, Niebyl, Simpson Fifth Edition 2007)

Or

Williams Obstetrics (Cunningham, Leveno, Bloom, Hauth, Gilstrap, Wenstrom, Twenty-third Edition, 2009)

Gabbe

Chapter 1 – Placental Anatomy and Physiology

Chapter 2 – Fetal Physiology

Chapter 3 – Maternal Physiology

Chapter 5 – Preconception and Prenatal Care: Part of the Continuum

Chapter 9 – Ultrasound for Pregnancy Dating, Growth and Diagnosis of Fetal Malformations

Chapter 11 – Antepartum Fetal Evaluation

Chapter 12 – Normal Labor and Delivery

Chapter 15 – Intrapartum Fetal Evaluation

Chapter 17 – Malpresentation

Chapter 18 – Antepartum and Postpartum Hemorrhage

Chapter 21 – Postpartum Care

Williams

Chapter 1 – Obstetrics in Broad Perspective (Important Chapter for All residents)

Chapter 2 – Maternal Anatomy

Chapter 3 – Implantation, Embryogenesis, and Placental Development

Chapter 5 – Maternal Physiology

Chapter 6 – Parturition

Chapter 8 – Prenatal Care

Chapter 15 – Antepartum Assessment

Chapter 17 – Normal Labor and Delivery

Chapter 18 – Intrapartum Assessment

Chapter 30 – The Puerperium

IMPORTANT OB phone numbers

*Duke Mole phone: 681-1065

*Ob Anesthesia resident: 970-9987

*Ob Anesthesia attending: 970-9988

*Pedi-Cards ICU (PCICU): 613-5400

*Pedi Cards Fellow: 970-0313

*Neonatal ICU (NICU): 681-5551

*NICU Fellow: 1-877-781-5126

*OB OR: 681-5670

*L+D triage: 681-6070

*L+D triage back line: 681-5021

*Duke On call social worker: 970-7419

*OB clinic work room: 668-3173

*Resident lounge: 613-6585

*PGY4 call room: 681-1688

*5th floor Pharmacy: 681-9916

*MFM call room: 668-6713

*L+D charge nurse pager: 970-5577

*UNC mole phone: 843-4243

Continuity Clinic Schedule for the OB Team

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	PGY-3 HROB	PGY-2/3*	Education	PGY-4 HROB	PGY-1/1*
PM	PGY-3 HROB	PGY-2/3*	PGY-4	PGY-4 HROB	PGY-1/1*

* = either the PGY-2 OR the PGY-3 will spend the entire day in clinic on alternating weeks. The two PGY-1s will spend full days in clinic on alternating weeks.

** After rounds, assignments are made and interns should report to triage Mon-Friday. OB interns will be expected to work in triage during the intern year to maximize triage experiences. Interns will split their time between triage and laboring patients.

***The Ob team is responsible for sending one person to HROB on Monday, Tuesday and Thursday

Make up clinics will occur on Tuesdays after holidays and are covered by an OB or DRH resident.

Rounds

- Start at 7:10am – sharp!
- AP: Split the list the night before, and then recheck in the AM.
- PP: If there are very sick/complicated PP ladies – the chief will often see them
 - Round on post-partum patients on 5700 and 5800 including: all staff patients (shaded purple), all MFM patients (shaded green), and all DWHA C-sections (shaded yellow). Residents do NOT round on DWHA pp vaginal delivery pts (also shaded yellow with green “ppVa-” in the Status column). Post-partum patients on 7700 will be rounded on by the antepartum team.
- The chief presents the scheduled cases for the day

Health Dept Numbers – Put the appropriate # on pt’s d/c paperwork just in case

LCHC: 956-4052

DCHD: 560-7600

FCHD: 496-2533

PCHD: 336-597-2204

WCHD: 252-257-1185

Duke Clinic 1J/MFM/DWHA: 684-2471

Ryan Clinic: 668-7888

CONTRACEPTIVE OPTIONS FOR LOW-INCOME WOMEN

Duke Ryan Family Planning Clinic Information

- What they do: complex contraception, BTL, IUD, and Implanon
- If a patient is covered by Medicaid or insurance for a IUD or implanon device **at the time of placement**, the patient is **NOT** eligible for a Ryan LARC device.
- There is a clinic charge of **\$150** which is due at time of placement but no other fees will be incurred by the patient. (must pay in cash at that visit)

Durham County Health Department

- What they do: Post-Partum Visits, Mirena and Paragurad IUD's, Implanon, All other forms of contraception, Plan B, Condoms
- IUD's and Implanon will not be placed at the post-partum visit, patients will need to return for placement. Limited number available.

Person County Health Department

- What they do: Post-Partum Visits, Mirena and Paraguard IUD's, all other forms of contraception (No iimplanon)
- IUD's will be placed at post-partum visit if patient qualifies for Medicaid or ARCH foundation. STD screening and treatments may be obtained at walk-in visits.

Warren County Health Department

- What they do: Postpartum & Family Planning visits; Referrals for IUD's, Implanon, BTL, Essure; All other forms of contraception

Obstetrics Pearls

OBSTETRIC EMERGENCIES

Postpartum Hemorrhage

- Call for help!
- Empty the bladder with straight cath
- Oxytocin 10-20 units diluted in 1000cc IVF – may cause hypotension if given IV bolus
- If no IV, then Oxytocin 10 unit IM
- Exploration of the uterus to rule out retained placental fragments, inspection of cervix to evaluate cervical laceration, inspection of perineum to evaluate lacerations.
- Bimanual massage
- Methergine 0.2 mg IM (Q4-6hrs) – contraindicated in patients with hypertension
- Hemabate (Carboprost) 0.25 mg IM (Q20min) – contraindicated in patients with asthma
- Misoprostol (Cytotec) 1000 mcg rectally
- Pack uterus and go to OR for further management
- These medications can also be used to manage hemorrhage during C/S.

Shoulder Dystocia:

- Mark time and call for help – OB emergency
- McRoberts- hyperflex maternal legs on the abdomen
- Suprapubic pressure – DO NOT use fundal pressure
- Rubin's maneuver – push anterior shoulder forward
- Wood's Screw – push posterior shoulder forward 180 deg
- Posterior arm – grab the posterior arm, flex it and pull it forward over the chest
- If you haven't already cut an episiotomy, cut a generous midline epis
- Gaskin maneuver - patient on hands and knees
- Repeat the steps again
- Finally, Zavanelli – replace the head and proceed to c/s

Eclampsia

- Call for Help/OB emergency
- Remember ABCs. Protect patient's airway because if she is not getting oxygen, neither is the fetus
- Mag bolus 6 gm over 20 minutes, if they continue to seize then 2 gm bolus followed by drip at 2 gm/hour. If there is no IV, you can give 10g Mag IM (5mg each butt cheek).
- Stabilize mom first. If mom is not stable, this not the time to do a c/s. Once mom is stable, evaluate the fetus. If the fetus is stable, assess and determine best route of delivery. If the fetus is unstable, then consider C/S.

Induction scheduling criteria

ACOG Guidelines for scheduling an elective delivery:

The patient should be $\geq 39\ 0/7$ weeks' gestation. If she is not or if her dating is poor, it is recommended that prior to performing an elective delivery (induction or cesarean section):

- 1) She have an amniocentesis to document fetal lung maturity;
- 2) She has developed labor;
- 3) She has ruptured membranes;
- 4) She has a medical and/or obstetrical condition that by delaying her delivery until $\geq 39\ 0/7$ weeks' gestation would place her or her fetus at increased risk of morbidity or mortality.

Confirmation of Term Gestation:

Any one of the following reasonably ensures that the patient is $\geq 39\ 0/7$ weeks' gestation. The patient must have at least one of these criteria:

- 1) Fetal heart tones have been documented for 30 weeks by Doppler;
- 2) It has been 36 weeks since a positive serum or urine human chorionic gonadotropin pregnancy test was performed by a reliable laboratory;
- 3) An ultrasound composite gestational age obtained at $< 20\ 0/7$ weeks, supports a gestational age of at least 39 weeks;
- 4) Although not in the ACOG practice bulletin, the following criteria would also allow confirmation of gestation (also, most of these patients would have one or more of the above criteria);
 - a. The patient has undergone assisted reproductive technology and 37 weeks have passed from an intrauterine insemination or timed intercourse;
 - b. The patient has had an IVF cycle and 36 $4/7$ weeks have passed from embryo transfer. (37 $0/7$ weeks post conception).

Duke Maternal-Fetal Medicine's Consensus for Dating When Managing Near Post Term (41 $0/7$ to 41 $6/7$ weeks' gestation) and Post Term Pregnancies ($\geq 42\ 0/7$ weeks' gestation)

Occasionally, patients present for near post term and post term management, but they have poor dating. Ultrasounds performed in the third trimester have an inherent error of ± 21 days. To have a scheduled labor induction or scheduled cesarean section in the setting of post term or near post term pregnancy, the patient must have at least one of these criteria:

- 1) Fetal heart tones have been documented for 32 weeks by Doppler;
- 2) It has been 38 weeks since a positive serum or urine human chorionic gonadotropin pregnancy test was performed by a reliable laboratory;
- 3) An ultrasound composite gestational age obtained at **$\leq 28\ 0/7$ weeks**, supports a gestational age of at least 41 weeks;
- 4) The patient has undergone assisted reproductive technology and 39 weeks have passed from an intrauterine insemination or timed intercourse;
- 5) The patient has had an IVF cycle and 38 $4/7$ weeks have passed from embryo transfer. (39 $0/7$ weeks or 259 days post conception).

If the patient has none of the above criteria, then:

- 1) She must have an amniocentesis documenting fetal lung maturity, or;
- 2) She is $\geq 42\ 0/7$ weeks' gestation by best dating criteria available.

Fetal Heart Rate Monitoring (there is a new / helpful ACOG bulletin worth reading)

A full description of EFM tracing requires a qualitative and quantitative description of:

1. Uterine contractions.
2. Baseline fetal heart rate.
3. Baseline FHR variability.
4. Presence of accelerations.
5. Periodic or episodic decelerations.
6. Changes or trends of FHR patterns over time.

Uterine contractions are quantified as the number of contractions present in a 10-minute window, averaged over 30 minutes. Contraction frequency alone is a partial assessment of uterine activity. Other factors such as duration, intensity, and relaxation time between contractions are equally important in clinical practice.

The following represents terminology to describe uterine activity:

- A. Normal: 5 contractions in 10 minutes, averaged over a 30-minute window.
- B. Tachysystole: >5 contractions in 10 minutes, averaged over a 30-minute window.
- C. Characteristics of uterine contractions:
 1. Tachysystole should always be qualified as to the presence or absence of associated FHR decelerations.
 2. The term tachysystole applies to both spontaneous or stimulated labor. The clinical response to tachysystole may differ depending on whether contractions are spontaneous or stimulated.
 3. The terms hyperstimulation and hypercontractility are not defined and should be abandoned.

Three-Tier Fetal Heart Rate Interpretation System

Category I: Category I fetal heart rate (FHR) tracings include all of the following:

- Baseline rate: 110-160 beats per minute (bpm) ☐
- Baseline FHR variability: moderate
- Late or variable decelerations: absent
- Early decelerations: present or absent
- Accelerations: present or absent

Category II: all FHR tracings not categorized as Category I or Category III

Category II tracings may represent an appreciable fraction of those encountered in clinical care.

Examples of Category II FHR tracings include any of the following:

- Baseline rate
 - Bradycardia not accompanied by absent baseline variability

- Tachycardia

Baseline FHR variability

- Minimal baseline variability
- Absent baseline variability not accompanied by recurrent decelerations
- Marked baseline variability

Accelerations

- Absence of induced accelerations after fetal stimulation

Periodic or episodic decelerations

- Recurrent variable decelerations accompanied by minimal or moderate baseline variability
- Prolonged deceleration (>2minutes but <10minutes)
- Recurrent late decelerations with moderate baseline variability
- Variable decelerations with other characteristics, such as slow return to baseline, “overshoots,” or “shoulders”

Category III: Category III FHR tracings include either:

Absent baseline FHR variability and any of the following:

- Recurrent late decelerations
- Recurrent variable decelerations
- Bradycardia

Sinusoidal pattern

COMMON TRIAGE PRESENTATIONS

NO PRENATAL CARE

When a patient is **28 wks gestation or greater** and has had no prenatal care, this triage visit may be the only Ob care she receives. Therefore, please obtain the following:

1) Enter a complete history on the **Triage Progress Note in TraceView(TV)** which should include:

Demographics (on separate Demo tab!)

Med/Surg/Ob/Gyn history

Screening-Social and Family history

Current Pregnancy-dating, complications

Allergies

Problems

Medications

Immunization history

2) Enter the PE on the Exam tab under **Admission Duke New**, with vital signs and breast exam.

3) Per Dr. B → DO NOT ORDER A TEST THAT NEEDS FOLLOW UP – b/c there is no way that we can be sure she will follow up!

4) Copy and paste the **Triage H+P Progress Note** into the **Prenatal Care (3 ladies) Progress Note**. Please write- “NOB H+P and labs were done in Triage” on the **Problem List**.

***Women who are **less than 28 weeks** should be evaluated for their presenting chief complaint and then discharged to their appropriate OB clinic for a NOB H+P visit with lab work as indicated below.

At Discharge: Before 5pm, the triage provider should speak with the “Charge Nurse” at the appropriate clinic for a FU appointment and mention if **“the NOB H+P and labs were done in triage”**. After 5 p.m., give the patient the clinic phone # and have her call with the clinic “Charge Nurse” asap about scheduling a FU appointment.

1)For **High risk patients** regardless of their gestational age, please call 668-7430 (HROB RN) to schedule a visit asap. After 5pm, please email the HROB clinic at mfmnurses@duke.edu with the patient’s MR#, pertinent high-risk diagnosis, and a home or contact phone #.

2)For **Low risk** Health Department patients **at or > 28 wks**, speak to the clinic “Charge Nurse” in order to schedule the patient’s follow-up appointment:

-At DCHD: Call 956-4052. After 5pm, call 956-4024 and leave the patient’s info and phone#

-At Other Health Departments: Call the phone #s below. The patient will need to inform this nurse that **“a NOB H+P and Labs was done in triage”**.

-PCHD: 336-597-2204

-FCHD: 919-496-2533

-WCHD: 252-257-1185

***The triage provider should also document these discharge instructions in TV and on the patient’s discharge paperwork so that the patient can present this form to the “Charge Nurse” at her clinic.

Low Risk Health Department patients who are **< 28 weeks and with no prenatal care** should be instructed go to their Ob clinic the next day and present their discharge paperwork that states: “this patient was seen in triage and needs to be scheduled for a NOB orientation visit asap”.

PPROM:

Do not perform a digital exam!!! Only sterile spec exam, estimate cervical dilation visually.

Caveat, if patient c/o strong, regular ctx, digital exam may be indicated

Cultures: Urine, GC, Chlamydia, GBS, wet prep

Bedside U/S: if possible – growth/date scan and confirm presentation.

VIABLE patient (23- 33/6 wk) – steroids

Betamethasone 12 mg IM q 24 hr X 2 doses or Dexamethasone 6 mg IM q 12 hr X 4 doses

Antibiotics

Ampicillin 2 gm IV q 6 hr x 48 hr then Amoxicillin 250 mg po TID x 5 days

Azithromycin 500 mg po q 24 hr x 48 hr then 250 mg po daily x 5 days

Tocolysis – if they are in labor generally the patient will be placed on Magnesium Sulfate – bolus 6 gm then 2 – 3 gm IV/hr until steroids are complete UNLESS there are obvious signs of infection.

Preeclampsia:

-Labs: cbc, urinalysis, LFTs, P/C ratio, uric acid (>5 suggestive)

-Term patients/mild preeclampsia – delivery

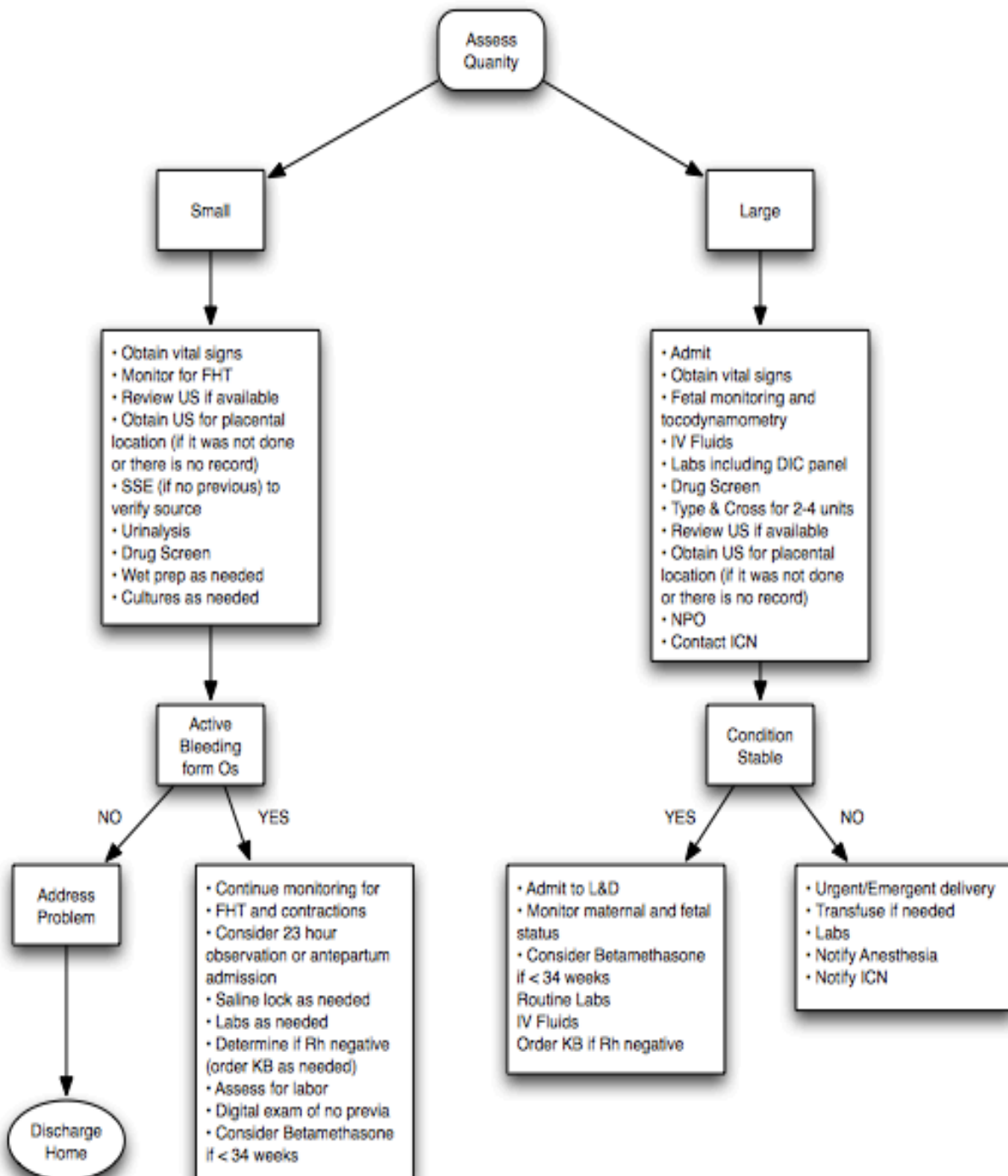
- Preterm patient/mild preeclampsia – admit and start 24 hr urine and steroids
- Magnesium is indicated if severe and if patient is getting induced/delivered
- PP Mag (generally pt are at highest risk for seizures 24 hr PP) cont Mag 2 gm -IV/hr for 24 hr or 12 hr depending on urine output and severity of the patient
- Mag check q 2hr

HELLP Syndrome:

- Check labs q 6 hr: CBC, LFTs
 - Magnesium 4 gm bolus then 2 gm IV/hr
 - Foley – remember mag is cleared by kidneys
 - Dexamethasone 10 mg IM q 12 hr until trend up in platelet then 5 mg q 12 hr IM X 2 doses
 - Platelets <50 – will likely need transfusion
 - DELIVER!!

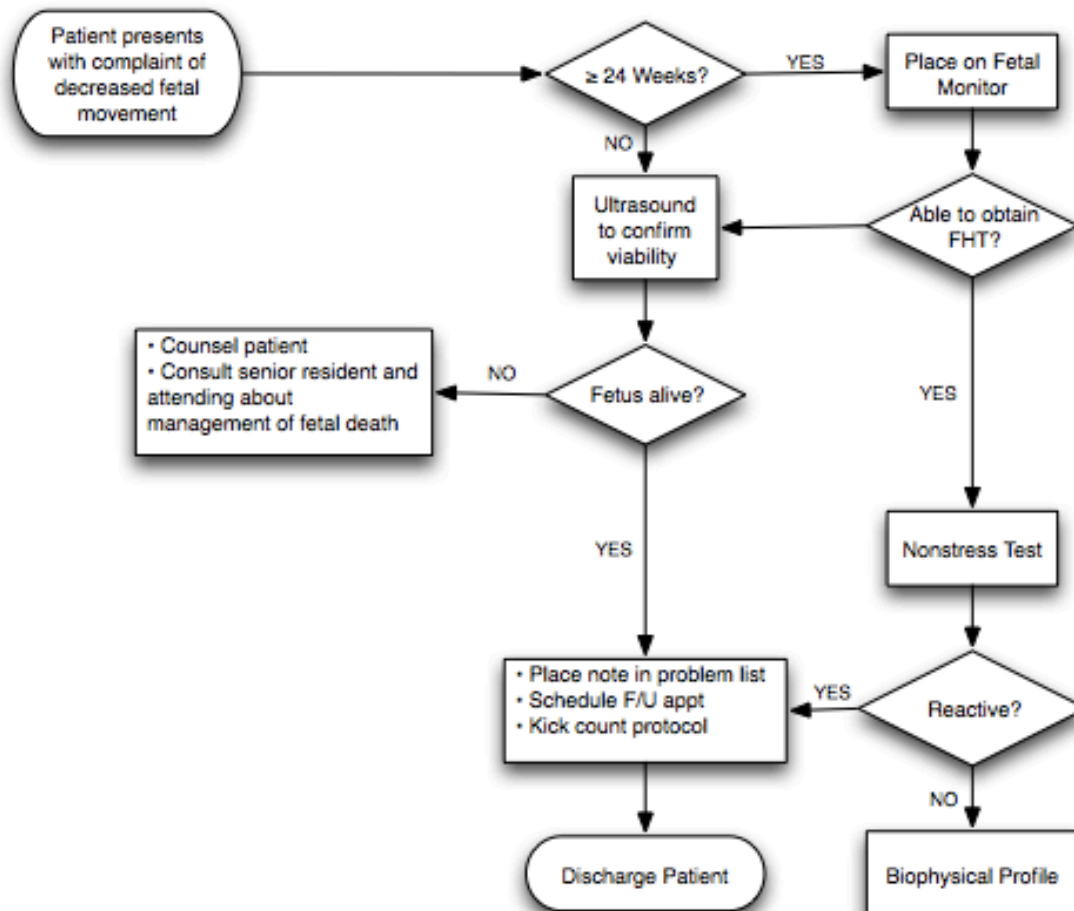
OB Thrombophilia Panel

1. Lupus anticoagulant
2. Anticardiolipin
3. Functional AT III activity
4. Protein C Activity
5. Free Protein S Antigen
6. Factor V Leiden
7. Prothrombin Gene Mutation (20210A)
8. Homocysteine

Bleeding after 20 weeks

Decreased Fetal Movement:

(Definition: Maternal perception of diminished fetal movement)



BPP < 4

- Consider extend testing time to 120 minutes; if persistent < 4 then
 - Deliver, or
 - Continuous FHR and tocodynamometry, and
- Discuss with attending about possible expedited delivery

BPP = 4

- If ≥ 36 0/7 weeks then deliver
- If 32 0/7 to 36 0/7 weeks;
 - Consider amniocentesis to document fetal maturity;
 - If mature then deliver;
 - If immature then;
 - Give Betamethasone;
 - Repeat test in 24 hours; if ≤ 4 deliver;
 - If not performing amniocentesis;
 - If < 34 0/7 weeks, give Betamethasone;
 - Repeat test in 24 hours; if ≤ 4 deliver
- If 24 0/7 to 31 1/7 weeks then repeat test in 24 hours;
 - If ≤ 4 deliver

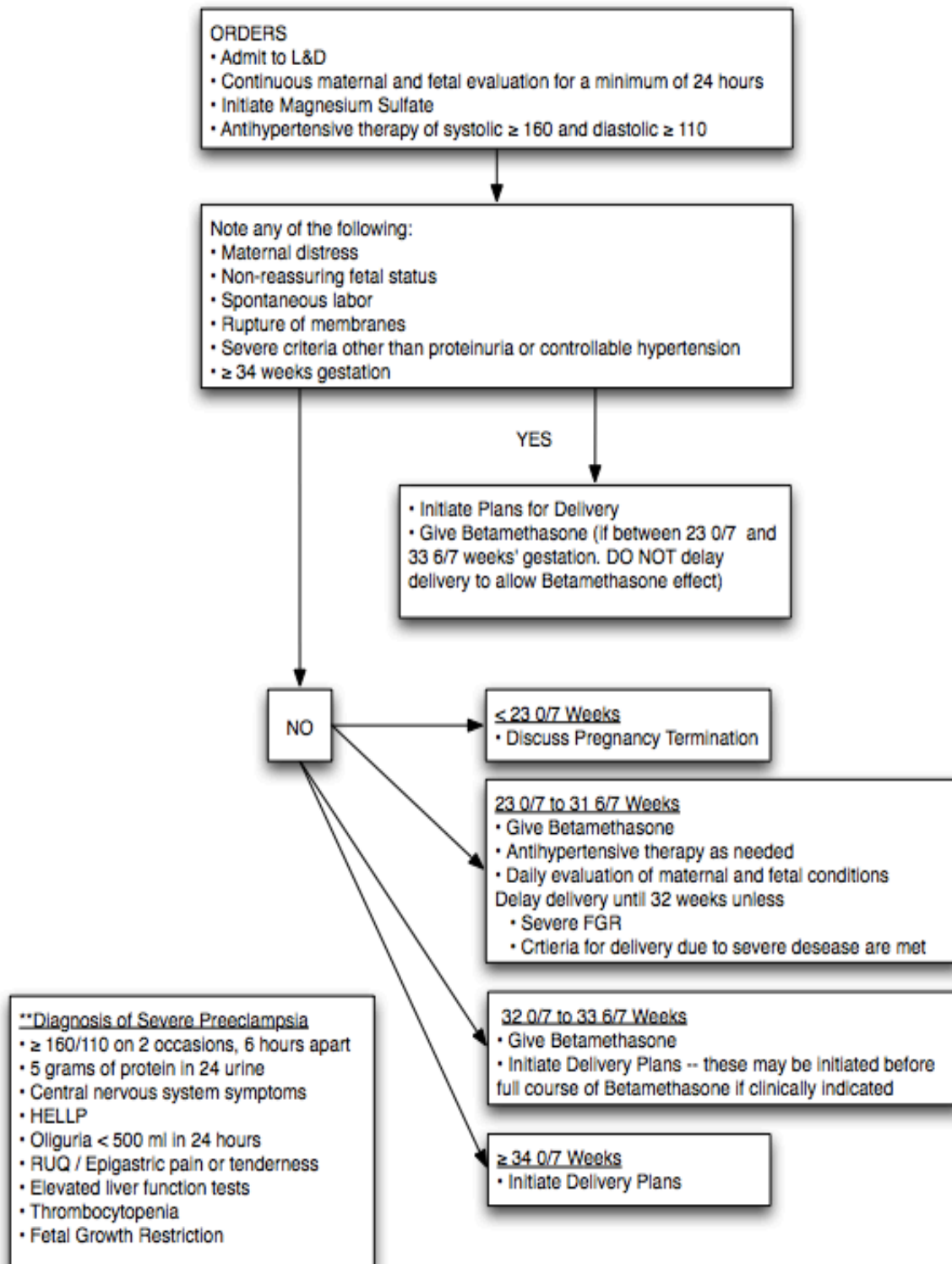
BPP = 6

- Repeat test in 4 to 6 hours, or perform contraction stress test
- If CST is positive, deliver
- If repeat BPP test is still 6
 - If ≥ 37 0/7 weeks then deliver
 - If 32 0/7 to 37 0/7 weeks;
 - Consider amniocentesis to document fetal maturity;
 - If mature then deliver;
 - If immature then;
 - Give Betamethasone;
 - Repeat test in 24 hours; if ≤ 4 deliver;
 - If not performing amniocentesis;
 - If < 34 0/7 weeks, give Betamethasone;
 - Repeat test in 24 hours; if ≤ 4 deliver
 - If 24 0/7 to 31 1/7 weeks then;
 - Give Betamethasone;
 - Repeat test in 24 hours; if ≤ 4 deliver

BPP ≥ 8

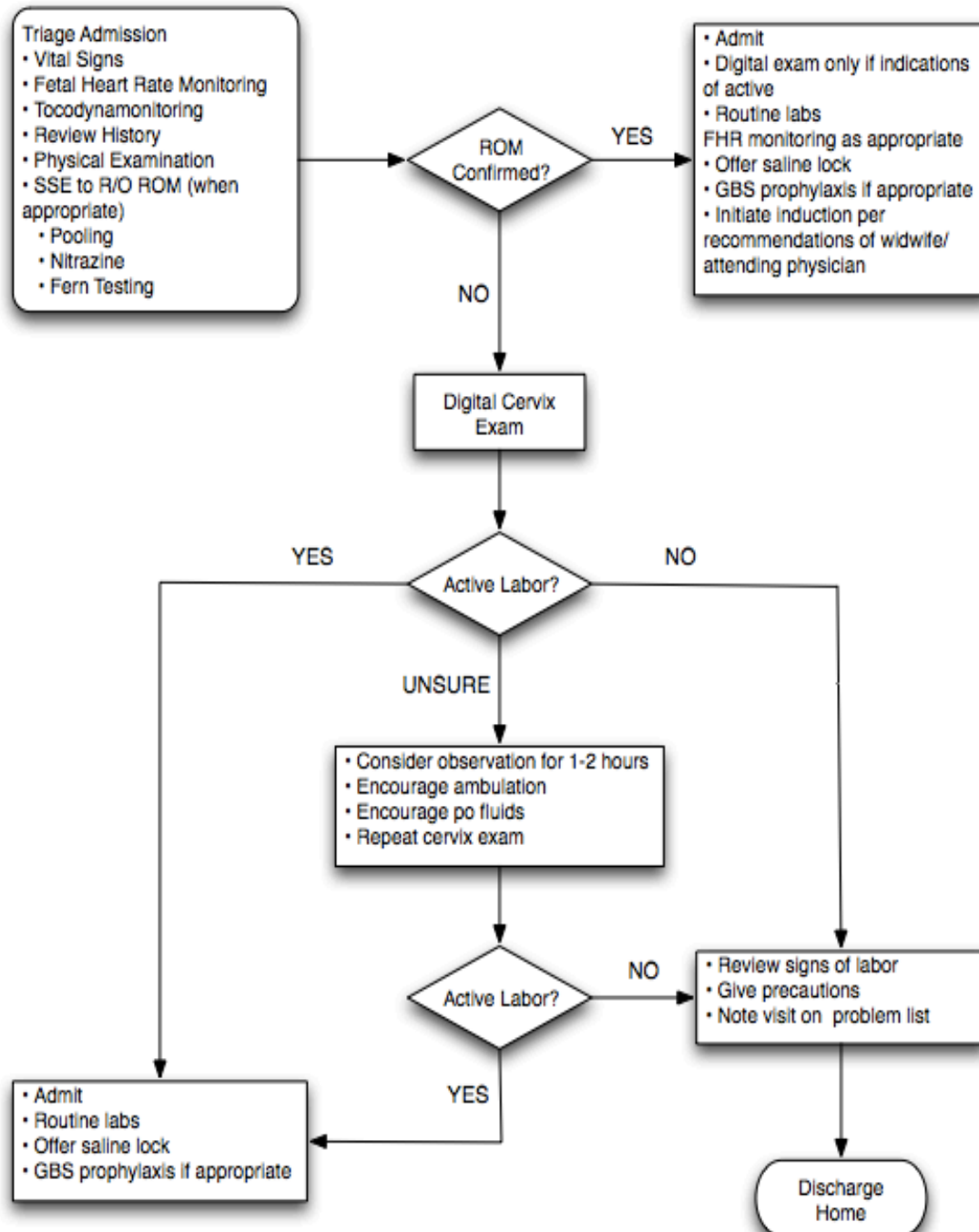
- Discharge home
- If this was repeat BPP when first BPP was ≤ 6, repeat test in 2 days

Severe Preeclampsia



Term Evaluation of Labor/ROM

TERM EVALUATION OF LABOR / ROM



Preterm Labor

PRETERM LABOR

Definition: Persistent contractions with

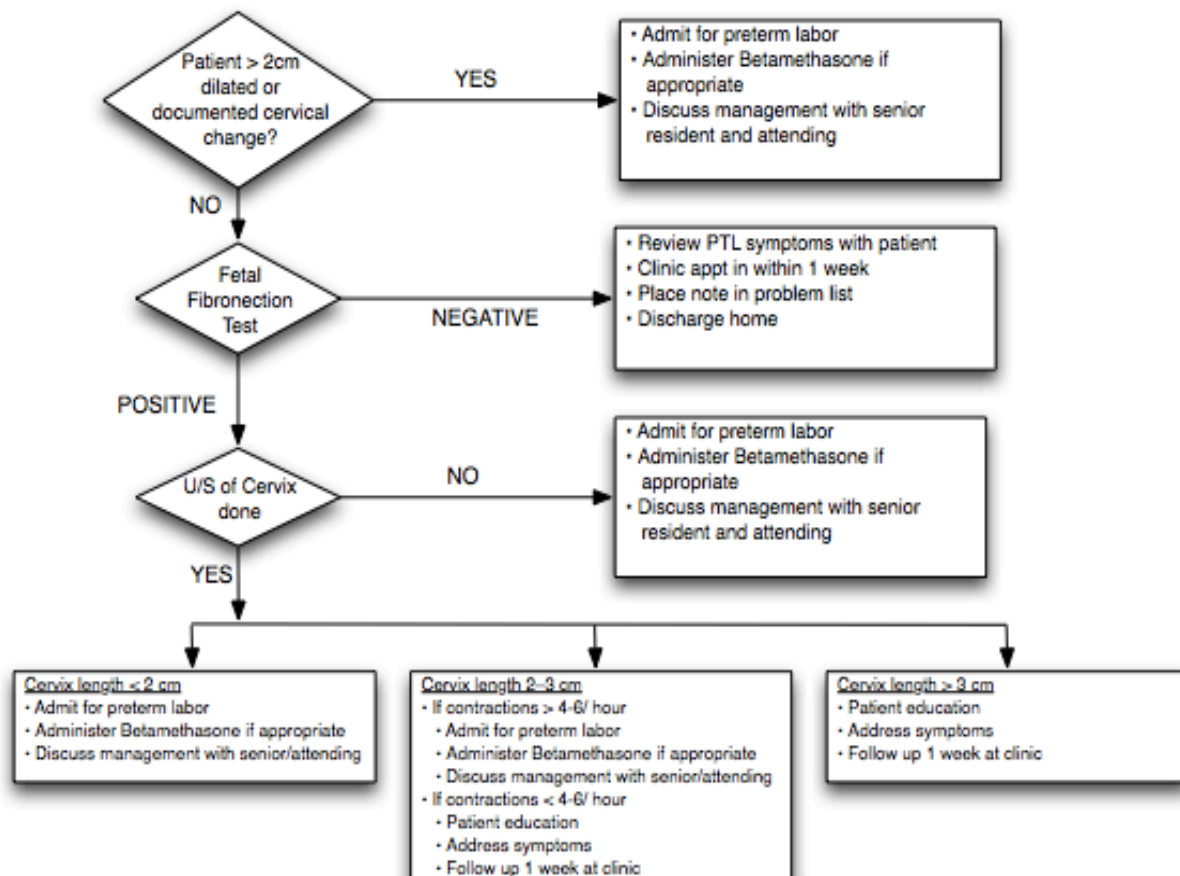
- 1) Cervical change of at least 1 cm noted on consecutive exams, or
- 2) Cervical dilation of ≥ 2 cm at initial exam.
- 3) Symptoms also include: cramping, low back pain, pelvic pressure, bleeding, change in vaginal discharge

Clinical Assessment

- Vital Signs
- Fetal Heart Rate Monitoring
- Tocodynamometry
- Review History
- Physical Examination
- Sterile Speculum Exam
 - Visualize cervix
 - Note any pooling of fluid or blood
 - Nitrazine and fern testing as needed
 - Obtain cultures as needed
 - Wet prep test as need
 - Obtain cultures as needed
- Fetal Fibronectin Test - follow protocol
- If no evidence of ROM - digital cervix exam
- Routine Labs
- Urinalysis
- Drug Screen
- Consider transvaginal U/S for cervix length

Criteria for Fetal Fibronectin Testing

- Patient between 23 0/7 and 33 6/7 weeks
- Cervix ≤ 2 cm dilated
- Cervix ≥ 1 cm long by ultrasound (if done)
- Within 24 hours
 - No vaginal exams
 - No intercourse
- No blood in vagina



Preterm Labor:

- Cervical exam: remember to collect FFN at time of initial exam before doing digital exam and only if patient is not having bleeding/recent intercourse; it can then be sent as needed.
- Cervical/Vaginal cultures: GC, Chlamydia, GBS, urinalysis and urine culture, wet prep
- Steroids (prior to 34 weeks)
- Call the NICU – if the patient is going to stay or if you think she will deliver soon
- Bedside u/s: growth/size and presentation.
- Antibiotics: use same abx for GBS prophylaxis
- Tocolytics

Fluid bolus – uterine irritability

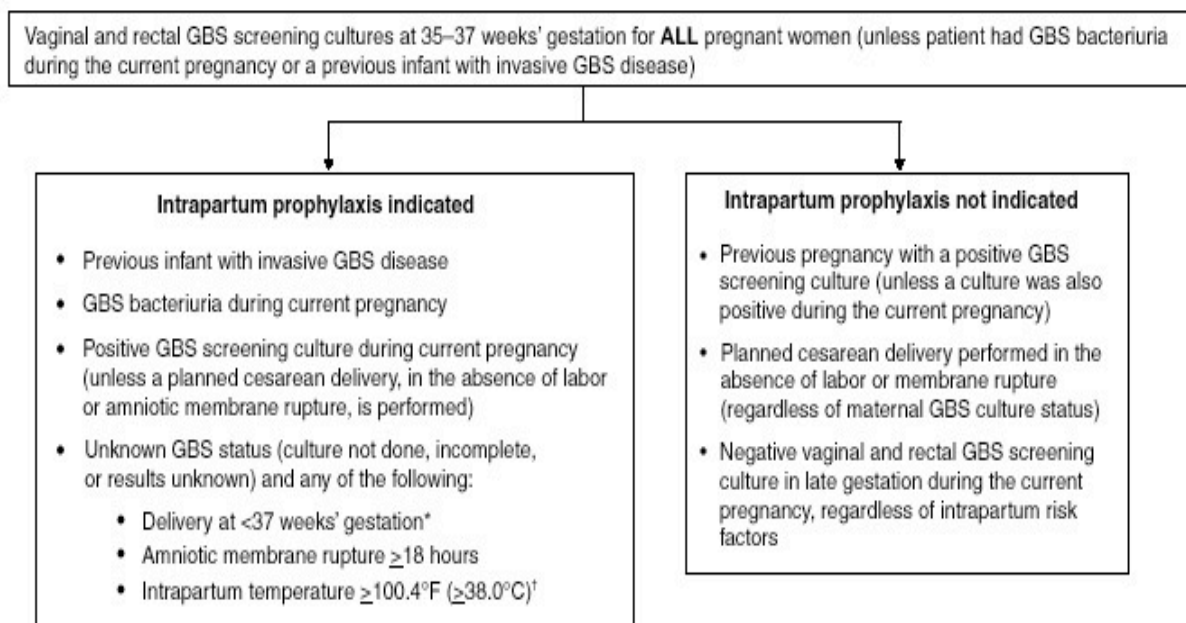
Magnesium 6 gm bolus then 2 gm iv/hr

Procardia loading 10mg q10min up to 40mg OR 15 q15 x2 OR initial load of 30-40mg

Long term – Procardia 10 mg q6-8h (however if the patient has low BP then this should not be used. Also if you have stopped mag, cannot start Procardia until 4-6 hrs

INFECTIOUS DISEASE AND OBSTETRICS: Group B Strep Prophylaxis

FIGURE 2. Indications for intrapartum antibiotic prophylaxis to prevent perinatal GBS disease under a universal prenatal screening strategy based on combined vaginal and rectal cultures collected at 35–37 weeks' gestation from all pregnant women



* If onset of labor or rupture of amniotic membranes occurs at <37 weeks' gestation and there is a significant risk for preterm delivery (as assessed by the clinician), a suggested algorithm for GBS prophylaxis management is provided (Figure 3).

† If amnionitis is suspected, broad-spectrum antibiotic therapy that includes an agent known to be active against GBS should replace GBS prophylaxis.

Source: Centers for Disease Control and Prevention. Prevention of Perinatal Group B Streptococcal Disease. MMWR 2002;51 (No. RR-11):[8].

Recommended:

- Penicillin G, 5 million units IV bolus, then 2.5 million units IV q 4 hours until delivery

Alternative:

- Ampicillin 2 g IV bolus, then 1 g IV q 4 hours until delivery (commonly used at DRH)

If penicillin allergic:

- Patients not at high risk for anaphylaxis: Cefazolin 2 g IV initial dose, then 1 g every 8 hours until delivery

Patients at high risk for anaphylaxis AND GBS susceptible to clindamycin and erythromycin:

- Clindamycin 900 mg IV every 8 hours until delivery OR
- Erythromycin 500 mg IV every 6 hours until delivery

GBS resistant to clindamycin or erythromycin or susceptibility unknown:

- Vancomycin 1 g IV every 12 hours until delivery.

Chorioamnionitis

Maternal temp >38.0, fetal tachycardia, maternal tachycardia, uterine tenderness

Abx: Ampicillin 2 gm IV q 6 hr and Gentamicin 1.5 mg/kg IV load then 1 mg/kg IV q 8, add clindamycin if goes for c/s

Herpes Simplex Virus:

	Active infection #1	Active recurrent	Suppressive	PPX
Acyclovir	400TID x10d OR 200mg 5x/d x10D	400mg TID or 800mg BID x5d OR 800mg TIDx2d	400mg po BID	400mg po BID or TID
Valtrex	1g BID x10d	500mg BIDx3d 1g daily x5D	1g po daily (can use 500mg if <9 outbreaks/yr)	500mg mg BID Or 1g qday

**If a term labor patient has a history of HSV, you need to do a speculum exam to check her cervix and vagina for lesions.

**If any lesions are present, then c/s for delivery.

**At 36 wk, start prophylaxis: Valtrex 500 mg QD. If active lesions, 1000 mg QD.

HIV and pregnancy/labor: Start

HIV meds @ 14 wks If CD4

<500, start earlier

C-sxn indicated @ 38 wks if VL >1000

For delivery

- AZT 2 mg/kg load over 1st hour, then 1 mg/kg/hr until delivery
- CALL pharmacy when patient arrives – the key is getting the AZT in the patient prior to delivery, and it takes a while to prepare the meds

EARLY LABOR/ MORPHINE SLEEP

Recipe varies by provider. Morphine: 5mg IV and 5mg IM for normal sized women. May add 6.25-12.5 mg of phenergan if they are nauseated or seem to need more sedation. Alternative: 5-10mg Ambien po with 3-5mg morphine IV or IM.

Bishop's Score

	0	1	2	3
Position	Posterior	Intermediate	Anterior	-
Consistency	Firm	Intermediate	Soft	-
Effacement	0-30%	31-50%	51-80%	>80%
Dilation	0 cm	1-2 cm	3-4 cm	>5 cm
Fetal station	-3	-2	-1, 0	+1, +2

A score of 5 or less suggests that labour is unlikely to start without induction. A score of 9 or more indicates that labour will most likely commence spontaneously. A low Bishop's score often indicates that induction is unlikely to be successful. Some sources indicate that only a score of 8 or greater is reliably predictive of a successful induction.

Labor Curve

Pattern	Nulligravida	Multiparous	Therapeutic Interventions
Prolonged latent phase	> 20 hrs	> 14 hrs	Rest, Oxytocin
Protraction Disorder			
Dilation	< 1.2 cm/hr	< 1.5 cm/hr	AROM, oxytocin
Descent	< 1 cm/hr	< 2cm/hr	Oxytocin
Arrest Disorder*			
Dilation	> 2 hrs	> 1hr	AROM, oxytocin, cesarean section
Descent	> 3 hrs with epidural	> 2 hrs with epidural	Forceps, vacuum, cesarean section

*With adequate uterine contractions: >200 MVU/10 min for 2 hours

The newest ACOG Bulletin suggests that one can wait up to 4 hours of adequate contractions prior to diagnosing an arrest of dilation and performing a C/S. The other therapeutic option for an arrest of descent is observation (if MF status are reassuring).

Average 2nd stage for multiparous women: 19 minutes

Average 2nd stage for nulligravida: 54 minutes

Induction/Augmentation of Labor

Cervical Ripening

Consider for Bishop Score <6

Misoprostol or Foley Bulb +/- pitocin

For foley Supplies needed: foley catheter, sterile speculum, ring forceps, betadine, gel (Can also place by feel) or Cook catheter with stylus.

If patient does not tolerate exams well, may work better better with 50mcg fentanyl premedication

Misoprostol

- IUFD – 400 mcg Miso per vagina q 4 hr (discuss with attending, depends on gestational age)

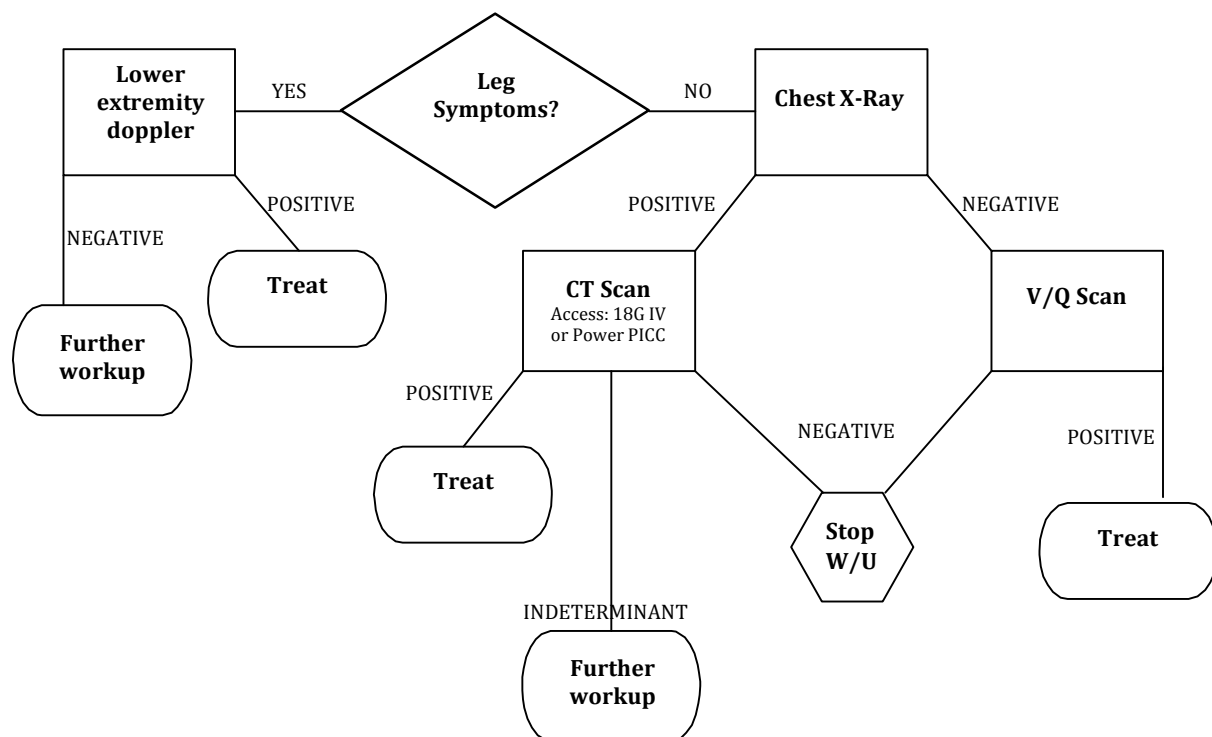
- For cervical ripening: Miso 25 mcg per vagina Q 4 hr

NO MISO FOR VBAC

Pulmonary Embolism Workup Protocol

This protocol was developed by Dr. Andra James in combination with the Departments of Radiology and Hematology.

START HERE



HROB Clinic

Resident Coverage:

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	AMB PGY-4 OB PGY-3	<u>OB Consult Clinic</u> AMB PGY-4	Conference	AMB PGY-4 OB PGY-4	AMB PGY-4 OUT PGY-2
PM	AMB PGY-4 OB PGY-3		<u>Postpartum Clinic</u> U/S PGY-1 Amb PGY-4	AMB PGY-4 OB PGY-4	AMB PGY-4 VA PGY-1

HIGH RISK OBSTETRICS CLINIC

Parking: park on the rooftop (DO NOT FORGET TO TAKE DOWN YOUR PARKING TAG OR YOU WILL BE TICKETED!)

Clinic is Monday, Thursday, and Friday. PP Clinic is Wednesday afternoon

See the patient and then present her to the clinic attending.

Management protocols: Please see below for specific protocols.

INDICATIONS FOR REFERRAL TO HIGH-RISK CLINIC

NEW PATIENTS

Patients should be referred directly to the Duke High Risk Obstetrics Clinic once pregnancy is confirmed if any of the following conditions are present at the time of registration.

Current Conditions

Cardiac, renal, thyroid disease

Diabetes mellitus

+HIV

Hypertension on medication

Multiple gestation

Substance abuse (drugs or alcohol not including marijuana)

Active TB (patients with active TB can be seen in prenatal clinic and/or referred to High Risk Ob Clinic only after treatment and clearance by the County Health Department)

Hyper or hypothyroidism

History

Blood clot or clotting disorder including stroke, deep vein thrombosis, or other thromboembolic event
 Preterm loss <20 weeks (i.e. incompetent cervix) and/or h/o cerclage
 History of and/or risk for having an infant with a life threatening congenital disease
 Recurrent loss (>2 miscarriages)
 Organ transplant
 Preterm Birth

For Patients with h/o preterm birth at between 20 and 36 weeks that was not related to maternal or fetal conditions (i.e. multiple births, fetal anomalies, or pre-eclampsia):

- Person, Franklin, or Warren County: refer patients to the high risk clinic
- Durham County Health Dept.: refer for a consultation visit in high risk ob clinic to determine plan of care including eligibility for 17 progesterone (17g). If 17pis appropriate it will be ordered and the patient will return in one week for their first injection. After that time the patient MAY be referred back to DCHD prenatal clinic if appropriate.
- Patients with a history of a still born infant should be referred to High Risk Ob Clinis for consultation visit(s) and plan of care AFTER their initial visit. They will be referred back to their prenatal clinic if appropriate.

REFERRALS

Patients should be referred to the Duke High Risk Clinic and/or Triage* using existing protocols, if any of the conditions above or if any of the following conditions below occur at any time during the prenatal period.

Gestational Diabetes
 Pathologic Hemoglobinopathies
 Lupus anticoagulant
 Multiple Gestations
 Pre-eclampsia*
 Preterm labor or significant contractions*
 Rh or other sensitization
 Severe anemia
 Unexplained abnormal maternal serum screen

Management of Specific Conditions in Pregnancy: (Arranged alphabetically)

Anemia

Screening/Diagnosis:

All patients should be evaluated for anemia both historically and by laboratory assessment on the first prenatal visit. Pregnant women are at a higher risk for iron deficiency anemia because of the increased iron requirements of pregnancy. In pregnant women hemoglobin (Hb) or Hematocrit (Hct) levels drop during the first and second trimester because of blood volume expansion. Hb is a more sensitive marker. Iron-deficiency anemia during the first two trimesters of pregnancy is associated with a twofold increased risk for preterm delivery and a threefold increased risk for delivering a low-birth weight baby. Longitudinal studies have shown that the highest prevalence of anemia during pregnancy is in the third trimester. Patients with a hematocrit less than 34% or hemoglobin less than 12 gm % at any point in the pregnancy should be considered anemic.

Recommendations:

1. Initiate foods high in iron for women with a Hct between 32 and 34
2. Initiate Ferrous sulfate 325 mg q day or BID in addition to their vitamin/mineral supplement for women with a Hct 32 or below that have not responded to foods high in iron.
3. Encourage patients to take iron with Vitamin C or on an empty stomach to improve absorption.
4. Iron may be poorly tolerated causing gastric upset. Using the lowest possible dose (30 mg of elemental iron/day) may be as effective as higher doses (60 mg el iron/day).
5. Inquire regarding compliance to treatment, i.e. color of stool and constipation.
6. If the hematocrit falls below 30% or hemoglobin below 10 gm %, the patient should have the following blood tests:
 - a. a complete blood count
 - b. ferritin level
 - c. TIBC
 - d. hemoglobin electrophoresis with A2 quant
7. If the hematocrit falls below 27% consult with a perinatal attending.

Candida

1. Monistat or other over the counter yeast cream or Terazol prescription x 3-7 days depending on dosage, to be used intravaginally at bedtime. May use cream on vulva as well if symptomatic.
2. If recurrent infection, review history of antibiotic usage and consider screening for diabetes and HIV infection, if not already screened.
3. If infection fails to resolve after 2 weeks x 2 treatment courses discuss use of Diflucan with Physician/Midwife (Category C)

4. Instruct the patient as follows:
 - Report all use of over the counter yeast preparations.
 - Observe correct perineal care (front to back wiping)
 - Wear cotton or cotton crotch panties
 - Avoid tight fitting pants and panty hose
 - Avoid using scented sprays and pads
 - Use tub baths and adequate perineal drying

Chlamydia and Gonorrhea

Screening/Diagnosis:

1. All patients should be screened at the New OB Exam and at 35-37 wks per Health Department protocols.
2. Screen patients with suspicious vaginal discharge or if their partner has been treated for nongonococcal urethritis, even if patient is asymptomatic

Recommendations:

1. **Chlamydia:** Azithromycin 1 gm po x 1 dose for patient and her partner;
Alternative: Erythromycin 500 mg QID x 7 days or 250 mg QID x 10 days.
2. **Gonorrhea:** If the patient has a positive culture and is otherwise asymptomatic the following treatment options may be used: **Check for penicillin allergy:**
Cefixime 400 mg orally in a single dose, **OR Ceftriaxone 125 mg** IM in a single dose

Alternative Regimen: Spectinomycin 2 g in a single, IM dose. Spectinomycin is expensive and must be injected; however, it has been effective in published clinical trials, curing 98.2% of uncomplicated urogenital and anorectal gonococcal infections.

All patients need Azithromycin (Zithromax) 1 gm po x 1 for chlamydia coverage if + gonorrhea unless a negative test result is in hand.

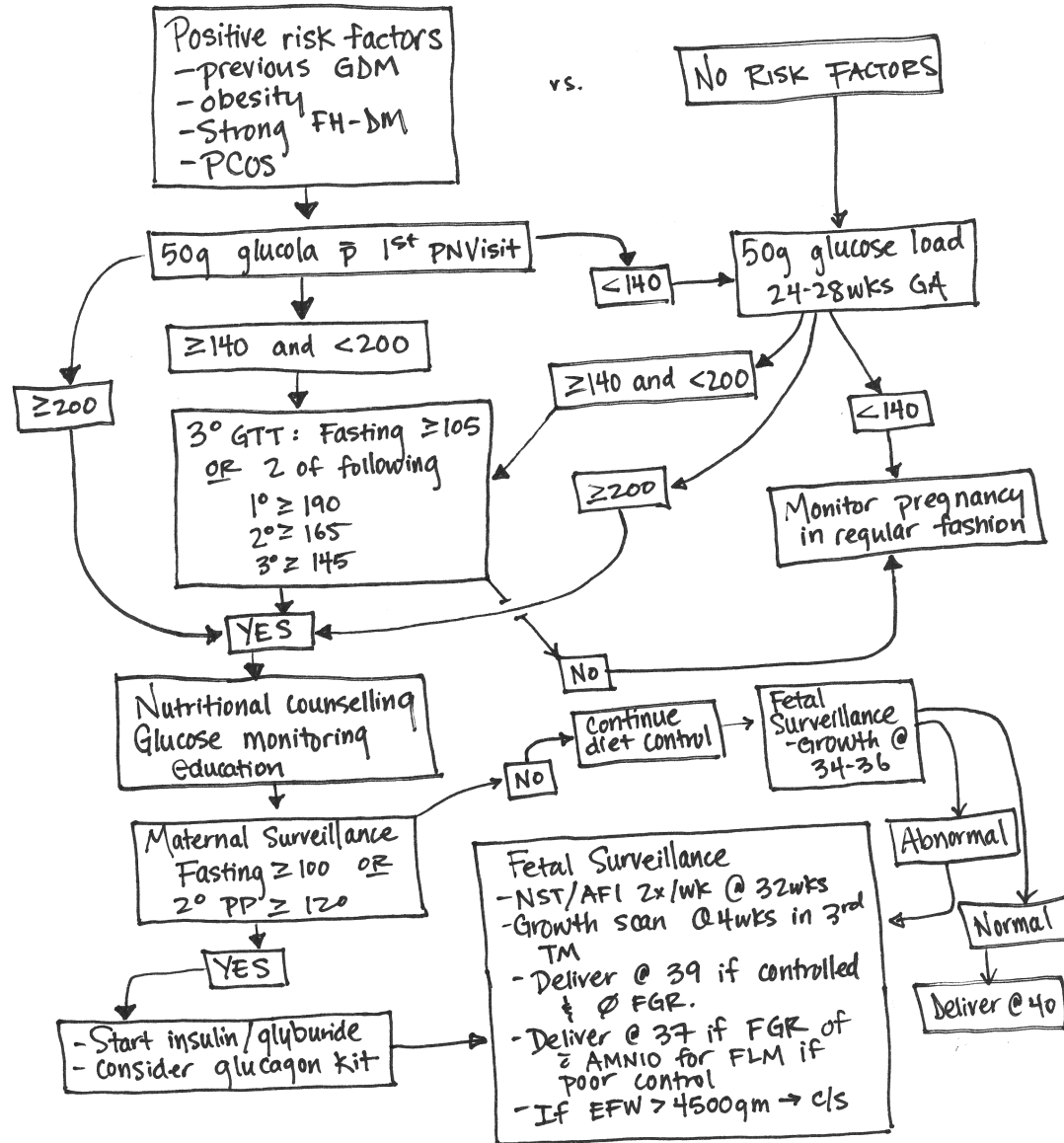
If the patient has symptoms of disseminated GC (fever, low abdominal pain) she should be referred for evaluation.

3. Advise patient to return if symptoms persist.
4. **Test of cure:** Test of cure for **Chlamydia** should occur within 2-3 months of treatment and again at 36 weeks per state guidelines as appropriate. If the 2-3 month test falls at 36 week, no further testing would be recommended. For **Gonorrhea**, A test of cure culture may be obtained at the care providers discretion or by 36 weeks.
5. Refer patient for Hepatitis B vaccination if has not previously received

17 P

Compounded medication. Conflicting data on efficacy in preventing preterm delivery. Duke is participating in a study of 1200 women using 17-P.

- Initiate at 18 week
- Weekly injections

Diabetes ManagementGESTATIONAL DIABETES

PREEXISTING DIABETES

- Titrate insulin during pregnancy
- Glucose monitoring at least Q.I.D.
- Education
 - Nutrition
 - Rationale for tight control
- 1st TM Dating u/s
- 2nd TM Anatomy scan
- Baseline labs
 - Eval. for proteinuria
(if P/C ≤ 100 or microalbumin < 30 ,
may omit 24^h urine P + Cr. cl.)
 - Metabolic panel
 - EKG
- Ophthalmology eval initially & PRN
- Pneumovax
- ? Endocrine eval.



FETAL SURVEILLANCE:

- NST/AFI 2x/wk @ 32wks
- Growth Q month in 3rd TM.
- Deliver @ 37 if FGR OR
with amnio for FLM if poorly controlled.
- If $> 4500\text{gm}$, Cesarean recommended.

Glyburide in GDM:**Candidates for Use:**

- Singleton IUP
- Gestational diabetes - 2 abnormal values, unmodified O'Sullivan's (105, 190, 165, 145)

-Any gestational age over 10-12 weeks with new diabetes diagnosis. (This is to avoid hyperglycemia during organogenesis. Attempting use of an oral agent might delay definitive Rx with insulin.)

-Type 2 patient conceiving on an oral agent, well-controlled, may switch to glyburide.

Exclusions:

- Multiple gestations (due to growth concerns).
- Previous poor pregnancy outcome (IUGR, IUFD, macrosomia, birth trauma . . .) - A fasting blood sugar >140, 2 hr post prandial >200. Hgb A1C >7.

Treatment:

All patients should be counseled regarding ADA diet.

All patients should monitor FBS and 3 two hour pp sugars daily.

- Offer insulin therapy as the best studied option.
- If the patient prefers oral therapy, then prescribe glyburide 2.5 mg po q AM, increase by 2.5 mg after week one if the fasting blood is >60-90 or a 2 hr post prandial blood sugar is >120.
- Second week, increase dose by 5 mg weekly up to a total of 20 mg to achieve glycemic control.

Treatment Failure:

Move to insulin therapy.

Failure defined as:

- FBS >100 or 2 hr post prandial >120 on 20 mg of glyburide
- or at any time after glyburide initiation with a FBS >120 or a 2 hr post prandial >180.

Insulin Treatment:

0.7-0.9units/kg

NPH/ Reg:

AM: 2/3 total dose – 2/3 NPH, 1/3 reg;

PM: 1/3 total dose – ½ NPH; ½ reg

In Labor:

Insulin drip when needed as standard of care to maintain euglycemia.

Post Partum:

Type 1 DM - usually we get an endocrine consult, but a good rule of thumb is about half of their term dose

Type 2 – Usually ½ the insulin dose, or restart the po meds they were on before pregnancy

GDM on po meds / diet : nothing – yes, that is right – NOTHING!

GDM on insulin – ½ the dose

Hepatitis B

Screening and Diagnosis: Hepatitis B virus infects the liver and causes varying degrees of inflammation and illness. Infected patients may respond in several ways: The acute hepatitis may resolve and the patient develops immunity. The patient's hepatitis may progress quickly and they may be at risk for acute hepatic failure. Or they may become chronic carriers with a long-term risk for cirrhosis and hepatic cancer. Because women infected with hepatitis B are at risk for acute and chronic liver problems and may transmit the infection to their sexual partners and neonates, North Carolina recommends routine screening of all pregnant women for Hepatitis B Surface antigen as part of their initial prenatal labwork. Neonatal vaccination and administration of hepatitis B immune globulin (HBIG) can interrupt 90% of vertical transmission of Hepatitis B. Vaccination of sexual partners may prevent sexual transmission. Most children born in the US are now vaccinated for hepatitis B, but older mothers and immigrants may be at risk for infection.

Recommendations:

If the patient's hepatitis B surface antigen is positive:

Counsel the patient about the test results and the need for further testing. The patient should be informed that the neonate will need injections after birth to help prevent transmission. If the patient appears jaundiced or acutely ill refer for immediate medical attention.

1. Document result on the lab screen and problem list "Positive Hepatitis B"
2. Send patient to the lab for the following tests:
 - a. Liver function tests-AST, ALT, Tbili, ABC (thrombocytopenia may indicate more severe disease) PT/PTT
 - b. Hepatitis B core antibody IgM (reflects recent infection and merits monitoring to evaluate for the development of chronic hepatitis or infection resolution)
 - c. Hepatitis e antigen (if positive patient is at higher risk of transmission of infection)
 - d. Hepatitis C antibody (co-infection is common)
 - e. Confirm HIV result (co-infection is common)
3. Vaccinate the patient for hepatitis A (two injections one month apart) and document in chart. 5.
4. Patient may plan to breastfeed after the neonate receives hepB Immune globulin and hepatitis B vaccine

5. Patient should be referred for a one visit consult to the high risk OB clinic but may continue their care at their original prenatal clinic. At the High risk Ob consult visit, patient will be informed of the option for liver specialty care after delivery.

Hepatitis C

Screening and Diagnosis: Patients with a history of liver disease/hepatitis, **MULTIPLE TATTOOS**, illicit drug use, sex partner with hepatitis C or transfusion prior to 1992 should undergo screening with a hepatitis C antibody.

Hepatitis C may be transmitted vertically to the fetus/neonate or to a sex partner.

Hepatitis C is not an indication for cesarean. Hepatitis C infected individuals may lactate.

If Hepatitis C antibody is positive:

1. Counsel the patient about the test results (that she has been exposed to hepatitis C and the need for further testing to see if she has ongoing infection).
2. Document on the lab screen and problem list : "Positive hepatitis C antibody"
3. Send patient to the lab for the following tests:
 - a. Liver function tests-AST, ALT, Tbili
 - b. Confirm HIV test results
4. Patient should be referred for a one visit consult to the high risk OB clinic but may continue their care at their original prenatal clinic. At the High risk Ob consult visit, patient will be tested for hep C RNA and informed of the option for liver specialty care after delivery.
5. Vaccinate for hepatitis A and B.

Hypertension

- I. Chronic Hypertension – Get baseline BMP, EKG, 24h urine; Assess fetal growth at 28-32 weeks
 - a. Well controlled HTN on no meds, normal fetal growth
 - i. Daily kick counts
 - b. Well controlled on meds, normal fetal growth
 - i. Weekly NSTs beginning at 32 weeks
 - ii. Repeat growth at 34-36 weeks
 - c. Poorly controlled, growth lag or low fluid
 - i. Twice weekly NST beginning at 28-32 weeks
 - ii. Weekly AFI
 - iii. Interval growth every 3 weeks
- II. Pregnancy induced hypertension and preeclampsia
 - a. Growth and twice weekly NST beginning at the time of diagnosis
 - b. Once weekly AFI
 - c. Interval growth every 3 weeks

Multiple Marker Screening and Nuchal Translucency

Multiple marker screening (MMS) is a test used to assess the chance for a baby to have one of three specific birth defects: Down syndrome (Trisomy 21), Edward syndrome (Trisomy 18), and Open Neural Tube defects. This risk assessment is determined based on the levels of up to four proteins present in maternal blood (AFP, hCG, estriol, and possibly DIA) along with demographic variables. It is important to remember that this is a screening tool, **NOT** a diagnostic test and therefore it cannot detect or rule out these conditions with certainty. It only indicates that a patient might be at specific risk for having a baby with one of these conditions. These women should be offered further counseling and possibly additional testing that may be diagnostic.

Note that nuchal translucency is a screening option between 11-14 weeks EGA. Nuchal translucency screens for Down Syndrome (trisomy 21) and Edward syndrome (trisomy 18), but not open neural tube effects. Women who have had nuchal translucency screen should be offered the option of MSAFP only (NOT quad screen or triple screen) to screen for neural tube defects at 15-21 weeks EGA.

Key points to know and/or share with patients prior to MMS testing:

1. MMS testing is performed between 15 and 21 6/7 weeks gestation if screen is sent to Labcorp; it is performed between 15 and 22 6/7 weeks gestation if screen is sent to UNC. This is an elective, not required test.
2. Plan to discuss the option of MMS testing and provide the patient with a brochure in advance of the appointment when the blood is to be drawn to allow the patient time to consider this testing option. MMS information can be obtained in English and Spanish from Lab Corp or the March of Dimes.
3. MMS is not a diagnostic test. Rather, it is a screening tool to allow for patient specific risk assessment.
4. A positive result does not mean that the baby has one of these conditions, but that there is an increased concern, warranting a “closer look.”
5. All positive results should be referred for genetic counseling, ultrasound and amniocentesis within one week of receiving verbal result.
6. A negative result cannot rule out these conditions, but means that the chance for these birth defects is less than the established cutoff of the lab.
7. Make sure that the variables are correctly entered onto the requisition. This will ensure that the results are interpreted properly. The variables are gestational age, maternal age, maternal weight, if the mother is an insulin dependent diabetic, multiple gestation (twins, triplets, etc.), and ethnic background.
8. If the MMS results are “negative,” and variables are correct, no additional diagnostic testing should be offered in the absence of advanced maternal age, ultrasound abnormalities or ultrasound markers of unclear significance (choroid plexus cyst, echogenic focus), or a positive family history.

The following should be applied to all patients who receive a “positive” MMS result:

1. Confirm variables used to calculate MMS, particularly gestational age. * (Note: MMS should not be ordered on a patient without a known LMP or a documented gestational age by ultrasound. Approximately 40% of positive MMS results can be explained by inaccurate gestational dates. This can create unnecessary anxiety for the patient and staff). The patient’s known LMP and/or ultrasound are the best resources.
2. If the Bipareital diameter (BPD) from ultrasound dating shows the gestational age used to calculate MsAFP was different by greater than 10-14 days, the specimen needs to be recalculated. Composite gestational age should not be used to estimate gestational age. Results should not be recalculated for patients who are at an increased risk for Edward Syndrome (due to the association with intrauterine growth restriction).
3. If the patient is at risk for Down syndrome or Edward syndrome, she should be referred to the Fetal Diagnostic Center for genetic counseling, ultrasound and amniocentesis. A repeat MMS is not indicated for these types of results.
4. If the patient is at risk for neural tube defects:
 - a. Patients with an elevated AFP MoM value that is less than 2.5 MoM, should be offered redraw of an AFP-only at the clinic. If repeat AFP is negative, no referral is needed.
 - b. Patients with elevated AFP MoM values or that remain increased above a normal range on repeat assessment should be scheduled for level II ultrasound, genetic counseling, and possible amniocentesis.
 - c. Many patients will wish an immediate referral after a single elevated AFP value. This request should be honored.

The patients should be made aware that a “positive” result does not imply that the baby has the diagnosed condition. It is often helpful to refer to a positive result as an “unusual result” that needs “a closer look”. Most patients with a usual result will continue to deliver babies who are healthy.

Elevated MSAFP

Patients with an unexplained elevated MSAFP (elevated MSAFP with no fetal open neural tube defect or abdominal wall defect seen by ultrasound) are at risk for adverse perinatal outcomes including hypertensive complications of pregnancy, preterm delivery, low birthweight, and intrauterine fetal demise. A third trimester ultrasound evaluation of fetal growth should be offered to these patients.

Antenatal testing:

Testing techniques

- Fetal movements
 - 10 movements in 2 hours
 - 1 hour three times per week
 - reassuring if count equals or exceeds previous baselines
- CST
 - Adequate CST has to fulfill:
 - 3 full contractions (40 second duration) each in 10 min
 - They can be spontaneous or via nipple stim (2 min until ctxs start) or oxytocin @ 0.5mU/min and double q 20 min
 - Results:
 - negative (no lates or variables)
 - positive (>50% ctx with late EVEN if <3 cntx/10 min)
 - equivocal/suspicious (intermittent late or sig variables)
 - equivocal/hyperstim (decels that occur every 2 minutes or ctxs longer than 90 minutes)
 - unsatisfactory (cannot get 3 ctx in 10 minutes)
- NST
 - 20 minutes but may need to extend to 40 minutes
 - Accelerations 10 x 10 before 32 weeks -> 15 x 15 after 32 weeks
 - Acoustic stimulation for 1-2 seconds, repeated up to 3 times and increasing duration up to 3 seconds total
 - Results = reactive/nonreactive (once reactive should stay reactive)
 - 24 – 28 weeks = 50% nonreactive
 - 28 – 32 weeks = 15% nonreactive
 - short (<30 sec) variable decels can be normal in up to 50%
 - non-repetitive and brief = NORMAL
- BPP
 - Five components - zero or two points for each one
 - NST
 - Breathing (30 seconds in 30 minutes)
 - Fetal movement (3 body or limb movements in 30 sec)
 - Fetal tone (1 instance of extension and RETURN to flexion, or hand opening and close in 30 min)
 - Fluid (vertical pocket > 2cm)
 - Results
 - 8-10/10 = normal
 - 6/10 = repeat in 24 hours
 - 2-4 = abnormal
 - REGARDLESS, oligo = abnormal
- Modified BPP = NST + AFI
 - This is a TRUE fluid check, not just MVP

What are indications?**Maternal:**

- Anti-PL Syndrome, Hyperthyroidism, Hemoglobinopathies, Cyanotic heart dz, SLE, Renal dz, T1DM, HTN

Pregnancy:

- PIH, Decreased FM, Poly/Oli, FGR, Postdates, RH isoimmunization, Hx of fetal demise (unexplained or repetitive), Multiple gestation (with growth discrepancy)

What GA should it be started?

Generally 32 – 34 weeks is appropriate for most high risk

For more high risk issues (brittle DM or cHTN with FGR) testing can start 26 – 28 weeks

Postdates for nl pregnancies

How frequently do you test people?

If the indication isn't persistent, then just once.

- Ex: decreased FM

Typically weekly

- But twice weekly: Postdates, T1DM, PIH

How reassuring is a normal test?

1.9/1000 for Reactive NST (99.81%)

0.8/1000 for BPP (99.93%)

0.8/1000 for modified BPP (99.93%)

0.3/1000 for CST (99.97%)

NOT MEANT TO PICKUP STILLBIRTHS FROM ABRUPTION, CORD ACCIDENT

Obesity

Increased risk for SAB, anomalies, GDM, macrosomia, stillbirth, pre-ex, labor dystocia, cesarean section and post-operative infection/ complications

BMI >30:

-Early Glucola

-Additional ultrasounds: Indicated if unable to evaluate fetal growth with fundal height

BMI >50

-Early glucose screen

-HROB consultation and anesthesia consult in early 3rd trimester

-Dating ultrasound

-Growth ultrasound at 28-32 weeks

Pregnancy over 40**Pregnant women who will be 40 or more at the time of their due date:**

Facilitate early prenatal care with documentation of gestational age in the first trimester whenever possible

Offer genetic counseling, including first trimester screening

Routine screening for diabetes and hypertension

Weekly NST/AFI starting at 37 weeks gestation

Anticipate delivery at 40 weeks gestation

If a patient has no comorbidities or fetal abnormalities she may remain at a community clinic. If she is normotensive, but has a history of hypertension, she should have some evaluation of renal function (e.g. a 24 hour urine for protein and creatinine.)

Urinary Tract Infections

Note: Urine cultures are recommended over bacticult/uricult if at all possible.

1. Clean voided specimen for urine culture done at the initial visit on all patients.
1. Urine cultures done every trimester throughout pregnancy, on:
 - a. urinary tract infection during the current pregnancy
 - b. A history of chronic Urinary tract infections
 - c. Patients with sickle cell trait or disease
 - d. Patients with previous kidney disease or diabetes
 - e. Any patient with >1+ protein, >1+ LE or + nitrites.
4. Symptomatic patients
5. African Americans with history of UTIs should be screened for G6PD.

Asymptomatic UTI - characterized by a positive culture on a clean voided specimen with no symptoms present.

Acute UTI - characterized by one or more of the following: dysuria with or after voiding; frequency and or urgency; positive nitrites on urine dipstick.

Chronic UTI - recurrence of positive culture after documented therapy and or one acute UTI followed by a subsequent positive culture.

Recommendations:

1. Before prescribing treatment, check for drug allergies.
2. Rule out pyelonephritis (fever and or chills; nausea and vomiting; costovertebral angle tenderness; hematuria). If suspected, refer patient to ER immediately for evaluation.
3. Asymptomatic and Acute UTI
 - a. Macrobid 100 mg BID X 7 days
 - b. Cephalexin 500 mg TID X 3 days
 - c. Bactrim DS 1 BID X 7 days (not in third trimester)
 - d. Consider screening AA for G6PD
4. Chronic UTI
 - a. Ampicillin 500 mg q day for remainder of pregnancy
 - b. Macrobid 100 mg at bedtime q day for remainder of pregnancy

5. Follow-up should include a culture or microscope exam of a clean voided urine specimen 2-4 weeks after completing treatment

VBAC GUIDELINES – (For more information see appendix)

Candidates for TOL/VBAC

- 1) Patients with one low transverse cesarean section;
- 2) Patients with two low transverse cesarean sections but have at least one vaginal birth;
- 3) Patients with low vertical hysterotomy incisions are candidates if the hysterotomy incisions did not extend into the muscular portion of the uterus;
- 4) Patients with unknown uterine scars but whose previous cesarean sections were done for clinical indications and/or in countries in which low transverse hysterotomies were most likely performed.

IOL guidelines: VERY attending depd

- @ 41 wks with VERY favorable cx
- If not favorable – for rLTCS

NOT candidates for TOL/VBAC:

- 1) Patients with one or more classical (vertical) cesarean hysterotomies;
- 2) Patients with two low transverse cesarean sections and no vaginal births;
- 3) Patients with one or more low vertical cesarean hysterotomies with extension of the hysterotomy incisions into the muscular portion of the uterus;
- 4) Patients who have had low transverse cesarean sections, but the incisions were extended into the muscular portions of the uterus ("T", "J", or "Hockey-stick" extensions);
- 5) Patients who have had uterine fundal surgeries in which the full thicknesses of the myometrium were violated (i.e. extensive fibroid surgery, cornual pregnancy resection, etc.);
- 6) Patients with previously ruptured uteruses;
- 7) Patients with medical or obstetrical histories that preclude vaginal delivery.

Thrombophilia in Pregnancy

Pregnancy increases the risk of thrombosis fourfold. Women with a history of VTE who receive anticoagulation have a 0% to 2% risk of a recurrent event in pregnancy as opposed to women with a history of VTE who do not receive anticoagulation and have a 2% to 12% risk. Women with particular inherited thrombophilia that carry a high risk of thrombosis should also be recommended to receive anticoagulation. The preferred agents for anticoagulation in pregnancy are heparin compounds. Neither heparin nor low-molecular-weight-heparin crosses the placenta and both are considered safe in pregnancy.

Individualization of the care provided to each patient receiving anticoagulant therapy in our clinic.

Full dose (adjusted dose) anticoagulation is recommended for the prevention of VTE in women with a need for lifelong anticoagulation and antiphospholipid syndrome with a history of thrombosis.

Full dose (adjusted dose) or an intermediate or moderate dose is recommended for women with ATIII Deficiency, homozygosity for the factor V Leiden mutation, the prothrombin gene G20210A mutation or compound heterozygosity for both mutations.

Thrombophylaxis with low-dose anticoagulation is recommended for women with a history of unprovoked thrombosis, antiphospholipid syndrome with a history of poor pregnancy outcome as the only clinical criterion (plus low dose aspirin), and thrombophilia with a history of poor pregnancy outcome.

Anticoagulation monitoring prenatally

1. For women on lifelong anticoagulation, convert from warfarin to LMWH before pregnancy or as soon as possible after conception.
2. For women not on lifelong anticoagulation, with the exception of ovulation induction patients, start anticoagulation therapy soon after pregnancy.
3. For ovulation induction patients, start anticoagulation at the time the patient starts ovulation induction, due to increased risk of venous thrombosis related to hormone therapy.

Monitor LMWH with anti-factor Xa level at week one and complete blood count (CBC) at week one and week two. The risk of HIT manifests during the first 5-15 days after heparin exposure.

- ❖ LMWH with anti-factor Xa should be drawn 3-4 hours after patient gives herself a dose.

Monitor LMWH with anti-factor Xa and CBC one week after Lovenox dose change

Twice weekly testing beginning at 34 weeks

Convert from LMWH to UFH at 36-37 weeks gestation or sooner if there is preterm labor, preeclampsia, fetal growth restriction, oligohydramnios or other evidence of immediate delivery.

Schedule delivery by 39 weeks gestation due to increased risk of poor pregnancy outcome.

Intrapartum anticoagulation and monitoring: Assure that patients have not received LMWH within 24 hours of needing regional anesthesia.

PTT on admission

Hold UFH for 6 to 24 hours prior to delivery.

Order pneumatic compression devices in labor or prior to cesarean delivery.

Pneumatic compression devices remain in place until patient is ambulatory and anticoagulation is restarted after delivery

Postpartum anticoagulation

Hold anticoagulation until 12 hours after a vaginal delivery, 12 hours after epidural removal, or 24 hours after cesarean delivery.

Bridge to warfarin or continue LMWH for the remainder of the 6 week pp period after the risk of postpartum hemorrhage has subsided (usually 2 weeks).

❖ Exceptions:

Women who have had a thrombotic event in pregnancy should be continued on warfarin for 3-6 months after delivery. Women on lifelong anticoagulation will be continued indefinitely. Educate patient that breastfeeding is not contraindicated during use of warfarin.

Unfractionated Heparin Dosing

Low-Dose	5000 U sc q 12 hrs < 8 weeks; 7500 U sc q 12 hrs 8–28 weeks; 10,000 U sc q 12 hrs > 28 weeks
Full-dose	q 8 or 12 hrs to target mid- interval aPTT in therapeutic range

LMWH Dosing

Prophylactic dose	Enoxaparin (Lovenox) 40 mg qd or 30 mg bid before 28 weeks then enoxaparin 40mg bid after 28 weeks
Therapeutic dose	Enoxaparin 1 mg/kg bid with target of anti-factor Xa level of 0.5–1.0

OTHER HELPFUL RESOURCES

Directions for Blackboard log-in:

Go to <http://blackboard.duke.edu/>

left click on LOG-IN

enter your NetID (DEMPO ID) and password (PIN station password)

left click on "Organizations" tab at top of page

left click on Women's Health -- you are now in the site

Night Float

Hours:

- 24hour shift on Sunday – OB signout 730am
- Monday – Thursday nights – sign out at 6pm for GYN, 6:15 for OB

Saturday/Sunday Morning Rounds:

Round on Saturday morning with oncoming call teams

- Intern – PP
- 2nd year – ONC
- 3rd year – AP
- 4th year – VA/GYN/REI/Urogyn/oversee PP rounds

Cafeteria Schedule:

Closes at 3am (and then you lose your \$7.25 until 5:30pm the next day)

There is a night owl menu – highlight includes breakfast for dinner on Sunday/Thurs

Responsibilities:

Intern: PP, Triage, SVDs

2nd year: benign services, onc, AP on 7700, and c/s

3rd year: Run the board, AP on 5700

4th year: Consult pager for part of the night, help 2nd year, staff c/s

BONUS: There are no clinic responsibilities during night float!!!

Family Planning

Weekly Schedule:

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	Cervix Clinic	Family Planning Clinic	Conference	Cervix Clinic	Family Planning Clinic
PM	Continuity Clinic	Family Planning Clinic	Family Planning Clinic	Family Planning OR Procedures	Family Planning Clinic

General Information (from Dr. Floyd):

The clinic focus is on pregnancy termination, management of abnormal pregnancies, and contraception, both routine and complex. We do medication abortions up to 8 wks, surgical up to 14 wks in the office, and surgical up to 20 wks in the OR. We do both manual vacuum aspirations and suction machine procedures in the office. For contraception, we place many IUD's and Implanon devices in the office, and perform laparoscopic and hysteroscopic procedures in the OR.

Tuesday's clinic starts at 8:30 am in Clinic 1 J on the Urogyn Hall. We meet in the back work-room where cervix clinic meets, please arrive no later than 8:15. Tuesdays are procedure days, Wednesday afternoons are contraception and surgical work-up days but you may see anything on either day.

Wednesday's clinic starts at 12:30 pm on Hall 4. Missed Abortion Clinic starts at 8:30 am on Wednesday and Friday. You are expected to go straight from your Wednesday lecture to clinic. We see many postpartums, be sure to cover the "B's" – bleeding, bowel/bladder function, breast/bottle feeding, blues (PP depression), boinking (birth control/sex).

OR cases are usually on Thursday afternoons but sometimes may be on Thursday mornings or Friday afternoons. I will let you know at the beginning of each week and we will discuss case/clinic coverage if necessary.

All of the documents/protocols for the Clinic are on-line in PC Commons/OB-GYN/Ryan Clinic. Try to review these prior to the first day.

There is an established curriculum with readings. The curriculum can be accessed on-line at the Ryan Program Website, the info on how to do this is below.

If anyone desires to opt-out of the rotation please let Dr. Floyd know and she will review the process and what the expectations are.

On the first day of the rotation, the Ryan Program requires that each resident complete a Pre-Rotation Survey and on the last day, a Post-Rotation Survey. These are done on-line and the access info is below.

Please reference the OB Section for LARC Information about IUD/Contraceptive device policy and pricing on Page 32.

LARC IUD/Implanon:

\$150 for placement

\$50 for IUD removal

\$75 for Implanon removal

Follow up visits - \$30 (first time), \$50 (subsequent visits)

Surgical Abortion Price:

\$455 for gestational ages \leq 12 weeks; \$525 for gestational ages 13 weeks to 14 weeks 6 days.

Medical Abortion Price:

\$460

Ryan Program Website:

1. Go to www.ryanprogram.org
2. Click on Private Login button at top of page
3. Enter the following email address and password:
 - a. resident@ryanprogram.org
 - b. password - resident

Female Pelvic Medicine and Reconstructive Surgery (AKA Urogynecology)

Weekly Schedule:

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	OR/Clinic	Pre-op Clinic OR (DN)	Grand Rounds 10:00 Conference 11:00 Conference	Clinic (R4) Continuity (R2)	OR
PM	OR/Clinic	Pre-op Clinic OR (DN)	Clinic/UDS (R2)	Clinic (R2) Continuity (R4)	OR

NOTE: There are ALWAYS exceptions to the schedule. Conference alternates between abstract review, journal club, case conference, research and educational lecture.

General Info

- Organization: The OR Fellow is your point person while on service. The first year fellow will meet with you when you start to review pre-op clinic protocol, but the OR fellow will oversee the pre-op clinic work-ups (i.e. lab results, etc.). Dr. Weidner is responsible for resident education so you should meet with her initially to set goals, and half way through the rotation for feedback. The clinic fellow does mostly UDS/clinic/Raleigh OR and may cover the OR if there are two rooms going. The research fellow is usually protected on research.
- Schedule: When on service, the R4 will be in charge of the schedule; if there is no R4, the R2 is primarily responsible for the schedule. The first priority is OR coverage. Be sure to check for Amundsen's cases specifically under her name (she posts under urology and these will not come up if you search under GYN!!). Every 2nd year resident should do at least one TVH. Ideally check the posted cases at the start of the rotation to tentatively divide TVH coverage.
- Rounds: You will round as a team with the OR fellow on all inpatients every morning with the meeting time to be determined by the OR fellow (usually around 6:30/6:45 on OR days, 7:15/7:30 on clinic days). Have the note complete and be ready to present your patients at rounds. Of note, some fellows will expect medical students to present their patients.
- Research Studies: The first year fellow will go over the protocol and resident role in any studies (i.e. STOPP UTI, MVP, ROSETTA) at the start of your rotation. If you have questions, contact either the first year fellow or the OR fellow.

Pre-op Clinic

- Again, the first year fellow will meet with you at the start of the rotation to review pre-op clinic protocol. The OR fellow will oversee pre-op clinic patients.
- Week Prior:
 - Pick up the surgical workup packets from the nurses ahead of time. Each packet should have:
 - Posting sheet (hint: use this to determine what is scheduled)
 - Green admission triplicate sheet
 - White doctor's order sheet
 - Blank consent form with preprinted Urogyn risks on the back
 - Bowel prep information sheet for patient

- Complete all the paperwork before pre-op clinic. H&Ps NO LONGER HAVE TO BE PREPARED (the anesthesia pre-operative H&P will take the place the resident H&P). But, you still need to understand the procedure and the indications for surgery so you can talk with the patient. Therefore, you should review the patient's chart and most recent note.
- On Tuesday: Arrive by 8:00am, find the nurse running pre-op clinic that day and ask for instructions, review the clinic flow and discuss any add-ons. Anesthesia will have a NP (usually Elizabeth (Beth) Owen), so introduce yourself, and she will usually see the pts after you. NOTE: Beth is a great person to ask about pre-op tests (i.e. does pt need CXR?).
- Consents: Again review the chart/posting sheet to determine what needs to be included. There are general descriptions of the surgeries and complications in the Urogyn folder in the Benign Gyn folder on PC Commons.
 - General hints: if undergoing laparoscopy include possible laparotomy. Attendings will attempt to make the intended procedures very clear in the last clinic note, so check it.
 - Interstim: There are specific Interstim consent forms. When you pre-op them, fill out consents for **both** step I and II, and fill out 2 sets of orders (the patients don't come back in between!!)
- Prescriptions: Have all scripts (i.e. Ibuprofen, Oxycodone, Colace) ready ahead.
 - Interstim: all Interstim patients need Cipro after step I and, if successful, after step II as well. So in addition to usual scripts give rx for Cipro 500mg BID x 21 days (if allergic, consider Keflex/Augmentin).
- White sheet orders: standard pre-op orders. For the 2012-13 year, you MAY not have to do this sheet at all so check with previous rotating resident!
 - Include diagnosis, procedure, Attending
 - NPO after midnight
 - No ASA/Motrin/NSAIDS x 1 week
 - Make sure any other anticoagulants (i.e. Lovenox, Plavix) have a stop plan
 - Specific bowel prep instructions
 - If incontinence surgery or anterior/posterior repair (attending specification), then write "ISC teaching."
- Green sheet: All patients get Ancef IV (1g if <80kg, 2g if ≥ 80kg) on call to OR. If allergic give Clindamycin 600 or 900mg IV + Gentamycin 80mg or 100mg IV. Again a preset urogyn pre-op order set may have been created so check with the previous resident as to whether you need to do this.
 - Note: There is a document of antibiotic ppx protocol for surgery, get this from the fellow and use as reference (and pass on to next resident)
- Encounter form: Add post-op visit 6 weeks after surgery (4 weeks ok if sling only)
- Lab Tests:

Test	Instructions
Serum β hcg	All patients (unless > 1 yr amenorrheic after menopause)
UA and UC&S	All patients
T&S	Duke North: order T&S upon arrival ASC: do NOT order T&S
CBC	Order if medically indicated
BMP	Order if medically indicated.
Creatinine	Order for STOPP UTI pts unless done within 6 mos
Others (i.e. PT/PTT, LFTs)	Order if medically indicated

****NOTE:** If the patient has a previous (+) antibody screen, then T&S needs to be done at least 1-2 days prior to surgery. **

- Bowel preps:
 - Make sure prescriptions are entered into AEMR!!!
 - Miralax Prep: 255mg of Miralax mixed with lots of Gatorade (see the RN packet) and two 5mg tablets of dulcolax. Should only eat clears after 5pm the day before surgery.

Surgery	Diet Pre-op	Bowel Prep
Sling ONLY Sling Lysis/Revision	Regular diet NPO after MN	No prep
Vaginal Prolapse Procedures <ul style="list-style-type: none"> • Anterior and posterior repair • Vaginal hysterectomy • Uterosacral or sacrospinous suspension • Colpocleisis/vaginectomy 	Regular diet NPO after MN	2 Fleet enemas
Vaginal mesh resection without planned abdominal procedure	Regular diet NPO after MN	2 Fleet enemas
Robotic Surgeries Rectovaginal Fistula Repair Anal Sphincteroplasty Any laparoscopic* or laparotomy procedures	Clear liquids day before NPO after MN	MiraLAX Prep
Interstim	Regular diet NPO after MN (both stages)	<u>Stage 1:</u> 2 Fleet enemas <u>Stage 2:</u> No prep

**Please confirm with the fellow or attending regarding bowel prep and planned laparoscopic procedures (such as diagnostic laparoscopy, cystectomy, oophorectomy, BTL) as not all will require the full bowel prep based on attending preference.*

OR

- Arrive early to meet the patient and start the paperwork before the case.
- Know your patient including symptoms, prior surgeries, POP-Q and UDS info (you will get pimped about this!), practice your surgical skills and read about the procedure beforehand. If you know your stuff and operate well, you will get rewarded with opportunities to do more surgery.
- The nurses routinely call all patients 1-3 days post-op. The resident in the OR must email the clinical nurses (names below), operating attending, and operating fellow at the end of each OR day with the following info for every case:
 - Patient name, MRN, attending, procedure done, results of void trial (if done), any issues, any follow up (i.e.: needs follow up CXR or needs Foley removal in __ days), when post-op follow-up appt needed (usually 6wks).
 - Clinic RNs: Danielle Povelones, Tara Clyde, Adriane Donohue, Candace Kravetz, Shelley Ray

Discharge paperwork/Void Trials:

- Paperwork: Use the specific discharge instructions for Urogynecology.
- Void Trials: All post-op patients s/p incontinence surgery or ant/apical/post repair need void trials (in PACU for outpt, and usually POD#1 for inpt).
 - Computer orders: there is an order in CPOE under Gynecology orders.
 - Written orders: "backfill bladder with 300mL NS, remove Foley and prompt to void immediately, record voided volume, check PVR and page MD with results." FYI Passing = PVR < 100 or >200cc total volume.
- Catheterization

- Self-Cath: Patients get instructed on self-cath in pre-op clinic and also receive written info and a chart. If patients are going home with self-cath, click the box on d/c paperwork to include the proper instructions.
- Indwelling Foley: If patients are going home with Foley, they will need to call for an appointment for VOID TRIAL (usually 2-3d after the surgery, but please ask if any questions). Again, include this in the email to the clinic nurses so they can help ensure this is done correctly.

Recovery time instructions for patients:

- For ALL patients: No heavy lifting x 6 wks
- Typical recovery times are:
 - Midurethral sling only ~ 2 wks
 - Vaginal surgery ~ 4-6 wks
 - Robotic surgery ~ 4-6 wks
 - Abdominal / Open procedure ~ 6 wks
- Remember, these are just guidelines. They are not definitive and Attendings may individualize these guidelines. So, if a question arises for a specific patient regarding when they can return to work, please contact the OR fellow.

Reproductive Endocrinology and Fertility

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	OR	R2: Gyn Continuity	Conference	R4: Gyn Continuity	OR
PM	Surgical W/U	11am HSG @ Duke North 4-5PM Price Lecture	Surgical W/U	Surg W/U Presentations	

Reading assignments: Speroff. Will have specific chapters assigned by Dr. Copland.

Time away: Let the fellow ASAP know about days that you are planning to be on vacation or away so the surgical work ups find substitute coverage or be rescheduled.

OR: Every 2nd and 4th Monday in Duke North, and every Friday at the ASC and Davis Surgical Center (DRH out patient). Residents assigned to OR cases should arrive by **7:15 am** for both inpatients and outpatients. If the case you are assigned to is a "to follow" case, it is **your** responsibility to keep track of the progression of earlier cases.

In-house patients: When there are inpatients at Duke North, the morning rounding on these patients should be completed **before 8:00 am**. For anything other than simple routine postoperative issues, contact the Clinical Fellow or a patient's attending to keep them informed. All patient discharge instructions should indicate the clinical fellow as the person to call for emergencies or problems ("Reproductive Endocrinologist on Call 684-8111").

HSG's: Every Tuesday afternoon in Duke South Radiology Clinic 2E.

TVUS: You are responsible for doing 30 endovaginal ultrasounds during your rotation. Monitoring and baseline scans are every morning starting at 7:30am. Residents are responsible for keeping track of the number of scans performed and informing the clinical fellow if the numbers are lower than departmental standards. It is the resident's responsibility to be on time and to be proactive in acquisition of these skills.

REF Clinic: You are responsible for seeing all surgical work-ups. Can workup new patients for attendings. In general, you will take a history from the new patients and present the patient to the attending.

**** To dictate:** 919-304-4789, code 17

Fellow meeting: Tuesdays 4-5p with Dr. Price. The fellow presents a patient and you 'work-up' the patient and determine a diagnosis with Dr. Price. There is a lot of good learning to be had here. Dr. Price know something about everything.

Pre-op meeting: Thursday 4-5p with fellows and attending in the divisional conference room. They review all scheduled cases for that Friday and next Monday. You present the cases in the order they

are scheduled and provide thorough but concise SUMMARYS including HPI, significant PMH and past surgical history, physical findings, preop diagnosis and indication for the procedure. Have available all labs, H&P's, studies, and any pertinent information. Get H&Ps from resident folder in physician workroom – make sure to copy the ASC H&P and print out the H&P for majors. Residents will present.

- Davis: Call to ask for surgical time 470-1000, and/or ask traci at clinic to help

Procedures: Make sure to see: oocyte retrieval (TVOR), frozen embryo transfer (FET), and intracytoplasmic sperm injection (ICSI) during your rotation.

Continuity clinics: Chief: Thursday morning; 2nd year: Tuesday morning

Presentations: At the end of the rotation both second and fourth-year residents are required to prepare a 20-minute REF Seminar for presentation on the last Thursday of the REF rotation. The seminar should be on a topic in the general area of REF and relevant to clinical practice. You will be expected to have an up-to-date grasp of the subject and have a current bibliography for distribution. The clinical fellow can give you help with a topic and orient you as to what is expected. Residents need to inform the clinical fellow about the topic and date of the seminars no later than one week before the presentation. Each resident needs to provide a clinical fellow with a hard copy of their Power Point presentation as well as email a copy of the presentation.

Surgical work-ups:

1. Usually Monday and Wednesday afternoons. Give patients their prescriptions at the time of their preop visit and place a note at the bottom of the H&P stating which meds were given and their follow up date.
2. Consents: descriptions of most surgeries and additional risks are saved in the Benign Gyn folder on PC Commons.
3. Preop antibiotics: Ancef 2 gm IV on call to OR (Clindamycin 900mg IV if allergic) for major cases and where antibiotics are indicated. For hysteroscopy, use Doxycycline 100mg IV on call to OR. If there is a history of PID, hydrosalpinx on the HSG, a previous ectopic, evidence of PID on a previous surgery, etc., then the patient should be given a prescription for doxycycline 100 mg bid for 5 to 7 days prior to the procedure. If you have questions as to what to use, ask the fellow or patient's attending. Most patients should be given Doxycycline 100 mg BID for 5 days after operative hysteroscopy, especially if uterine balloon is used.
4. Follow-up appointment: Ask the patient at the time of the work-up if she has already scheduled a post-op visit. If not, get it scheduled at that time: 2 weeks for laparoscopy/hysteroscopy (sooner if uterine balloon is used) and 4 weeks for laparotomy.
5. Labs: If you order any additional pre-operative tests, **you** are responsible to get the results **prior** to surgery (EKG, CXR, chemistries, etc.). Dr. Walmer's patients should not have a routinely ordered hCG test prior to surgery. Dr. Price's and Dr. Behera's patients should have β -hCG testing prior the surgery. **Do not order β -hcg testing on the day of surgery. It must be done beforehand.**
6. ASC minor cases: All patients should have a CBC. These patients do not need T&S. For patients with significant medical problems, use the Anesthesia Dept. guidelines,

including consultation with Anesthesia. CXR and EKG should be obtained only if indicated by medical history or if age \geq 50.

7. Duke North Major Cases: ABC, T&S if the w/u is within 48 hrs of the OR. If the OR is scheduled >72 hrs after the W/U, order stat type & screen upon admission to pre-op holding.
8. Bowel prep: Have the nurses in the clinic give the patient a bottle of magnesium citrate to be taken the afternoon prior to surgery.
9. Research protocols: For some surgical cases (outpatient or inpatient), patients may be asked to sign a research consent. Only one research protocol should be requested from each patient. The Department of Anesthesia frequently has research protocols and our patients can certainly participate, but only if she has not been offered another one and with the prior approval of the REF attending.
10. Cancellations: Instruct patients to call the office (919-572-4673) if they need to cancel their procedure for any reason. Confirm home and work phone numbers on the w/u so that we can contact them if there is any need to change the starting time for the case.

Durham Regional Hospital

Orientation

Contact Kevin Fallon, 470-6256, before you start to complete orientation

You need to go to Medical Staff Services on the 2nd floor to sign paperwork, get computer access codes, and dictation code. Make sure you get a scrub card that works.

Getting Situated

First Floor: Cafeteria

Second Floor: ER, Medical Records, Medical Staff Services, Staff Entrance

Third Floor: OR, Main Lobby

Fourth Floor: Labor and Delivery, Women's Unit (43)

Hospitalist: Dr. Anita Hudson-Fraley 470-4218

Dictations

- To LISTEN to dictated radiology reports, call 4630, user number 000005, then enter patient's social security number.
- To DICTATE dial *612 from any in-house phone. Call 1-877-629-0808 for medquist dictation.
- See dictation section for further details

Emergency Room

- Before you see the patient, always ask "STAFF" or "PRIVATE." If it is a private patient, the ER MD needs to contact the private MD. Only see private patients if you are specifically asked.
- Leave the blue consult form in the chart. Take the white copy and keep in the call room. Dictate all consults (stat dictation so they show up in browser for your colleagues seeing them in clinic).
- Have staff patients follow-up in your continuity clinic whenever possible.
- If a patient needs to be followed for betas, make sure you have a phone number to reach them.
- 48 hour beta-hCGs can be drawn on the weekends at the outpatient lab. Give the patient a script with instructions for the result to be paged to the Gyn resident on call.
- If your patient needs to be followed for beta-HCG, make sure that you add her to the DRH Beta Book.

Triage, Labor, post-partum Patients

- Triage – only work up staff patients. Discuss management with the attending on call before admitting or discharging.
- Discuss all ER consults, floor consults, and L&D patients with the attending on call. If you have any questions about when to call, ask the attending when they want to be called.
- We do not round on private C-sections.
- Answering pages on private patients:
 - o If it is ok to give simple medication orders (i.e. Phenergan, Ambien). It is also okay to say this is not your patient and they can call the patient's attending.
 - o Acute situations (PPH, unresponsive patient), evaluate the patient and call the attending.

- Otherwise, defer management to private attendings (elevated blood pressures, antepartum patient with issues).

Gyn patients

Usually rounded on by the resident who assisted on the case. If any questions about the patient then ask the attending. These patients need dictated discharge summaries.

Forms / Notes

Billing forms only need to be filled out on STAFF patients.

Place completed forms in tray on L&D.

Triage – Brief H&P in Tracevue, Yellow billing form, Discharge instructions.

Labor patient – Yellow billing form, Discharge instructions.

ER/Consults – Blue consult form (attending must sign!), Blue billing form.

All antepartum, gyn patients need a dictated discharge summary.

Labor and most antepartum notes are in Tracevue.

Gyn progress notes are handwritten.

Random Topics

*The code to the women's locker room on L&D is 3 then 4 then 2

*The code to the men's locker room on L&D is 1+2 then 5

*You can get scrubs on the 4th floor across from the elevators from the Clean Hold room (there is a scrub machine in there) or else in the lockers rooms by the main OR

*Meal Tickets are given to us by Kevin Fallon – one meal ticket per call day. Please do not use more than one per day or else someone else won't get dinner on their call day! The cafeteria closes at 7pm SHARP!

*Late night Cafeteria: open 12-4am.

*Long distance code: 266002

*Generally the post call person rounds on the service so if you're on call on Saturday the person that was on Friday night will round on everyone and sign-out to you. Then you would round on Sunday morning before signing out to the next person etc.

Helpful Phone Numbers:

*L+D 470-4220

*Call Room 470-4215

Duke Raleigh

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	Valea Clinic or Lee OR	Lee Clinic	Conference	Urogyn OR vs. Hav Clinic	MIGS OR/ Urogyn Clinic @ Blue Ridge Rd
PM	Valea/Lee OR	Lee Clinic	Continuity Clinic	Urogyn OR vs. Hav Clinic	If no Urogyn clinic Lee clinic

Credentialing ---- Contact Sue Knerr for application packet:

- You must have 2 recent TB tests done 2 weeks apart and one within 6 months.
- When you start you need to get an ID so you have badge access to the lounge

Clinics

- Clinics are located on the ground floor of building 7.
- Go in the front entrance, then take the stairs/elevator down one level and follow signs to Gyn Onc Clinic.

Operating Rooms

- OR's are on the ground floor of the hospital.
- Park in PG2 and take the entrance to the right of the ED entrance. Go to the end of the hall, turn left and look for the physician's lounge on your right.
- Physician's lounge has HOT BREAKFAST and LUNCH every day. The code for the changing rooms is 1-3-5.
- Scrubs are freely available in the physician lounge. You don't need a scrub card.
- The OR schedule is on OR View. For Monday, check to see if Lee has a full day of majors, if so you will be responsible for covering those cases. On Valea's OR day, he usually has clinic in the AM. In Onc clinic you are responsible for seeing all the news, work-ups and some returns.

On Thursdays – Cover Urogyn cases. If no cases are scheduled, go to Havrilesky clinic. On Fridays – Cover MIGS cases. If no cases are scheduled go to Urogyn clinic.

Postoperative Care

- Orders are written. Onc/Urogyn/MIGS each have pre-typed check box order sets.
- Post-op patients typically go to the 5th floor. Vitals can be found on a clipboard right inside the patient's door.
- After surgery - Fill out the two op notes (one is on orange paper & the other is on the bottom of the outpatient H&P sheet); blank Raleigh scripts are available in the PACU, fill out either inpatient or outpatient order sets.

Directions from Durham:

Take 147 to I-40 East.

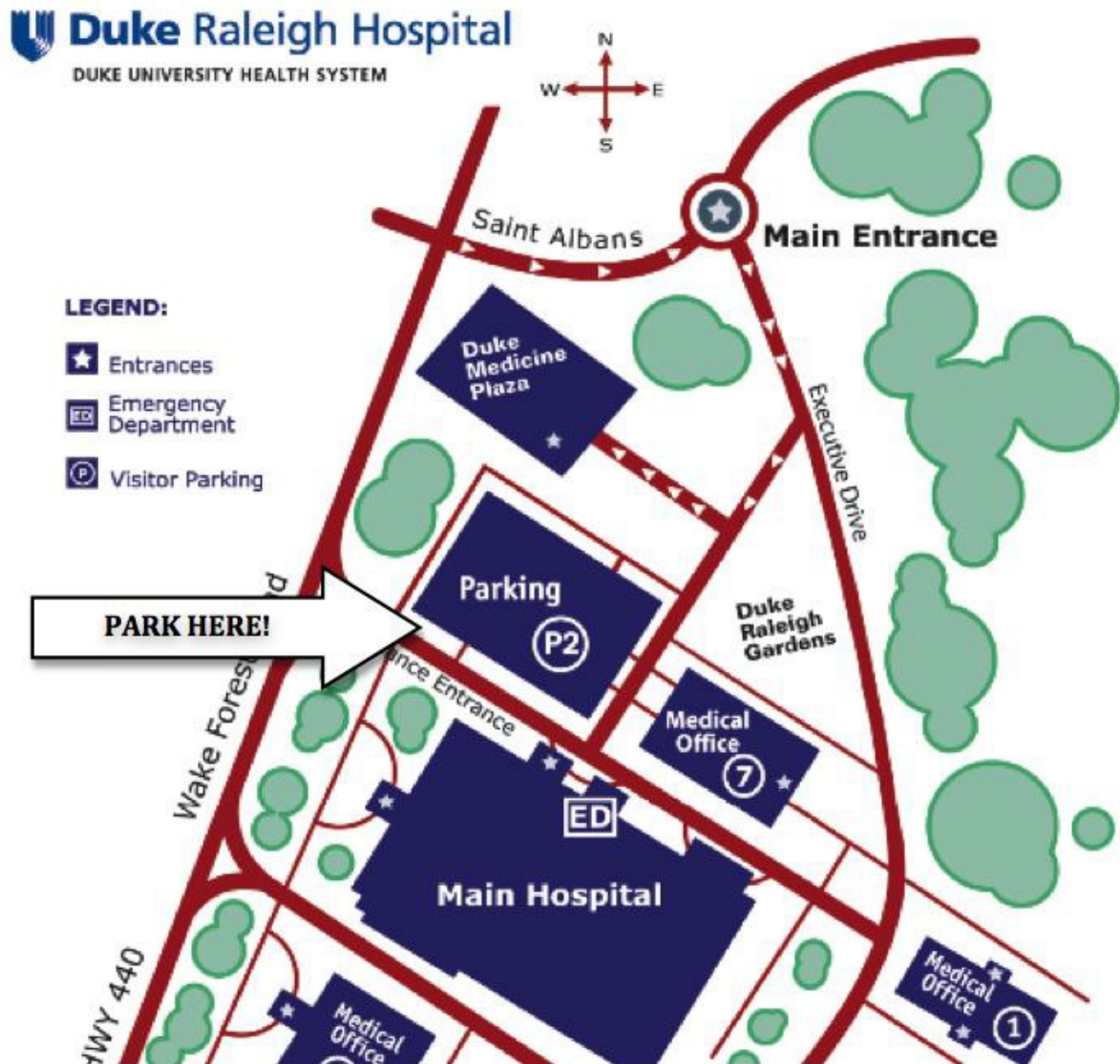
Take the Wade Ave exit #289.

Take the I-440 North (inner belt line) exit towards Wake Forest.

Take the Wake Forest Rd Exit.

Turn left at the light.

Duke Raleigh will be on the right (see map).



PGY-2 Outrider

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	DCHD OB	Person County	Conference	Warren County	HROB
PM	DCHD OB	Person County	Lincoln GYN	Warren County	Gyn Continuity

There will be a lot of driving on this rotation. Keep accurate records of your car mileage in the mileage log. This log is available in the OB/GYN folder of PC Commons. You will be reimbursed 0.50/mile which adds up VERY quickly in your favor.

Lincoln Community Health Center

1301 Fayetteville St.
Clinic begins at 8:30AM

Person County

355 South Madison Boulevard
Roxboro, NC 27573-5485
(336) 597-2204
Clinic begins at 8:30AM
Approximate Travel Time from Duke: 1 HR
Roundtrip mileage: 60

Warren County

544 West Ridgeway Street
Warrenton, NC 27589-1716
(252) 257-1185
Clinic begins around 8:30 to 8:45AM
Approximate Travel Time from Duke: 1 HR
Roundtrip Mileage: 125 miles
The clinic is on the LEFT in a brick building with Warren County Health Department on the brisk sign in front of the building. You have gone too far if you pass by a Hardee's.

In the 1860s, Warren County was the most financially prosperous county in all of North Carolina. Tobacco and cotton were the historic cash crops. Today, the county is among the most underprivileged areas in all of the state. The WCHD OB/GYN clinic is an extremely smoothly run clinic. The RNs know most of the patients very well as they have been coming to this clinic for many years. The day will be spent doing annual GYN care on pre and post-menopausal women and low risk OB.

Traditionally, the medical students are supposed to contact the resident a few days before the planned clinic. You can decide if you want to drive the students. There has been a long tradition of good/productive OB/GYN teaching during the 1 hour long commute each way.

1. Return OB/New OB patients
 - a. The patient visit cannot be completed until you document your note in TraceVue. The RN will use your typed assessment/plan to finish the encounter and schedule any appropriate follow-up appointments
 - b. These patients will typically choose to deliver at Duke or Mariah Parham.
 - c. It is not a bad idea to give each patient the Duke OB/GYN triage line.
2. Family Planning (pre-menopausal) GYN patients
 - a. These patients are generally here for problem visits or annual exams
 - b. The clinic does not have the ability to do colposcopy or endometrial biopsies
 - i. For this, you will need to refer a pt to 1J Cervix Clinic
 - c. Pelvic ultrasounds need to be referred to Mariah Parham or Duke
 - d. STD screening is typically done on everyone
3. Post-menopausal GYN patients
 - a. You will be ordering mammograms, colonoscopies and referring patients to other specialty providers

PGY-4 Ambulatory Rotation

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	HROB	OB Consult Clinic	Conference	HROB	HROB
PM	HROB	Continuity	Postpartum Clinic	HROB	HROB

High-Risk Consult Clinic:

- On Friday before pick up the records from RNs at HROB and prep charts
 - o If RN not around should be in MD workroom in the slots on the wall
- Dr. James arrives around 8:45 or 9:00 am
- After seeing patients, dictate a Consult Note

For Tuesday Afternoon Continuity Clinic:

- Starts at 1:40pm (because Consult Clinic runs so late)

Dictation Section

In compiling this set of representative dictations, I was reminded of a few important things that I must share with you. First of all, every physician has his or her own operating and dictating style. The enclosed dictations are simply meant to demonstrate one way to describe a procedure. Most residents realize the importance of accurately describing the procedure performed, but I would caution you to also consider the importance of being thorough in your pre-operative and post-operative diagnoses, and your findings sections. This will serve you well after you finish your residency, as this diligence will help you bill appropriately and defend your surgery from the third party payers.

Second, in trying to find representative dictations, I have found that rarely is a case truly “routine”. Deviation from textbook technique is frequently necessitated by alterations in anatomy. As you grow as a surgeon, it will be your responsibility not only to recognize and document when this occurs, but also to understand the basic variations in technique and when one method might be preferred over another.

Do try to be as accurate as possible in your dictations. For procedures that are performed frequently (ie Cesarean Section), be mindful that you do not mindlessly read the template. Put care into the “findings” section as this demonstrates the only opportunity for description and direct visualization of the operative field. Further, they may be heavily relied upon in legal settings and in subsequent patient care. Take any revisions in a dictation as a learning experience.

Although the attempt has been made to be relatively complete, this list is certainly not exhaustive. Certain obstetric, gyn, infertility, urogyn, and oncology procedures are not currently included. I encourage you to ask seniors for examples of dictations when needed.

Phone Numbers

DUKE: To Dictate call 681-5757 or 1-877-349-1616

Consultation	03
Tele-Medicine	05
Record of Patient Call	09
Clinic Notes	10
General Letter	11
Observation Summary	14
Discharge Summary	15
Stat/Priority Transfer	16
Operative Notes	20
Corrections	30
ED Consults	93

DRH: To Dictate call *612 from in house or 1-877-629-0808 from outside

History and Physical	1
Consultation	2
Operative Procedure	3
Discharge Summary	4
ER Note	6

Raleigh: To Dictate use dictaphone in PACU or call 5555 in house or 1-877-590-1905 from outside.

History and Physical	1
Op note	2

Technical Support :

Call Help Desk at 681-7696

Go to <http://him.duhs.duke.edu>

Contact MedQuist at 1-800-851-5753 OR 1-888-342-8283

Medical Records: 384-7119

Duke Dictation Keypad Guide

LISTEN	DICTATE	SHORT REVIEW
1	2	3
PAUSE	OBTAIN JOB #/EXIT	GOTO END
4	5	6
SHORT F.FWRD	GO TO BEGINNING	DISCONNECT/END
7	8	9
CLEAR/CORRECT ID	N/A	N/A
*	0	#

Appendix

How to Direct Admit

1. Call bed control, let them know about the new patient
2. They will transfer you to reservations, they will ask you questions re: admission
3. Bed control will contact you as soon as room is available for transport
4. If acute care is needed and no beds are available, must transfer to ED and admit from there

Technical Support

Systems to get set up as you progress through PGY-1:

CON Inbox (Hope Richard and DHTS):

This system is your clinic note documentation interface via Lotus Notes

A-EMR (DHTS/1J RN staff):

This will allow you to electronically prepare/send prescriptions

CareDoc (DHTS, online training)

This is for vital signs on 6300, stepdown and ICU floors. The hospital to use this for VS/I&O/line management.

Radiology/PACS (DHTS)

This will enable to view prelim results and look at the actual radiologic images. (ER consults, pelvic ultrasounds, stat KUB, PICC line placements) Settings can be changed to view DRH images as well.

OR View (DHTS)

This will allow you to check the order and progress of OR cases as the day goes on.

VBAC Counselling:

What are the benefits of attempting a VBAC?

The patient should be counseled that if successful:

- 1) Her recovery time after the vaginal birth is shorter
- 2) She has avoided the risks of major abdominal surgery
- 3) She has a decreased risk of infection after delivery
- 4) She has a decreased risk of blood transfusion
- 5) She has been able to experience a more natural birthing process.

What are the disadvantages / risks of VBAC

(when compared to an elective cesarean section) beyond the normal risks of having a vaginal birth?

The patient should be counseled:

- 1) The biggest risk is that she will need a repeat cesarean section during her labor;
- 2) If she needs a cesarean section during her labor, she has a greater risk of infections and a greater need for blood and/or blood product transfusion;
- 3) There is the possibility that she might need emergency anesthesia. This carries a higher risk than routine anesthesia;
- If she needs a cesarean section during her labor, she has a greater risk of infections and a greater need for blood and/or blood product transfusion;
- 4) There is the possibility that she might need emergency anesthesia. This carries a higher risk than routine anesthesia;
- 5) There is a 0.5 to 1% risk that she could develop a uterine rupture. If she were to develop uterine rupture, other complications could happen. These complications include:
 - a. The need for a hysterectomy and/or other surgery;
 - b. The need for blood and/or blood product transfusions;
 - c. Injury or death to her baby (Approximately 1 out of 2000 babies are injured or die because their mothers have tried a VBAC.).

What are the benefits of having an elective cesarean section? The patient should be counseled:

- 1) She has more control over the planning and timing of her baby's birth;
- 2) She may have the opportunity to schedule the date of her baby's birth;
- 3) She may avoid labor;
- 4) She nearly eliminates (but not entirely eliminates) the risk of uterine rupture.

What are the disadvantages / risk of having an elective cesarean section? The patient should be counseled when compared to a successful VBAC:

- 1) The recovery time is longer;
- 2) She may require more pain medicines after her baby's birth;
- 3) She has the risks of major surgery (these include but are not limited to bleeding, infection, damage to internal organs and/or structures);
- 4) Babies born by elective cesarean section may have a harder time transitioning to newborn life and are at increased risk for short-term breathing problems;
- 5) Every cesarean section that she has increases the risk that with future pregnancies she might develop placenta previa and/or placenta accreta.

In patients who are considering VBAC, overall they should be told that the overall success rate is 65-80%. There are subsets of patients who do not have this success rate. If possible, providers should discuss the prognosis for a successful VBAC with the patient when that patient's individual characteristics are known. The table below lists various success rates as functions of patient characteristics.

If a patient has a low chance of success, and she still desires/insists on a trial of labor, then the provider(s) must document that the patient was counseled concerning the higher risk of failure and despite this the patient choose a course that was against the provider(s) advice.

Trial of Labor Success Rates:

	Total	Previous Dystocia	Previous NRFHT	Previous Malpresentation
Spontaneous Labor	80	71.6	80.5	86.7
Induction	67	57.7	64.5	80.8
Previous vaginal delivery	86.5	81.1	84.1	91.1
No previous vaginal delivery	60.7	51.7	60	74.8
BMI < 30	79.4	70	77.1	87.7
BMI >= 30	67.8	58.4	68.9	79.5
Spontaneous labor and previous vaginal delivery	90.8	87.9	89.9	91.9
Induced and no previous vaginal delivery	51.7	44.7	48.9	69.8
Spontaneous labor and previous vaginal delivery and BMI <30	93.6	93.3	90.5	94.8

Spontaneous labor and previous vaginal delivery and BMI ≥ 30	44.1	39.8	43.3	59.1
---	------	------	------	------

Factors that increase the chance of success of a VBAC include:

- 1) history of a cesarean birth for a reason that is not likely to happen again (e.g. breech);
- 2) Prior one vaginal birth
- 3) at least 18 months between last cesarean birth and the due date for this pregnancy;
- 4) Natural labor (without medications to stimulate contractions);
- 5) pregnancy that is less than 40 weeks.

Factors that decrease the chance of success of a VBAC include:

- 1) induction of labor;
- 2) history of more than one cesarean section (Most providers will not offer an attempt at VBAC if a woman has two or more previous cesarean sections.);
- 3) extreme obesity;
- 4) shorter height;
- 5) older age;
- 6) previous cesarean section done during the second stage of labor secondary to dystocia.

Documentation Requirements

- 2) At the new provider visit, the provider should review the patient's history and cesarean section documentations.
 - a. This thorough review should include;
 - i. Gestational age; ii. Type of delivery; iii. Newborn weight; iv. Location of birth;
 - v. Maternal/newborn complications;
 - vi. Patient's understanding of indication for cesarean;
 - b. Review the operative note to confirm a low transverse cesarean and indication for cesarean;
 - i. If the operative note is not available at the first visit note in the progress notes that counseling needs to be revisited once the operative note is reviewed;
 - ii. If the operative note is unavailable (i.e. outside the US) counsel the patient based on the information provided.
- 3) At the new provider visit, the provider should counsel the patient. This includes;
 - a. Review "Information about Choosing a Vaginal After Cesarean or a

Repeat Cesarean” provided to the patient at their nurse visit;

b. Discuss the options with the patient, With the patient, sign the information sheet;

d. Document in the obstetrical record the discussion and signing;

i. Document in the progress note;

ii. Place entry in problem list;

e. Make a copy of the sheet for the record and give the original to the patient.

4) All Patients requesting a trial of labor/VBAC should be referred for a physician consultation visit. This should be done by 32 weeks’ gestation.

a. Patients at Durham County Health Department may be seen by a Maternal-Fetal Medicine attending at that clinic.

b. Patients at Franklin, Person, and Warren County Health Department Obstetrical Clinics should be referred to the Resident Consultation clinic at Duke.

5) If the patient is not identified as a possible VBAC candidate during the first visit but later she is, then the above should occur as soon as possible during her antenatal care.

6) At 35 to 37 weeks’ gestation;

a. If the patient is opting for repeat cesarean section;

i. Her cesarean section should be scheduled for = 39 0/7 weeks’ gestation

(Please see below for when it is appropriate to schedule the elective repeat cesarean section before 39 0/7 weeks’ gestation.);

ii. The patient should also be scheduled for a “lab only” visit to occur 1 day prior to her surgery. If the patient does not have her pre-op lab work done within 72 hours of her scheduled cesarean, then the patient must arrive at the hospital earlier than normal on day of her surgery.

1. 8:30 AM case -they must arrive no later than 5:30 AM;

2. 10:30 AM case -they must arrive no later than 6:30 AM;

3. 12:30 PM case -they must arrive no later than 8:30 AM.

If the patient is considering VBAC

i. The patient’s information sheet should again be reviewed with her;

ii. This discussion should be documented in the patient’s obstetrical record.

7) At 39-40 weeks if the patient who is considering VBAC has not delivered

a. Perform a cervical exam (effacement, dilation, station, cervical consistency, and cervix position in the vagina);

b. Estimated fetal weight in grams;

c. Determine fetal presentation;

d. Reassess appropriateness for trial of labor vs. repeat cesarean;

e. Consider sweeping membranes at 39 weeks if possible.

8) Induction of labor – If a patient who is considering VBAC, and is now being considered for labor induction (post term management, preeclampsia, diabetes, etc) then she must have a consultation with an MFM attending. That attending

must document the appropriateness of allowing the VBAC or not and document a safety discussion that he/she had with the patient.

****THE ATTENDING MUST WRITE PITOCIN ORDERS FOR VBAC IOL/ AUGMENTATION
NO MISOPROSTOL FOR VBAC IOL**

Breech presentation/Version

COUNSELING / OFFERING A PATIENT EXTERNAL CEPHALIC VERSION

What is it?

Breech presentation complicates 2 to 3 percent of all term deliveries and a higher proportion of preterm deliveries. Breech presentation is more common when a patient has had a breech presentation in an earlier pregnancy. External version (ECV) is the manual turning of a fetus in breech presentation to the cephalic presentation. In an attempt to turn the fetus, one or two providers will push on the fetus through the patient's abdomen and uterus.

Why attempt ECV? – Benefits of ECV

The only benefit of ECV is that if successful, the patient can possibly avoid a cesarean section. Currently, we are not offering an attempt at vaginal delivery to patients who present in labor with a breech fetus. Therefore, if a patient who is carrying a breech fetus wants to avoid a cesarean section, she may elect to attempt ECV.

What is the success rate of ECV?

Overall, the success rate for ECV is approximately 50%.

The following factors increase the success rate:

- 1) Women with several previous deliveries;
 - a. Nulliparous patients have a 40% success rate;
 - b. Parous patients have a 60% success rate;
- 2) Women with a relaxed uterus;
- 3) Women whose breech fetus is not engaged;
- 4) Women with a generous amount of amniotic fluid (although there is a higher rate of reversion to breech).

What are the risks of ECV?

The patient should be told that, overall, ECV is a safe procedure. There are some uncommon risks of ECV that the patient should be made aware:

- 1) Slowing of the fetal heart rate. In approximately 40% of attempts there is a temporary slowing of the fetal heart rate. This is caused by a vagal response due to head compression. This slowing is temporary and is not harmful to the fetus.
- 2) Preterm labor (< 5%);
- 3) Cord entanglement (< 1.5%);
- 4) Need for emergent cesarean section (< 1%);

- 5) Preterm rupture of membranes (< 1%);
- 6) Abruptio placentae (< 1%);
- 7) Fetomaternal hemorrhage (< 1%);
- 8) Rupture of the uterus (rare);
- 9) Injury to the fetus (rare);
- 10) Death of the fetus (rare).

Which patients can be offered ECV?

- 1) Women with a breech presentation;
- 2) Women with a reassuring fetal heart rate tracing (This will be determined when the patient arrives to Labor and Delivery on the day of her attempted ECV.).

What are contraindications to ECV?

- 1) Absolute contraindications for ECV: multiple gestation; contraindications to vaginal delivery (e.g., active herpes simplex virus infection, placenta previa); and nonreassuring fetal heart rate tracings.
- 2) Relative contraindications for ECV (Patients still may be offered ECV but patients must be made aware that there is increased risk for complications and/or a decreased risk of success.): polyhydramnios, oligohydramnios, fetal growth restriction, uterine malformation, fetal anomaly, prior uterine incision

When should the patient attempt ECV, and what is procedure for scheduling ECV?

Patients should be told that the earlier in pregnancy an ECV is attempted, the higher the success rate but the higher the rate the fetus will revert back to breech.

- 1) At greater than 34 weeks' the provider should ultrasound to confirm the presentation or schedule arrangements to confirm the presentation.
- 2) A formal ultrasound should be scheduled between 36-37 weeks' gestation to:
 - a. Re-confirm the breech presentation;
 - b. Screen for fetal anomalies (breech fetuses have a higher rate of anomalies);
 - c. Screen for contraindications to ECV;
- 3) After the formal ultrasound's results are known, the provider should;
 - a. Again discuss the pros and cons of ECV;
 - b. Call Duke Labor and Delivery to schedule the ECV – the ECV should be done ideally between 36 and 38 weeks' gestation, but can be done anytime before labor starts;
 - c. Inform the patient that she MUST BE NPO starting after midnight the day of the ECV and she cannot eat or drink anything until after the procedure. The patient needs to understand that any deviation of this NPO order (other than required medications with a small sip of water) will cause her ECV to be cancelled.
- 4) The provider should NOT offer ECV the same day a breech is discovered. ECV is always an elective procedure and should be treated as such.
- 5) For patients carrying a fetus with growth restriction or carrying a fetus with anomaly, before the ECV is scheduled, the patient's case must be approved by an MFM attending.

6) If the provider does not schedule a formal ultrasound before the ECV is scheduled, then a Maternal-Fetal Medicine attending physician must be consulted and it must be documented why the ECV is scheduled without a formal ultrasound.

What other things should the patient be aware about ECV?

- 1) The procedure is painful. The patient may tell the operators to stop at any time during the procedure.
- 2) she may or may not be offered pain medicine and/or anesthesia during the procedure. This decision will be made by the ECV operators. The providers in the prenatal clinic will NOT and CANNOT make any suggestion about or promise of analgesia or anesthesia.
- 3) she may or may not be offered tocolytics during the procedure. This decision will be made by the ECV operators. The providers in the prenatal clinic will NOT and CANNOT make any suggestion about or promise of tocolytics during the procedure.
- 4) regardless of the success or failure of the procedure, the patient will have to remain in Labor and Delivery for a minimum of 4 hours after the procedure. She will not be allowed to eat or drink anything for the 4 hours.

What will be the disposition of the patient after the attempted ECV?

- 1) If the procedure was successful and there were no complications, most often, the patient will be discharged home. 2) If the procedure was unsuccessful and there were no complications, the providers at the hospital may or may not schedule an elective cesarean section for the patient. She then will be discharge home. She should return to the clinic/health department were she was having her prenatal care. If the hospital providers did not schedule the cesarean section, then it should be scheduled from the clinic/health department.
- 3) Occasionally, there may be obstetrical or medical factors that would necessitate the patient staying afterwards for labor induction or cesarean delivery. If possible these situations should be discussed with and confirmed with a Maternal-Fetal Medicine attending before scheduling the procedure. If the factor(s) could not be foreseen, then the hospital providers will discuss the situation(s) with the patient at that time.
- 4) Regardless of the success or failure of the procedure, there may be complications that would necessitate the patient being transferred to another clinic. These situations will be discussed and the transfers made during the patient's stay at the hospital.

Gynecologic Cancer Staging

Vulvar Cancer
<p>Stage I: tumor confined to the vulva with negative nodes</p> <p>IA: lesion less than or equal to 2cm in size, confined to the vulva or perineum and with stromal invasion of less than or equal to 1.0mm</p> <p>IB: lesions greater than 2cm in size or with stromal invasion greater than 1.0mm but confined to the vulva or perineum</p>
<p>Stage II: tumor of any size with extension to the adjacent perineal structures (1/3 lower urethra, 1/3 lower vagina and/or extension to the anus) with negative nodes</p>
<p>Stage III: tumor of any size with or without extension to the adjacent perineal structures (1/3 lower urethra, 1/3 lower vagina, anus) with positive inguino-femoral lymph nodes</p> <p>IIIA: (i) with 1 lymph node metastasis ($\geq 5\text{mm}$) or (ii) 1-2 lymph node metastasis(es) ($< 5\text{mm}$)</p> <p>IIIB: (i) with 2 or more lymph node metastases ($\geq 5\text{mm}$) or (ii) 3 or more lymph node metastases ($< 5\text{mm}$)</p> <p>IIIC: with positive nodes with extracapsular spread</p>
<p>Stage IV: tumor invades other regional (2/3 upper urethra, 2/3 upper vagina) or distant structures</p> <p>IVA: tumor invades any of the following:</p> <p>(i): upper urethra and/or vaginal mucosa, bladder mucosa, rectal mucosa, or fixed to pelvic bone or</p> <p>(ii): fixed or ulcerated inguino-femoral lymph nodes</p> <p>IVB: any distant metastasis including pelvic lymph nodes</p>

Cervical Cancer

Stage I: the carcinoma is strictly confined to the cervix (extension to the corpus would be disregarded)

IA: invasive carcinoma that can be diagnosed only by microscopy, with deepest invasion ≤ 5 mm and the largest extension ≤ 7 mm.

IA1: measured stromal invasion of ≤ 3.0 mm in depth and extension of ≤ 7.0 mm

IA2: measured stromal invasion of > 3.0 mm and < 5.0 mm with an extension of not more than 7.0 mm

IB: clinically visible lesions limited to the cervix uteri or pre-clinical cancers greater than stage IA.

IB1: clinically visible lesion ≤ 4.0 cm in greatest dimension

IB2: clinically visible lesion > 4.0 cm in greatest dimension

Stage II: cervical carcinoma invades beyond the uterus, but not to the pelvic wall or to the lower third of the vagina

IIA: without parametrial invasion

IIA1: clinically visible lesion ≤ 4.0 cm in greatest dimension

IIA2: clinically visible lesion > 4.0 cm in greatest dimension

IIB: with obvious parametrial invasion

Stage III: the tumor extends to the pelvic wall and/or involves lower third of the vagina and/or causes hydronephrosis or non-functioning kidney

IIIA: tumor involves lower third of the vagina, with no extension to the pelvic wall

IIIB: extension to the pelvic wall and/or hydronephrosis or non-functioning kidney

Stage IV: the carcinoma has extended beyond the true pelvis or has involved (biopsy proven) the mucosa of the bladder or rectum. A bullous edema, as such, does not permit a case to be allotted to stage IV.

IVA: spread of the growth to adjacent organs

IVB: spread to distant organs

Endometrial Cancer

Stage I: tumor confined to the corpus uteri

IA: no or less than half myometrial invasion

IB: invasion equal to or more than half the myometrium

Stage II: tumor invades the cervical stroma, but does not extend beyond the uterus

Stage III: local and/or regional spread of the tumor

IIIA: tumor invades the serosa of the corpus uteri and/or adnexae

IIIB: vaginal and/or parametrial involvement

IIIC: metastases to pelvic and/or para-aortic lymph nodes

IIIC1: positive pelvic nodes

IIIC2: positive paraaortic lymph nodes with or without positive pelvic lymph nodes

Stage IV: tumor invades bladder and/or bowel mucosa, and/or distant metastases

IVA: tumor invasion of bladder and/or bowel mucosa

IVB: distant metastases, including intra-abdominal metastases and/or inguinal lymph nodes

Ovarian Cancer

Stage I - limited to one or both ovaries

IA - involves one ovary; capsule intact; no tumor on ovarian surface; no malignant cells in ascites or peritoneal washings

IB - involves both ovaries; capsule intact; no tumor on ovarian surface; negative washings

IC - tumor limited to ovaries with any of the following: capsule ruptured, tumor on ovarian surface, positive washings

Stage II - pelvic extension or implants

IIA - extension or implants onto uterus or fallopian tube; negative washings

IIB - extension or implants onto other pelvic structures; negative washings

IIC - pelvic extension or implants with positive peritoneal washings

Ovarian Cancer

Stage III - microscopic peritoneal implants outside of the pelvis; or limited to the pelvis with extension to the small bowel or omentum

IIIA - microscopic peritoneal metastases beyond pelvis

IIIB - macroscopic peritoneal metastases beyond pelvis less than 2 cm in size

IIIC - peritoneal metastases beyond pelvis > 2 cm or lymph node metastases

Stage IV - distant metastases to the liver or outside the peritoneal cavity

Antibiotic Protocols

(Oncology and Departmental-wide)

Proper use of prophylactic or therapeutic antibiotics is based on an understanding of the classification below. In general, prophylactic antibiotics are used for “clean contaminated” cases and therapeutic antibiotics are used for “contaminated” and “dirty” cases.

Classification of operative wounds based on degree of microbial contamination	
Classification	Criteria
Clean	Elective, not emergency, non-traumatic, primarily closed; no acute inflammation; no break in technique; respiratory, gastrointestinal, biliary and genitourinary tracts not entered.
Clean-contaminated	Urgent or emergency case that is otherwise clean; elective opening of respiratory, gastrointestinal, biliary or genitourinary tract with minimal spillage (e.g. appendectomy or hysterectomy) not encountering infected urine or bile; minor technique break.
Contaminated	Non-purulent inflammation; gross spillage from gastrointestinal tract; entry into biliary or genitourinary tract in the presence of infected bile or urine; major break in technique; penetrating trauma <4 hours old; chronic open wounds to be grafted or covered.
Dirty	Purulent inflammation (e.g. abscess); preoperative perforation of respiratory, gastrointestinal, biliary or genitourinary tract; penetrating trauma >4 hours old.

The summary below briefly describes the appropriate use of perioperative antibiotics.

Hysterectomy

For vaginal or abdominal hysterectomy, which are considered “clean contaminated” cases, use prophylactic cefazolin or cefoxitin 1-2 g IV (depending on patient weight) during the hour prior to the incision. Re-dosing every 3-4 hours during the procedure is a practice many endorse, but which has only Level B evidence in its favor. There is no evidence of benefit for continuing antibiotics after the case is completed.

For patients with history of anaphylactic hypersensitivity reactions to penicillin:

Doxycycline 100mg IV, or

Metronidazole 500mg IV, or

Clindamycin 600-900 mg IV (depending on patient weight)

For patients with other beta-lactam allergy history, cefazolin may be used.

Infected “dirty” cases

For Gyn procedures in fields with known pre-existing infection, definitive antibiotic treatment for the infection should be begun pre-op in lieu of prophylaxis.

Laparotomy

There is **NO** indication for prophylactic antibiotics in patients undergoing laparotomy, or other “clean” gynecologic surgical procedures. This includes removal of the ovaries without hysterectomy.

Vulvectomy

There is little data on the utility of prophylactic antibiotics in this population. We generally do not use antibiotics for simple wide local excisions. With a more extensive vulvectomy for cancer that may include groin dissection, it seems reasonable to use prophylactic antibiotics.

High-risk cardiac lesions

For patients with high-risk cardiac lesions (eg prosthetic valves, prior endocarditis, known valvular disease, congenital heart malformations, etc), ampicillin/vancomycin + gentamicin is indicated pre-op, and for 2 doses 8 hours apart post-op for most Gyn procedures.

D&C

For D&C pregnancy termination, doxycycline 100mg prior to the procedure is appropriate. For other D&C's, antibiotic prophylaxis is not indicated

General Policy Information

Educational Leave

Each resident is entitled to leave for educational reasons. This includes USMLE Step 3, ACLS, BLS renewal, fulfilling an elected or appointed position in ACOG, attending approved educational courses or presenting a paper at a medical society meeting. It is the responsibility of the resident to inform the Program Director and Admin. Chief Resident at least 1 month in advance in order to provide coverage of assigned duties. If the time off involves call, it is the responsibility of the resident to find coverage for that call and then to inform the Admin. Chief Resident.

Travel/Meeting

The residency program will finance attendance at one national professional meeting for each chief resident. Opportunities for all residents to attending meetings at which they are invited to present are encouraged.

1. Residents must obtain written approval from Drs. Valea and Brown to attend.
2. Coverage must be confirmed before booking travel.
3. Travel arrangements must be booked after approval has been granted
4. Maximum reimbursements for conference attendance is \$1500; excess is the responsibility of the resident. Original receipts must be presented for reimbursement.
5. Conference must be held within the continental USA.
6. Documentation of conference content must be provided for inclusion in the training portfolio.

Interviews

Residents will be allowed interview days as needed with some potential limitations based on patient care and ABOG guidelines. Each resident is responsible for finding call coverage and making up call. Administration and chief residents need to be informed of interview days.

Sick Leave

As an employee of the hospital, sick time is accrued based on time worked. Sick leave is approximately 12 days per year or 1 day per month. In the event of an illness where a resident is unable to work, it is the responsibility of the person calling in sick to contact administration, service chief and chief residents. The resident calling out sick needs to find coverage and is responsible for making up missed call. If a resident is sick for an extended period of time (more than a few days), the program director needs to be informed. Upon return to work, a physician's note is required.

For off-site rotations, residents must contact the supervisor at that location in addition to the Program Director.

Maternity Leave

Maternity leave consists of a total of 6 weeks leave per year. This includes 3 weeks of vacation in addition to 3 weeks of approved paid leave of absence. In order to ensure that all services to continue to run smoothly, discussions regarding necessary time off should be held with the program director and Administrative Chief Residents as soon as possible. Appropriate leave of absence paperwork must be completed.