

## Appendix 1. Risk factors for Conditions that Require Early Ultrasound Screening

*These risk factors, if present, should prompt earlier scheduling for in-person prenatal visit and ultrasound evaluation:*

- Historical factors
  - History of ectopic pregnancy
  - History of bilateral tubal ligation
  - History of tubal reversal
  - History of pelvic inflammatory disorder
  - History of prior endometrial ablation
  - History of hydatidiform mole
  - Previous exposure to diethylstilbesterol
  - Intrauterine device in situ
  - Conception via assisted reproductive technologies
  - History of prior higher-order cesarean deliveries
  - History of early pregnancy loss
  - Maternal age over 40 or under 18 years old
  - Family history of genetic abnormalities
  - Family history of multifetal gestation
  - Significant maternal comorbidity
  - At risk for or history of intimate partner violence
- Symptoms
  - Abdominal or pelvic pain
  - Vaginal bleeding
  - Severe nausea/vomiting
  - Urinary symptoms suspicious for urinary tract infection

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## Appendix 2. Recommended Elements of the Postpartum Comprehensive Telehealth Visit

*The following screening questions should be a part of the comprehensive postpartum telehealth visit, to be held no later than 12 weeks post-delivery:*

- Psychosocial evaluation
  - Mood and emotional well-being, including use of standardized postpartum depression screening questionnaires
  - Sleep and fatigue
  - Screening for intimate partner violence
  - Food and shelter security
- Infant care
  - Feeding modality
  - Breast health
  - Infant care
- Reproductive health
  - Sexuality
  - Contraception
  - Birth spacing
- Physical recovery
- Chronic disease management
- Planning for healthcare maintenance follow-up, including:
  - Pap smear, if indicated
  - Mammogram, if indicated
  - Vaccination plans
  - Follow-up for gestational diabetes, with plan for postpartum glucose testing (see Table 1)
  - Follow-up for preeclampsia, with referral for monitoring of blood pressure and cardiovascular health

Data from Optimizing postpartum care. ACOG Committee Opinion 736. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;131:e140-50.

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**Appendix 3: Summary of Elements of Routine Obstetrical Care, With Prepandemic Paradigm, Suggested Modifications, and Additional Precautions**

Obstetrical care	Routine paradigm	Pandemic-adjusted modifications	Additional precautions
<b>Early pregnancy care (1–9)</b>			
Early prenatal visit and ultrasound screening	<ul style="list-style-type: none"> <li>• Initial prenatal visit recommended to take place in the first trimester</li> <li>• Routine first-trimester imaging recommended to occur before 14 weeks GA</li> </ul>	<ul style="list-style-type: none"> <li>• Telehealth obstetrical intake at &lt;11 weeks</li> <li>• Initial prenatal visit and ultrasound at 11-13 6/7 weeks GA</li> <li>• Early ultrasounds can be avoided in the low-risk patient</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate for risk factors for miscarriage, ectopic pregnancy, cesarean scar pregnancy, molar pregnancy, multifetal gestations</li> <li>• Patient’s desire for continuation of pregnancy should be evaluated</li> <li>• Patients who are Rh-D unknown should have early confirmation of Rh-D status if bleeding is noted</li> <li>• Assess desire for telegenetics consultation</li> </ul>
Comorbidities management	<ul style="list-style-type: none"> <li>• History is taken at the first in-person prenatal visit</li> <li>• Patients at risk for pregnancy complications, including those with medical comorbidities are recommended to be seen “as early as possible”</li> </ul>	<ul style="list-style-type: none"> <li>• The first telehealth visit should occur as early as possible to evaluate for maternal comorbidities</li> </ul>	<ul style="list-style-type: none"> <li>• Medications should be adjusted to avoid teratogenicity</li> <li>• Appropriate subspecialist referrals should be made. These consultations can also be performed via telehealth</li> </ul>

Family planning	<ul style="list-style-type: none"> <li>• Family planning is an essential component of reproductive health care</li> <li>• Measures restricting abortions are in place in certain regions</li> </ul>	<ul style="list-style-type: none"> <li>• The first telehealth visit should occur as early as possible to evaluate for desire to continue the pregnancy.</li> </ul>	<ul style="list-style-type: none"> <li>• In areas of restricted abortion access, early ultrasound is of particular importance to afford the patient opportunities for intervention.</li> <li>• Telehealth can be applied for no-touch terminations</li> <li>• An additional referral network should be established to ensure that patients have adequate access to care</li> </ul>
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**Antepartum care**

**Preeclampsia and Gestational Hypertension (10–11)**

Diagnosis	<ul style="list-style-type: none"> <li>• In office blood pressure (BP) and urine screening</li> <li>• Inpatient or outpatient diagnostic confirmation if the suspicion arises</li> <li>• USPSTF has found no increase in adverse outcomes related to preeclampsia among patients with fewer prenatal visits</li> </ul>	<ul style="list-style-type: none"> <li>• Home screening via BP logs and symptoms can be used in lieu of frequent prenatal visits. Low-risk patients should perform checks on a weekly basis, and high-risk patients on a daily or as needed basis.</li> <li>• Home screening should be augmented by occasional telehealth or in-person prenatal visits</li> <li>• Diagnostic confirmation can be made on an outpatient basis,</li> </ul>	<ul style="list-style-type: none"> <li>• Home sphygmomanometers should be pre-calibrated. Upper arm cuffs are recommended, but wrist cuffs can be considered if upper arm measurements are not feasible, the monitor is directly over the radial artery, and the wrist is in neutral position at the level of the heart.</li> <li>• A report of abnormal BP or symptom should trigger an in-person visit to confirm BP cuff accuracy, laboratory evaluation, and fetal assessment.</li> </ul>
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		unless the patient has severe features	
Management	<ul style="list-style-type: none"> <li>• In preeclampsia without severe features, expectant management is used until 37 weeks GA.</li> <li>• In preeclampsia with severe features, inpatient management to 34 weeks GA is recommended, followed by delivery.</li> <li>• ACOG recommends serial growth ultrasound, weekly antepartum testing, close monitoring of BPs, and weekly laboratory tests.</li> </ul>	<ul style="list-style-type: none"> <li>• In preeclampsia without severe features, expectant management can be used until 37 weeks GA.(unchanged)</li> <li>• In preeclampsia with severe features, <i>outpatient</i> management can be considered up to 34 weeks if clinically stable.</li> <li>• Frequency of surveillance and timing of delivery may be adjusted as needed based on the clinician’s risk assessment</li> </ul>	<ul style="list-style-type: none"> <li>• In-person visits and fetal surveillance may be staggered on alternate days with telehealth reviews of BP logs and symptoms</li> <li>• The utility of weekly laboratory studies for preeclampsia in decision-making regarding delivery has also been called into question</li> <li>• Written and detailed instructions on calling guidelines should be provided. Patients must have access to a direct communication line. Patients must be reliable, understand potential risks, and have rapid hospital access.</li> </ul>
Delivery	<ul style="list-style-type: none"> <li>• Intrapartum and 24-hour postpartum magnesium sulfate seizure prophylaxis</li> </ul>	<ul style="list-style-type: none"> <li>• If clinically stable, outpatient cervical ripening protocols can be considered in the appropriate candidate to minimize the duration of admission.</li> <li>• Limitation of postpartum magnesium to 6-12 hours in clinically stable patients</li> </ul>	<ul style="list-style-type: none"> <li>• Elimination of magnesium sulfate for seizure prophylaxis has been advocated among patients without severe features.</li> </ul>
<b>Fetal Growth Restriction (12–18)</b>			

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Diagnosis	<ul style="list-style-type: none"> <li>• In low-risk patients, fundal height screening is performed during prenatal visits after 24 weeks GA</li> <li>• In high-risk patients, regular sonographic growth assessments are recommended, with frequency not specified</li> <li>• Diagnostic criteria for FGR is set at EFW or AC &lt;10th percentile</li> </ul>	<ul style="list-style-type: none"> <li>• Tailor frequency of sonographic growth assessment (ever 4-8 weeks) to associated relative risk of stillbirth</li> <li>• Consider use of more stringent criteria for FGR to determine entry into additional surveillance</li> </ul>	<ul style="list-style-type: none"> <li>• No study has demonstrated effectiveness of home fundal height evaluation</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Growth assessments at 2-4 week intervals.</li> <li>• Weekly antenatal testing with Doppler, to be initiated when intervention would be performed</li> </ul>	<ul style="list-style-type: none"> <li>• Growth assessments at 3-4 week intervals.</li> <li>• Surveillance and umbilical artery Doppler studies at 1-3 week intervals, if Dopplers remain normal</li> <li>• If Dopplers become elevated, recommend twice weekly Dopplers.</li> </ul>	<ul style="list-style-type: none"> <li>• Telemedicine review of fetal movement logs may be used in alternating intervals with in-person surveillance</li> </ul>
Delivery	<ul style="list-style-type: none"> <li>• Delivery at 38-39 6/7 weeks GA for isolated FGR</li> <li>• Delivery at 32-37 6/7 weeks GA for FGR with additional risk factors for adverse outcome</li> </ul>	<ul style="list-style-type: none"> <li>• Delivery may be shifted to the latter part of the recommended gestational age ranges to promote cervical ripening and decrease in-hospital duration of induction, using clinician judgment on a case-by-case basis</li> </ul>	<ul style="list-style-type: none"> <li>• FGR is not an automatic indication for cesarean delivery, particularly as this has the potential to prolong hospitalization.</li> <li>• The threshold for recommending a cesarean delivery during labor with non-reassuring fetal status remote from delivery may be lowered in order to</li> </ul>

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			avoid the need for emergent conversion to cesarean. Emergent patient transport and intubation can increase the risk viral aerosolization and healthcare worker exposure.
<b>Preterm Labor (19–21)</b>			
Diagnosis	<ul style="list-style-type: none"> <li>• Preterm contractions with cervical change</li> </ul>	<ul style="list-style-type: none"> <li>• Preterm contractions with cervical dilation 2cm or greater</li> </ul>	<ul style="list-style-type: none"> <li>• Fetal fibronectin may be used in triaging patients to outpatient management</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Tocolysis until completion of antenatal steroid administration</li> </ul>	<ul style="list-style-type: none"> <li>• Consider outpatient management after completion of steroids if clinically stable without further or advanced cervical dilation</li> </ul>	<ul style="list-style-type: none"> <li>• Patients must be reliable, understand potential risks, and have rapid hospital access.</li> </ul>
<b>Preterm premature rupture of membranes (22–24)</b>			
Management	<ul style="list-style-type: none"> <li>• Inpatient expectant management if delivery not otherwise indicated</li> </ul>	<ul style="list-style-type: none"> <li>• Inpatient expectant management until completion of latency antibiotics</li> <li>• Consideration of outpatient expectant management after latency antibiotics with daily telehealth visits</li> </ul>	<ul style="list-style-type: none"> <li>• Patients should conduct q6-8 hour temperature and heart rate assessments, fetal movement logs</li> <li>• Written and detailed instructions on calling guidelines should be provided. Patients must have access to a direct communication line. Patients must be reliable, understand potential risks, and have rapid hospital access.</li> </ul>

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Delivery	<ul style="list-style-type: none"> <li>• Delivery at 34 weeks GA</li> </ul>	<ul style="list-style-type: none"> <li>• Expectant management to 36 6/7 weeks GA in the well-selected patient may improve obstetric outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Delivering in the late preterm period may decrease the length of hospital stay for the maternal-neonatal dyad</li> </ul>
<b>Diabetes mellitus in pregnancy (25–29)</b>			
Diagnosis (Gestational Diabetes Mellitus [GDM])	<ul style="list-style-type: none"> <li>• Stepwise laboratory screening via 1-hour 50-gram and reflex 3-hour 100-gram glucose load</li> </ul>	<ul style="list-style-type: none"> <li>• One step assessment among patients with risk factors.</li> </ul>	<ul style="list-style-type: none"> <li>• Options for alternate testing modalities include the 2-hour 75-gram glucose load, or the 1-hour 50-gram load without reflexing to the 3-hour confirmatory test</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Serial in-person glucose log evaluation</li> <li>• A2GDM and pregestational DM: Serial fetal growth assessment.</li> <li>• A2GDM and pregestational: Weekly or twice weekly surveillance after 32 weeks GA.</li> </ul>	<ul style="list-style-type: none"> <li>• Frequent telehealth visits for diabetic education, nutritional and glucose monitoring.</li> <li>• A2GDM and pregestational DM: Surveillance schedule should be tailored to glucose control. If a patient is well-controlled, antenatal testing may be delayed beyond 32 weeks GA.</li> <li>• No additional surveillance is necessary for A1GDM.</li> </ul>	<ul style="list-style-type: none"> <li>• If the patient is diagnosed with “GDM” using the alternate screening modalities, but glucose logs are within normal limits after testing for a period of time, fingerstick testing can be stopped or decreased in frequency.</li> <li>• Group prenatal care via teleconferencing can be considered for diabetes education. In-person group prenatal care should be halted during social distancing.</li> </ul>
Delivery	<ul style="list-style-type: none"> <li>• A1GDM: Expectant management until 41 weeks GA.</li> <li>• A2GDM or pregestational DM: Delivery at 39 weeks GA, or</li> </ul>	<ul style="list-style-type: none"> <li>• Unchanged, but can consider delivering towards the latter part of the recommended range.</li> </ul>	<ul style="list-style-type: none"> <li>• Delivery planning should be made to decrease the length of hospital stay for the maternal-neonatal dyad</li> </ul>

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	37-38 6/7 weeks GA with poor glucose control		
Postpartum	<ul style="list-style-type: none"> <li>• Postpartum screening for persistent DM with fasting blood glucose and 2-hour glucose after a 75-gram glucose load, performed at 4-12 weeks postpartum</li> </ul>	<ul style="list-style-type: none"> <li>• Can consider a 75-g oral glucose tolerance test during the delivery hospitalization</li> </ul>	<ul style="list-style-type: none"> <li>• Measurement of hemoglobin A1c alone is not a sensitive test to detect abnormal glucose tolerance in postpartum period.</li> </ul>
<b>Antenatal bleeding</b>			
Management	<ul style="list-style-type: none"> <li>• Inpatient expectant management if hemodynamically stable with reassuring fetal status.</li> <li>• Can consider outpatient management after prolonged observation.</li> <li>• Steroids can be considered if GA is appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>• Outpatient management if medically stable. Patients should have frequent virtual assessments of symptoms and fetal movement logs, alternating with in-person fetal evaluation.</li> <li>• Steroids should be considered with caution (Table 3)</li> </ul>	<ul style="list-style-type: none"> <li>• Outpatient management should be considered only with absence of bleeding or evidence of preterm labor.</li> <li>• Patients must be reliable, understand potential risks, and have rapid hospital access. Providers must provide access to a direct provider line and strict calling guidelines.</li> </ul>
Delivery	<ul style="list-style-type: none"> <li>• Expectant management until bleeding recurrence or planned preterm delivery.</li> </ul>	<ul style="list-style-type: none"> <li>• Planned preterm delivery may be indicated if safe expectant management cannot be performed.</li> </ul>	<ul style="list-style-type: none"> <li>• Timing of delivery remains per ACOG recommendations on medically indicated deliveries, but providers can err on the latter part of the GA range if the patient is stable</li> </ul>

### Intrapartum care

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<b>Labor and Delivery (30–31)</b>			
Bed management	<ul style="list-style-type: none"> <li>• Admission in active labor</li> </ul>	<ul style="list-style-type: none"> <li>• Unchanged</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership team must ensure adequate staffing to maintain mother:nurse ratios</li> </ul>
Anesthesia	<ul style="list-style-type: none"> <li>• Upon request for pain management</li> </ul>	<ul style="list-style-type: none"> <li>• Upon request</li> <li>• Early regional analgesia if increased likelihood of cesarean</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid nitrous oxide in some pandemics (see Table 3)</li> </ul>
<b>Induction of labor (32)</b>			
Bed management	<ul style="list-style-type: none"> <li>• Elective induction permissible at 39 weeks or as medically indicated</li> </ul>	<ul style="list-style-type: none"> <li>• Medically indicated inductions only. Minimize elective inductions.</li> <li>• Outpatient cervical ripening protocols can be considered.</li> </ul>	
Blood products	<ul style="list-style-type: none"> <li>• Available as per unit protocol</li> </ul>	<ul style="list-style-type: none"> <li>• Continual assessment for hemorrhage risk for early intervention and minimization of blood product usage.</li> </ul>	
<b>Complex surgical deliveries:</b> such as placenta accreta spectrum; previous abdominal surgery; previous transplant; large fibroids; refusal of blood products			
Bed management	<ul style="list-style-type: none"> <li>• Delivery timing as indicated by the pathology</li> </ul>	<ul style="list-style-type: none"> <li>• Delivery timing balancing risk of 1) emergent presentation and delivery, 2) resource availability on unit, and 3) reduction in duration of</li> </ul>	<ul style="list-style-type: none"> <li>• Delivery should not be delayed beyond the recommended GA range for each pathology, but can be moved towards the latter part if the patient is clinically stable.</li> </ul>

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		maternal and neonatal hospitalization	
Anesthesia	<ul style="list-style-type: none"> <li>• In person anesthesia consults as indicated</li> </ul>	<ul style="list-style-type: none"> <li>• Use of telehealth anesthesia consults</li> <li>• Multidisciplinary team preparations via teleconference</li> <li>• Consideration of likelihood of conversion to general anesthesia in pre-operative anesthetic planning</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate PPE should be donned per pandemic-specific recommendations</li> </ul>
Blood products	<ul style="list-style-type: none"> <li>• Available as per unit protocol</li> </ul>	<ul style="list-style-type: none"> <li>• Preoperative optimization of hemoglobin</li> <li>• Use of cell salvage, vascular occlusion/embolization, and tranexamic acid in patients without pro-thrombotic risks, (Table 3)</li> <li>• Rapid escalation to hysterectomy if indicated</li> </ul>	<ul style="list-style-type: none"> <li>• The decreased blood bank supply chain during pandemics can significantly affect blood product availability. Open lines of communication is recommended with the blood bank to prepare for upcoming complex deliveries.</li> </ul>

**Postpartum care**

**Postpartum hemorrhage (33–34)**

Anesthesia	<ul style="list-style-type: none"> <li>• Awareness of high-risk patients</li> </ul>	<ul style="list-style-type: none"> <li>• Early anesthesia consultation in high risk patients</li> <li>• Ensure vascular access</li> </ul>	
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Blood products	<ul style="list-style-type: none"> <li>• Available as per unit protocol</li> </ul>	<ul style="list-style-type: none"> <li>• Early utilization of tranexamic acid (in patients without pro-thrombotic risks; Table 3), balloon compression, or vascular embolization</li> <li>• Rapid escalation to hysterectomy if indicated</li> </ul>	<ul style="list-style-type: none"> <li>• The decreased blood blank supply chain during pandemics can significantly affect blood product availability. Open lines of communication is recommended with the blood bank to prepare for upcoming complex deliveries.</li> </ul>
<b>Post-cesarean delivery monitoring (35–39)</b>			
Postoperative recovery	<ul style="list-style-type: none"> <li>• Enhanced recovery after surgery (ERAS) protocols are being increasingly adopted</li> </ul>	<ul style="list-style-type: none"> <li>• ERAS protocol should be encouraged to decrease duration of hospital stay</li> </ul>	
Incision monitoring	<ul style="list-style-type: none"> <li>• In-person follow-up at 1-3 weeks for wound check</li> </ul>	<ul style="list-style-type: none"> <li>• Telehealth based evaluation at 1-3 weeks</li> </ul>	<ul style="list-style-type: none"> <li>• Ideally, a visual component to the telehealth visit (via still image of the incision or video capabilities) is recommended.</li> <li>• It is important to note that not all patients will be able to self-evaluate their incision.</li> <li>• Calling guidelines need to be reviewed.</li> </ul>
<b>Postpartum care of Hypertensive disorders (40–44)</b>			
Blood pressure monitoring	<ul style="list-style-type: none"> <li>• BP care and symptoms assessment at 1-3 weeks</li> </ul>	<ul style="list-style-type: none"> <li>• Telehealth based evaluation</li> <li>• Provision of home-based pre-calibrated sphygmomanometer.</li> </ul>	<ul style="list-style-type: none"> <li>• More frequent home BP checks may be necessary if the patient is discharged early or requires antihypertensive medications.</li> </ul>

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			<ul style="list-style-type: none"> <li>• Written and detailed instructions on calling guidelines should be provided. Patients must be reliable and have rapid hospital access.</li> </ul>
<b>Postpartum depression and mood disorders (45–52)</b>			
Depression screening	<ul style="list-style-type: none"> <li>• Screening for postpartum depression throughout the postpartum period</li> </ul>	<ul style="list-style-type: none"> <li>• Screening should be performed via telehealth</li> <li>• Referral to tele-mental health services as indicated</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of mood disorders significantly increased during pandemics and requires additional surveillance</li> <li>• Obstetricians should partner with pediatricians to expand screening, as this can effectively be incorporated into well-child checks</li> <li>• Assure referral and treatment services are available for those with positive screening results</li> </ul>
<b>Contraception access (53–54)</b>			
Contraception	<ul style="list-style-type: none"> <li>• LARCs are often placed at postpartum outpatient visits</li> </ul>	<ul style="list-style-type: none"> <li>• Post-delivery LARC should be offered to decrease need for another in-person visit</li> </ul>	<ul style="list-style-type: none"> <li>• Antepartum and postpartum counseling regarding long-acting reversible contraceptives (LARC) increases acceptance. LARC improves optimal pregnancy spacing nearly 4 times over barrier contraception</li> <li>• Those starting other types of contraception (even in 4-6 weeks) should be provided these medications on discharge to avoid need to return to</li> </ul>

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			office or pharmacy and to avoid delayed starts
Postpartum bilateral tubal ligations	<ul style="list-style-type: none"> <li>• Routinely performed postpartum in some centers</li> </ul>	<ul style="list-style-type: none"> <li>• Access becomes limited in some centers, as it is felt to be a non-essential by some organizations</li> <li>• If unavailable, alternative contraception should be encouraged and arranged</li> </ul>	

**Obstetrical care is divided into four blocks: early pregnancy care, antepartum care, intrapartum care, postpartum care). The overall goal is to balance community mitigation protocols with ensuring adequate screening.**

### References

1. AAP Committee on Fetus and Newborn. Guidelines for perinatal care, 8th ed. American Academy of Pediatrics and the American College of Obstetricians and Gynecologists. 2017.
2. Salomon LJ, Alfirevic Z, Bilardo CM, Chalouhi GE, Ghi T, Kagan KO, Lau TK, Papageorghiou AT, Raine-Fenning NJ, Stirnemann J, Suresh S, Tabor A, Timor-Tritsch IE, Toi A, Yeo G. ISUOG Practice Guidelines: performance of first-trimester fetal ultrasound scan. *Ultrasound Obstet Gynecol* 2013; 41: 102–113.
3. AIUM-ACR-ACOG-SMFM-SRU Practice Parameter for the Performance of Standard Diagnostic Obstetric Ultrasound Examinations. *J Ultrasound Med*. 2018 Nov;37(11):E13-E24.
4. Methods for Estimating the Due Date. Committee Opinion No. 700. American College of Obstetricians and Gynecologists. *Obstet Gynecol*. 2017 May;129(5):e150-e154.
5. Nettleman MD, Brewer J, Stafford M. Scheduling the first prenatal visit: office-based delays. *Am J Obstet Gynecol* 2010;203:207.e1-3.
6. Committee Opinion No. 693: Counseling About Genetic Testing and Communication of Genetic Test Results. *Obstet Gynecol*. 2017 Apr;129(4):e96-e101.
7. Vrečar I, Hristovski D, Peterlin B. Telegenetics: an Update on Availability and Use of Telemedicine in Clinical Genetics Service. *J Med Syst*. 2017 Feb;41(2):21. Epub 2016 Dec 17.

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8. Society for Maternal-Fetal Medicine (SMFM). Norton ME, Biggio JR, Kuller JA, Blackwell SC. The role of ultrasound in women who undergo cell-free DNA screening. *Am J Obstet Gynecol.* 2017 Mar;216(3):B2-B7.
9. Karanth L, Jaafar SH, Kanagasabai S, Nair NS, Barua A. Anti-D administration after spontaneous miscarriage for preventing Rhesus alloimmunisation. *Cochrane Database Syst Rev.* 2013 Mar 28;(3):CD009617.
10. Henderson JT, Thompson JH, Burda BU, Cantor A, Beil T, Whitlock EP. Screening for Preeclampsia: A Systematic Evidence Review for the U.S. Preventive Services Task Force [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2017 Apr. Report No.: 14-05211-EF-1.
11. Aquino M, Munce S, Griffith J, Pakosh M, Munnery M, Seto E. Exploring the Use of Telemonitoring for Patients at High Risk for Hypertensive Disorders of Pregnancy in the Antepartum and Postpartum Periods: Scoping Review. *JMIR Mhealth Uhealth* 2020;8(4):e15095
12. Fetal growth restriction. ACOG Practice Bulletin No. 204. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2019;133:e97–109.
13. McCowan LM, Figueras F, Anderson NH. Evidence-based national guidelines for the management of suspected fetal growth restriction: comparison, consensus, and controversy. *Am J Obstet Gynecol.* 2018 Feb;218(2S):S855-S868.
14. Gevaerd Martins J, Biggio JR, Abuhmad A. Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. Society for Maternal Fetal Medicine. Accessed on smfm.org on May 12, 2020.
15. Early severe fetal growth restriction: Evaluation and treatment. <https://www.smfm.org/publications/89-early-severe-fetal-growth-restriction-evaluation-and-treatment>. (Retrieved on May 12, 2020.)
16. Mongelli M, Ek S, Tambyrajia R. Screening for fetal growth restriction: a mathematical model of the effect of time interval and ultrasound error. *Obstet Gynecol* 1998;92:908–12.
17. Gordijn S.J. Beune I.M. Thilaganathan B. et al. Consensus definition of fetal growth restriction: a Delphi procedure. *Ultrasound Obstet Gynecol.* 2016; 48: 333-339.
18. The Investigation and Management of the Small-for-Gestational-Age Fetus. Royal College of Obstetricians and Gynaecologists Green-Top Guideline No. 31. [https://www.rcog.org.uk/globalassets/documents/guidelines/gtg\\_31.pdf](https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_31.pdf) Accessed April 27, 2020. (Retrieved on May 12, 2020.)
19. Management of preterm labor. ACOG Practice Bulletin No. 171. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2016;128:e155–64.
20. Fuchs IB, Henrich W, Osthues K, Dudenhausen JW. Sonographic cervical length in singleton pregnancies with intact membranes presenting with threatened preterm labor. *Ultrasound Obstet Gynecol* 2004;24:554-7.
21. Berghella V, Saccone G. Fetal fibronectin testing for reducing the risk of preterm birth. *Cochrane Database Syst Rev.* 2019 Jul 29;7:CD006843.

Duzyj CM, Thornburg LL, Han CS. Practice modification for pandemics: a model for surge planning in obstetrics. *Obstet Gynecol* 2020;136.

The authors provided this information as a supplement to their article.

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22. Mercer BM. Preterm premature rupture of the membranes. *Obstet Gynecol* 2003;101:178–93.
23. Abou El Senoun G, Dowswell T, Mousa HA. Planned home versus hospital care for preterm prelabour rupture of the membranes (PPROM) prior to 37 weeks' gestation. *Cochrane Database of Systematic Reviews* 2014, Issue 4. Art. No.: CD008053.
24. Bond DM, Middleton P, Levett KM, van der Ham DP, Crowther CA, Buchanan SL, et al. Planned early birth versus expectant management for women with preterm prelabour rupture of membranes prior to 37 weeks' gestation for improving pregnancy outcome. *Cochrane Database of Systematic Reviews* 2017, Issue 3. Art. No.: CD004735.
25. Bartholomew ML, Soules K, Church K, Shaha S, Burlingame J, Graham G, Sauvage L, Zalud I. Managing Diabetes in Pregnancy Using Cell Phone/Internet Technology. *Clin Diabetes*. 2015 Oct;33(4):169-74.
26. Group prenatal care. ACOG Committee Opinion No 721. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018; 131:3104-8.
27. Gestational diabetes mellitus. ACOG Practice Bulletin No. 190. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018;131:e49–64.
28. Waters TP, Kim SY, Werner E, Dinglas C, Carter EB, Patel R, Sharma AJ, Catalano P. Should women with gestational diabetes be screened at delivery hospitalization for type 2 diabetes? *Am J Obstet Gynecol*. 2020 Jan;222(1):73.e1-73.e11. Epub 2019 Jul 24.
29. Su X, Zhang Z, Qu X, Tian Y, Zhang G. Hemoglobin A1c for diagnosis of postpartum abnormal glucose tolerance among women with gestational diabetes mellitus: diagnostic meta-analysis. *PLoS One*. 2014 Jul 11;9(7):e102144. eCollection 2014.
30. Planned home birth. ACOG Committee Opinion No. 697. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2017;129:e117–22.
31. Obstetric analgesia and anesthesia. ACOG Practice Bulletin No. 209. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2019;133:e208–25.
32. Son SL, Benson AE, Hart Hayes E, Subramaniam A, Clark EAS, Einerson BD. Outpatient Cervical Ripening: A Cost-Minimization and Threshold Analysis. *Am J Perinatol*. 2020 Feb;37(3):245-251. Epub 2019 Aug 20.
33. [https://www.who.int/bloodsafety/publications/WHO\\_Guidelines\\_on\\_Pandemic\\_Influenza\\_and\\_Blood\\_Supply.pdf](https://www.who.int/bloodsafety/publications/WHO_Guidelines_on_Pandemic_Influenza_and_Blood_Supply.pdf) (Retrieved May 12, 2020)
34. Postpartum hemorrhage. ACOG Practice Bulletin No. 183. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2017;130:e168–86.
35. Kummerow Broman K, Oyefule OO, Phillips SE, Baucom RB, Holzman MD, Sharp KW, Pierce RA, Nealon WH, Poulouse BK. Postoperative Care Using a Secure Online Patient Portal: Changing the (Inter)Face of General Surgery, *Journal of the American College of Surgeons*, Volume 221, Issue 6, 2015, Pages 1057-1066, ISSN 1072-7515,

Duzyj CM, Thornburg LL, Han CS. Practice modification for pandemics: a model for surge planning in obstetrics. *Obstet Gynecol* 2020;136.

The authors provided this information as a supplement to their article.

36. Wirthlin DJ, Buradagunta S, Edwards RA, Brewster DC, Cambria RP, Gertler JP, LaMuraglia GM, Jordan DE, Kvedar JC, Abbott WM. Telemedicine in vascular surgery: Feasibility of digital imaging for remote management of wounds, *Journal of Vascular Surgery*, Volume 27, Issue 6, 1998, Pages 1089-1100, ISSN 0741-5214,
37. Totty JP, Harwood AE, Wallace T, Smith GE, and Chetter IC. Use of photograph-based telemedicine in postoperative wound assessment to diagnose or exclude surgical site infection. *Journal of Wound Care* 2018 27:3, 128-135.
38. Pirris SM, Monaco EA, Tyler-Kabara EC. Telemedicine Through the Use of Digital Cell Phone Technology in Pediatric Neurosurgery: A Case Series, *Neurosurgery*, Volume 66, Issue 5, May 2010, Pages 999–1004,
39. Gunter R, Fernandes-Taylor S, Mahnke A, Awoyinka L, Schroeder C, Wiseman J, Sullivan S, Bennett K, Greenberg C, Kent KC. Evaluating Patient Usability of an Image-Based Mobile Health Platform for Postoperative Wound Monitoring. *JMIR Mhealth Uhealth* 2016;4(3):e113 URL: <https://mhealth.jmir.org/2016/3/e113>
40. Gestational hypertension and preeclampsia. ACOG Practice Bulletin No. 202. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2019;133:e1–25
41. Bernstein PS, Martin JN Jr, Barton JR, Shields LE, Druzin ML, Scavone BM, Frost J, Morton CH, Ruhl C, Slager J, Tsigas EZ, Jaffer S, Menard MK. National Partnership for Maternal Safety: Consensus Bundle on Severe Hypertension During Pregnancy and the Postpartum Period. *Obstet Gynecol*. 2017 Aug;130(2):347-357.
42. Aquino M, Munce S, Griffith J, Pakosh M, Munnery M, Seto E. Exploring the Use of Telemonitoring for Patients at High Risk for Hypertensive Disorders of Pregnancy in the Antepartum and Postpartum Periods: Scoping Review. *JMIR Mhealth Uhealth* 2020;8(4):e15095
43. Hoppe KK, Williams M, Thomas N, et al. Telehealth with remote blood pressure monitoring for postpartum hypertension: A prospective single-cohort feasibility study. *Pregnancy Hypertens*. 2019;15:171–176.
44. APA Hauspurg, Alisse MD; Lemon, Lara S. PharmD, PhD; Quinn, Beth A. RN; Binstock, Anna MD; Larkin, Jacob MD; Beigi, Richard H. MD; Watson, Andrew R. MD; Simhan, Hyagriv N. MD A Postpartum Remote Hypertension Monitoring Protocol Implemented at the Hospital Level, *Obstetrics & Gynecology*: October 2019 - Volume 134 - Issue 4 - p 685-691
45. Horwitz SM, Kelleher KJ, Stein RE, et al. . Barriers to the identification and management of psychosocial issues in children and maternal depression. *Pediatrics* 2007;119:e208–e218
46. Field T. Postpartum depression effects on early interactions, parenting, and safety practices: A review. *Infant Behav Dev* 2010;33:1–6
47. Yao H , Chen J-H , Xu Y-F . Patients with mental health disorders in the COVID-19 epidemic. *Lancet Psychiatry* 2020;7:e21
48. [https://www.today.com/parents/covid-19-pandemic-leads-more-postpartum-depression-t179221?cid=sm\\_npd\\_td\\_fb\\_pa](https://www.today.com/parents/covid-19-pandemic-leads-more-postpartum-depression-t179221?cid=sm_npd_td_fb_pa)
49. Olin SC, Kerker B, Stein RE, et al. Can Postpartum Depression Be Managed in Pediatric Primary Care?. *J Womens Health (Larchmt)*. 2016;25(4):381–390.

Duzyj CM, Thornburg LL, Han CS. Practice modification for pandemics: a model for surge planning in obstetrics. *Obstet Gynecol* 2020;136.

The authors provided this information as a supplement to their article.

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50. Nair, U., Armfield, N. R., Chatfield, M. D., & Edirippulige, S. (2018). The effectiveness of telemedicine interventions to address maternal depression: A systematic review and meta-analysis. *Journal of Telemedicine and Telecare*, 24(10), 639–650
51. Berryhill MB, Culmer N, Williams N, Halli-Tierney A, Betancourt A, Roberts H, and King M. *Telemedicine and e-Health*. Jun 2019.435-446.
52. La Porte, L.M., Kim, J.J., Adams, M.G. et al. Feasibility of perinatal mood screening and text messaging on patients' personal smartphones. *Arch Womens Ment Health* (2019).
53. Moniz M, Chang T, Heisler M, Dalton VK. Immediate postpartum long-acting reversible contraception: the time is now. *Contraception*. 2017;95(4):335–338.
54. Zuniga, C., Grossman, D., Harrell, S., Blanchard, K., & Grindlay, K. (2019). Breaking down barriers to birth control access: An assessment of online platforms prescribing birth control in the USA. *Journal of Telemedicine and Telecare*. J Telemed Telecare. 2019 Jan 21:1357633X18824828

Duzyj CM, Thornburg LL, Han CS. Practice modification for pandemics: a model for surge planning in obstetrics. *Obstet Gynecol* 2020;136.

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