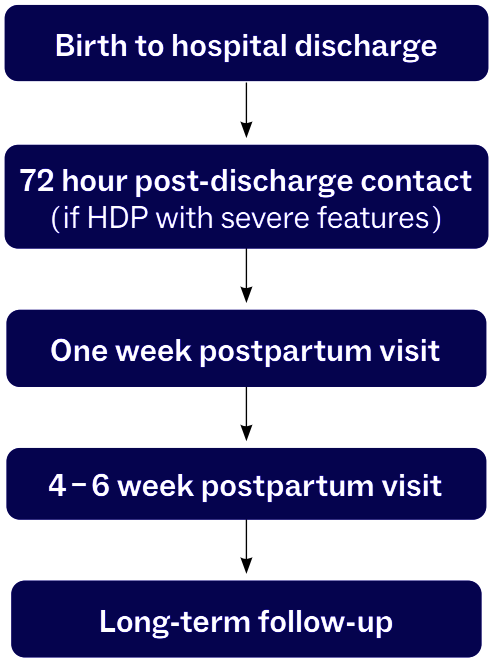
Postpartum Follow Up of Patients with Hypertensive Disorders of Pregnancy (HDP)

Canyons, Desert, and Peaks Regions 2025

This document is a collaboration of Intermountain Health's Cardiovascular and Women's Health and Neonatal Clinical Programs, as well as the Pharmacy and Kidney Services Clinical Shared Service Lines. It provides first-year postpartum follow-up guidance for providers managing patients with hypertensive disorders of pregnancy (HDPs). These disorders include chronic hypertension, gestational hypertension, preeclampsia, HELLP syndrome, and eclampsia. Guidance for HDP patients presenting to the ED, can be found in Mild Hypertension, Postpartum and Severe Hypertension, Postpartum



What's Inside?

Key Postpartum Follow-up [1–4]

- Provide comprehensive follow-up for patients with HDP which includes patient education, blood pressure (BP) management, and medication titration.
- Ensure all patients with HDP obtain BP cuff at discharge, along with instructions for accurate monitoring. Implement remote patient monitoring (RPM) when possible.
- Contact patients with HDP with severe features, *(C) on pg 2,* within 72 hours post-discharge for a symptom and BP check.
- Schedule a follow-up visit for **ALL** HDP patients 7–10 days after delivery.
- Educate all patients with HDP on the maternal risks associated with HDP, including potential cardiovascular outcomes following delivery and the risk of recurrent HDP in future pregnancies. See Discussion on pg 2
- Advise patients with current or past HDP on the use of daily low-dose aspirin (81–162 mg/day), initiated at ~12 weeks gestation in subsequent pregnancies, to prevent recurrence.

Intermountain Health

See *Executive Summary* of this document.

Quality Measurements

- Return to ED
- Hospital readmission
- 72-hr check-in for HDP with severe features
- One week visit for HDP patients
- Blood pressure control at 3 months

Primary Evidence Base

American College of Cardiology: Postpartum Hypertension Clinic Development Toolkit

ACOG Practice Bulletin Number 222, 2020: Gestational Hypertension and Preeclampsia

American Heart Association: Opportunities in the Postpartum Period to Reduce Cardiovascular Disease Risk after Adverse Pregnancy Outcomes

HDP Postpartum follow-up: Birth to 72 hours post-discharge

Patient with HDP (A) gives birth

Before Discharge

- BP target goal **≤140/90,** begin antihypertensives (D) if needed.
- Consider a 5–day course of furosemide (B) to aid in blood pressure normalization for patients with HDP, regardless of severity, in addition to other antihypertensive medications.
- Ensure access to BP cuff with instructions for monitoring and recording BP 1–2X per day. If well controlled after 2 weeks, decrease to 2–3x per week. OR Enroll in remote home monitoring program if available.
- Patient handout: *High BP in Pregnancy: What you need to know* / Spanish.

Did patient exhibit ANY severe features of HDP (C) ?

Yes

No

OB team contact by phone/in-person within 72 hrs post-discharge for symptom and BP check[13]

- SBP ≥160 or DBP ≥110?
- Severe headache, visual disturbances, right upper quadrant pain, shortness of breath, or frothy cough?
- Fever > 38°C (100.4°F)?
- Excessive depression or anxiety?
- Other concerns?

No to ALL

Yes to ANY

Ensure the patient visits in-office or ED for further evaluation. Initiate or adjust medication as needed based on patient condition or concerns..

Proceed to One Week Visit (pg 3)

(A) Hypertension Disorders of Pregnancy (HDP)

- Chronic hypertension
- Gestational hypertension
- Preeclampsia
- Preeclampsia with severe features
  - HELLP syndrome
  - Eclampsia

See UpToDate Preeclampsia: Clinical features and diagnosis Table 6. for clinical definitions

(B) Furosemide [5]

- Assess baseline potassium and renal function
- Prescribe oral furosemide; 20 mg, once per day for 5 days
- Recommend potassium-rich foods (dried fruit, bananas, etc.)
- Test for hypokalemia and decreased kidney function (BMP) within 7 days

(C) Severe Features of HDP [1,3]

- New-onset headache unresponsive to medications
- Visual disturbances
- Severe persistent right upper quadrant or epigastric pain unresponsive to medications
- Shortness of breath
- SBP ≥160 or DBP ≥110
- Renal insufficiency (creatinine >1.1mg/dL)
- Thrombocytopenia (<100 x 10^9/L)
- Hepatic dysfunction (AST or ALT ≥2x upper limit of normal)
- Pulmonary edema

For postpartum patients that present to the ED See *Mild Hypertension, Postpartum* and *Severe Hypertension, Postpartum*

(D) Antihypertensive Quick Guide for Postpartum patients (first-line recommendations **bolded**)

Patients on contraception and breastfeeding	Patients on contraception and not breastfeeding	Patients NOT on contraception, regardless of breastfeeding status
• Ca^{++} channel blockers: **nifedipine, amlodipine**, verapamil • Beta blockers: **labetalol**, metoprolol, carvedilol • ACE inhibitors: **enalapril**, captopril • Diuretics: hydrochlorothiazide, spironolactone • ARB: candesartan • Other: hydralazine See details in *Antihypertensive Pharmacotherapy in Breastfeeding pg 6*	Standard antihypertensives *Intermountain Hypertension Guidelines*	• Ca^{++} channel blockers: **nifedipine, amlodipine**, verapamil • Beta blockers: **labetalol**, metoprolol, carvedilol • Diuretics: hydrochlorothiazide • Other: hydralazine Avoid all teratogenic agents given risk of pregnancy

HDP Postpartum Follow-up: One Week Postpartum Visit

In-person (preferred) or remote by obstetric provider

Assess	• Vitals including BP and BMI • OB history • Signs or symptoms of high blood pressure or other cardiac condition • Mental health status • Social determinants of health
Discuss	• Patients comfort level/knowledge of home measurement of BP • Breastfeeding status • Contraception. Consider contraceptive options that do not contain estrogen, as estrogen can raise blood pressure. For guidance see: UpToDate Contraception: Hormonal contraception and blood pressure; CDC's US Medical Eligibility for Contraceptive Use, 2024[13] OR Call MFM at IMED and ask for PrePPARE Clinic. In Peaks contact Cardio-obstetrics
Document	• Add hypertensive disorder of pregnancy to problem list
Blood Pressure Management **Target ≤140/90**	• Review home blood pressure record and manage hypertensive medication; See *Antihypertensive Pharmacotherapy in Breastfeeding Individuals* pg 6 for first-, second,- and third-line recommendations and instructions for breastfeeding patients. If patient is not breastfeeding and not on contraception consider pg 2 (D). If patient is not breastfeeding but is on contraception, use general hypertension guidelines. – If average BP is 10–20 below target consider down titration of hypertensive medication (See *Downtitration of First-line Antihypertensive Medications* pg 8) – If average BP is at target continue antihypertensive medications at current levels – If average BP is above target consider initiation or up-titration of hypertensive medication (See *Uptitration of First-line Antihypertensive medications* pg 8)
Labs	• Perform any labs required for medication prescribed at discharge • If patient exhibited any severe features of HDP see pg 2 (C) order: – CBC and CMP – UPCR (urine protein to creatinine ratio) • If heart failure is suspected, draw NTproBNP or BNP. If elevated, order ECG and maternal echocardiogram.
Education and Follow-up See full list of educational resource on page 8	• Schedule four to six-week follow-up appointment and other follow-up as needed • Counsel regarding long-term risks of HDP and importance of a healthy lifestyle (see discussion below) • Review *High Blood Pressure in Pregnancy: What you need to know* English/Spanish • Review *Home Blood Pressure Monitoring* • For more complete list of patient education resources, see pg 8

Cardiovascular Risk in Patients with HDP

HDPs are strongly associated with severe maternal complications during pregnancy, and are a leading cause of pregnancy-related death in the United States.[1]

Minority groups and economically disadvantaged individuals exhibit higher rates of HDP, with longer-lasting hypertension.
The prevalence of HDP was highest among Non-Hispanic Black women, Non-Hispanic American Indian and Alaska Native (AI/AN) women, and women aged > 35 years, who reside in zip codes in the lowest median household income quartile.[6] Research also indicates that after birth, Black women have significantly higher blood pressures that improve at a slower rate than White women.[7]

Individuals with a history of HDPs have an increased and graded risk of long-term cardiovascular disease.

- Several systematic reviews and meta-analyses have linked preeclampsia with an increased risk of cardiovascular disease (hypertension, myocardial infarction, congestive heart failure), cerebrovascular events (stroke), peripheral arterial disease, and cardiovascular mortality later in life, with an **estimated doubling of odds** compared with women unaffected by preeclampsia.[8]
- Meta-regression analysis reveals a graded relationship between the severity of preeclampsia or eclampsia and the risk of cardiac disease:
  Mild preeclampsia: RR, 2.00; 95% CI [1.83–2.19]
  Moderate Preeclampsia: RR, 2.99; 95% CI [2.51–3.58]
  Severe Preeclampsia; RR, 5.36; 95% CI, [3.96 – 7.27][9]

HDP Postpartum Follow-up: Four to Six Week Postpartum Visit

In-person with obstetric provider

Assess	• Vitals including BP and BMI • OB history	• Mental health status • Social determinants of health
Discuss	• Contraception. Consider contraceptive opetions that do not contain estrogen, as estrogen can raise blood pressure. For guidance see: UpToDate Contraception: Hormonal contraception and blood pressure; CDC's US Medical Eligibility for Contraceptive Use, 2024[13] OR Call MFM at IMED and ask for PrePPARE Clinic. In Peaks contact Cardio-obstetrics • Breastfeeding status	
Document	• Add hypertensive disorder of pregnancy to problem list, if not already added	
Blood Pressure Management **Target ≤130/80**	• Review home blood pressure record and manage hypertensive medication; See *Antihypertensive Pharmacotherapy in Breastfeeding Individuals* pg 6 for first-, second,- and third-line recommendations and instructions for breastfeeding patients. If patient is not breastfeeding and not on contraception consider pg 2 (D). If patient is not breastfeeding but is on contraception, use general hypertension guidelines. – If average BP is 10–20 below target consider down titration of hypertensive medication (See *Downtitration of First-line Antihypertensive Medications* pg 8) – If average BP is at target continue antihypertensive medications at current levels – If average BP is above target consider initiation or up-titration of hypertensive medication (See *Uptitration of First-line Antihypertensive medications* pg 8)	
Labs	• Assess proteinuria (protein:creatinine ratio) if evidence of proteinuria during pregnancy. Can order a Kidney Risk Score, which includes eGFR, and albumin:creatinine ratio. See description in *CKD stages 1-3b* • Basic Metabolic Panel (BMP)	• Diabetes screening: 2-hour 75-gram oral glucose tolerance test (preferred) , fasting blood sugar, or HgbA1c • If heart failure is suspected, draw NTproBNP or BNP. If elevated, order ECG and maternal echocardiogram.
Education and Counsel	• Reinforce the importance of regular follow-up with the patient's primary care provider for ongoing hypertension management. Facilitate PCP follow-up 3 months postpartum for patients currently on antihypertensive medication, and 6 months postpartum for those not on medication. • Risk of HDP in future pregnancies. • Use of low-dose aspirin (81 –162 mg/day) in future pregnancy to reduce risk (starting at ~12–weeks gestation) • Counsel regarding long-term risks of HDP and importance of a healthy lifestyle (see pg 3) • Reinforce importance of optimal lifestyle (Life's Essential 8) • For more complete list of patient education resources, see pg 8	
When to refer	**Cardiology** • Stage III HTN (SBP ≥ 180 and/or DBP ≥ 120) or HTN resistant to treatment • Cardiovascular condition (e.g. peripartum cardiomyopathy, spontaneous coronary artery dissection, previous myocardial infarction/cerebrovascular accident, heart failure, valve disease, or arrhythmia) • Elevated NTproBNP or BNP, and/or ECG or echocardiogram abnormalities • High-risk comorbidities (e.g. systemic lupus erythematosus) • Any signs/symptoms of cardiovascular disease (e.g. palpitations, shortness of breath, chest pain, edema)	**Nephrology** • Proteinuria >500 mg/24 hours • eGFR < 60 mL/min/1.73 m^2 • Urine protein/creatinine ratio > 0.5 mg/mg • 2 or 5–year Kidney Risk Score ≥ 3% (EMR or online calculator) • Persistent hematuria

HDP Postpartum Follow-up: Long-term Follow-up

In-person with primary care provider

Timing	• If on hypertensive medication: **3 months, 6 months** , and **one year postpartum** • If not on hypertensive medications: **6 months** and **one year postpartum**	
Blood Pressure Management **Target ≤130/80**	• Review home blood pressure record and manage hypertensive medication; See *Antihypertensive Pharmacotherapy in Breastfeeding Individuals* pg 6 for first-, second,- and third-line recommendations and instructions for breastfeeding patients. If patient is not breastfeeding and not on contraception consider pg 2 (D). If patient is not breastfeeding but is on contraception, use general hypertension guidelines. – If average BP is 10–20 below target consider down titration of hypertensive medication (See *Downtitration of First-line Antihypertensive Medications* pg 8). – If average BP is at target continue antihypertensive medications at current levels . – If average BP is above target consider initiation or up-titration of hypertensive medication (See *Uptitration of First-line Antihypertensive medications* pg 8). • Consider enrolling patients in existing or emerging hypertension pathways in your local area.	
Measure Future ASCVD Risk ACC ASCVD Risk Estimator Plus or AHA PREVENT Online Calculator	Assess for risk enhancers such as: • Family history of premature cardiovascular disease • Diabetes, including a history of gestational diabetes • Obesity with a BMI > 30 • Metabolic disease	• Smoking • Hyperlipidemia • Chronic kidney disease or renal dysfunction • Prior chest radiation or cardiotoxic chemotherapy • Rheumatologic / autoimmune disorders
Labs and Other Testing (if not conducted earlier in postpartum phase)	• Assess proteinuria (protein:creatinine ratio) if evidence of proteinuria during pregnancy; can order a Kidney Risk Score, which includes eGFR, and albumin:creatinine ratio. See description in *CKD stages 1-3b.* • If heart failure is suspected, draw NTproBNP or BNP. If elevated, order ECG and maternal echocardiogram.	• Basic Metabolic panel • Diabetes screening: 2-hour 75-gram oral glucose tolerance test (preferred), fasting blood sugar, or HgbA1c • Lipid panel (if not done in past year) • Consider LPa (Lipoprotein A) if never done • Order Coronary Artery Calcium (CAC) if patient >40 with family history of premature CVD, elevated LPa, or hyperlipidemia (not meeting criteria for statins)
Education and Counsel	• Risk of HDP in future pregnancies • Use of low-dose aspirin (81 –162 mg/day) in future pregnancy to reduce risk (starting at ~12–weeks gestation) • Counsel regarding long-term risks of HDP and importance of a healthy lifestyle (see pg 3) • Reinforce importance of optimal lifestyle (Life's Essential 8) • For more complete list of patient education resources, see pg 8	
When to refer	**Cardiology** • Stage III HTN (SBP ≥ 180 and/or DBP ≥ 120) or HTN resistant to treatment • Cardiovascular condition (e.g. peripartum cardiomyopathy, spontaneous coronary artery dissection, previous myocardial infarction/cerebrovascular accident, heart failure, valve disease, or arrhythmia) • Elevated NTproBNP or BNP, and/or ECG or echocardiogram abnormalities • High-risk comorbidities (e.g. systemic lupus erythematosus) • Any signs/symptoms of cardiovascular disease (e.g. palpitations, shortness of breath, chest pain) • Elevated LPa • CAC score >0	**Nephrology** • Proteinuria >500 mg/24 hours • eGFR <60 mL/min/1.73 m^2 • Urine protein/creatinine ratio > 0.5 mg/mg • 2 or 5–year Kidney Risk Score ≥3% (EMR or online calculator) • Persistent hematuria

Antihypertensive Pharmacotherapy in Breastfeeding Individuals [3,10,11]

Medication	Dosing	Labs	Lactation Info (Briggs)*	Infant Safety	Notes
Nifedipine (1st line)	30 mg ER daily; up to 120 mg daily	N/A	Low amounts transferred to breast milk, primarily in maternal doses > 30 mg/day (Probably compatible)	No adverse effects in infants	May be used to treat Raynaud's phenomenon of the nipple
Amlodipine (1st line)	5 mg daily; up to 10 mg daily	N/A	Low amounts transferred to breast milk (Compatible)	No adverse effects in infants	
Enalapril (1st line) ONLY IF PATIENT IS ON CONTRACEPTION; DRUG IS A TERATOGEN	5 mg daily up to 40 mg daily	BMP within 2-4 weeks of initiation and with any dose change	Low amounts transferred to breast milk (Probably compatible)	No adverse effects in infants	Monitor for hyperkalemia, acute kidney injury
Labetalol (1st line)	100 or 200 mg TID; increase as needed every 2–3 days by 100 mg TID; up to 2400 mg/day	N/A	Low amounts transferred to breast milk (Probably compatible)	No adverse effects in infants Other agents preferred if preterm infant Monitor infants for bradycardia, hypotension, symptoms of α/β blockade	May predispose nursing mothers to Raynaud's phenomenon of the nipple
Hydralazine (2nd line)	10 mg QID; up to 50 mg QID	CBC within 2 weeks of initiating or after dose increase	Limited milk level and infant serum level data however long history of use postpartum indicates acceptable (Probably compatible)	No adverse effects on infants	Monitor for anemia and thrombocytopenia
Hydrochlorothiazide (2nd line)	12.5 mg daily; up to 50 mg daily	BMP within 2 weeks of initiating or after dose increase	Doses < 50 mg are acceptable during lactation (Compatible)	No adverse effects in infants expected	Larger doses (> 25 mg/day) may decrease breast milk production Monitor for hypokalemia
Verapamil (2nd line)	120 mg ER daily; 40–80 mg IR TID Max dose 360 mg/day	N/A	Low levels in breast milk and infant serum (Probably compatible)	No adverse effects in infants expected Monitor infants for bradycardia, hypotension, symptoms of α/β blockade	
Spironolactone (2nd line) ONLY IF PATIENT IS ON CONTRACEPTION; DRUG IS A TERATOGEN	12.5 mg daily; up to 100 mg daily	BMP within 2 weeks of initiating or after dose increase	Poorly excreted into breast milk (Probably compatible)	No adverse effects in infants	Monitor for hyperkalemia Intense diuresis can suppress lactation however, unlikely for spironolactone alone to do so

(Table continues on next page)

Antihypertensive Pharmacotherapy in Breastfeeding (continued) [3,10,11]

Medication	Dosing	Labs	Lactation Info (Briggs)*	Infant Safety	Notes
Metoprolol tartrate (3rd line)	50 mg BID; up to 200 mg BID	N/A	Low levels are found in breast milk (Considered compatible with breastfeeding)	No adverse effects in infants, limited data Monitor infants for bradycardia, hypotension, symptoms of α/β blockade	Consider waiting 3-4 hours after doses to breastfeed
Carvedilol (3rd line)	6.25 mg BID; up to 25 mg BID	N/A	Low levels are found in breast milk (Probably compatible)	Limited safety data Monitor infants for bradycardia, hypotension, symptoms of α/β blockade	

The medications below should only be used when safer alternatives are not possible. They may be harmful to both a fetus and/or breastfeeding infant and should be used with caution. Limited date for their use during breastfeeding is available.

Bisoprolol	2.5 mg daily; up to 20 mg daily	N/A	Likely not passed into breast milk however limited data in humans (Potential toxicity)	Limited data but maternal doses of 5 mg daily are likely safe; no adverse effects to infant Monitor infants for bradycardia, hypotension, symptoms of α/β blockade	Consider other beta blocker with more safety data unless required for mother
Chlorthalidone	12.5 mg daily; up to 50 mg daily	BMP within within 2 weeks of initiating or after dose increase	Present in breast milk (Compatible)	Slow drug clearance may lead to accumulation in the infant	Monitor for hypokalemia May reduce milk production
Diltiazem	60 mg BID; up to 180 mg BID	N/A	Low amounts transferred to breast milk (Probably compatible)	Limited data; no adverse effects in infants Monitor infants for bradycardia, hypotension, symptoms of α/β blockade	
Candesartan ONLY IF PATIENT IS ON CONTRACEPTION; DRUG IS A TERATOGEN	8 mg daily; up to 32 mg daily	BMP within 2 weeks of initiating or after dose increase	Poorly excreted into breast milk (Probably compatible)	Limited Data	Monitor for hyperkalemia, acute kidney injury
Captopril ONLY IF PATIENT IS ON CONTRACEPTION; DRUG IS A TERATOGEN	25 mg BID or TID; up to 50 mg TID	BMP, CBC within 2 weeks of initiating or after dose increase	Low amounts transferred to breast milk (Compatible)	Limited data	Monitor for hyperkalemia, acute kidney injury

***Brigg's Categories**

Compatable: Either the drug is not excreted in clinically significant amounts into human breast milk or its use during lactation does not, or is not expected to, cause toxicity in a nursing infant.

Probably Compatable: Either there are no human data or the human data are limited. The available data suggest that the drug does not represent a significant risk to a nursing infant.

Potential Toxicity: Either there are no human data or the human data are limited. The characteristics of the drug suggest that it could represent a clinically significant risk to a nursing infant. Breastfeeding is not recommended.

Any medications with Brigg's Categories of *Human Data Suggest Potential Toxicity*, *Potential Toxicity to Mother*, *Contraindicated*, or instructions *Hold Breastfeeding* were omitted from this table. Contact Cardiologist or Clinical Pharmacist if other hypertensives are needed in breastfeeding mothers.

Downtitration of First-line Antihypertensive Medications [3]

Medication	Dosing	Titration Interval in Stable Patients
Nifedipine	Decrease by 30 mg daily; If on 30mg HOLD and monitor for 1 week before ending.	5 – 7 days
Amlodipine	Decrease dose by half	5 – 7 days
Enalapril	Decrease dose by half	5 – 7 days
Labetalol	Decrease by 100 – 200 mg BID	2 – 3 days
Combined Labetalol and Nifedipine	If nifedipine dose >90 mg, begin with decrease in nifedipine as above; Otherwise begin with labetalol decrease as above	

Adapted from American College of Cardiology: Postpartum Hypertension Clinic Development Toolkit

Uptitration of First-line Antihypertensive Medications [3]

Medication	Instructions
Nifedipine	Increase by 30 mg / day every 5 – 7 days as needed. Total maximum of 120 mg / day. Consider adding a second antihypertensive agent if 90 mg / day is not sufficient.
Amlodipine	Double dose once after 5 – 7 days. Total Maximum of 10 mg / day. Consider adding a second antihypertensive agent if maximum is not sufficient.
Enalapril	Double dose every 5 – 7 days as needed. Maximum 40 mg / day (20 mg BID). Consider adding a second hypertensive agent if 20 mg / day is not sufficient.
Labetalol	Increases as needed by 100 mg TID every 2 – 3 days as needed. Total maximum of 2400 mg / day. Consider adding a second antihypertensive agent if 400 mg TID is not sufficient.

Adapted from American College of Cardiology: Postpartum Hypertension Clinic Development Toolkit

Patient Education Resources

Education Resources and Links

Hypertension Disorders of Pregnancy	• *High Blood Pressure in Pregnancy: What you need to know* English / Spanish • CDC Million Hearts: Hypertension Disorders of Pregnancy	• NIH / NLM Medline Plus *High Blood Pressure in Pregnancy (English)* / *(Spanish)*
Postpartum Preeclampsia	• Preeclampsia Foundation; Postpartum Preeclampsia (English / Spanish)	
Measuring Blood Pressure	• AHA; Home Blood Pressure Monitoring • AHA; High Blood Pressure Tools and Resources	• BP basics (English / Spanish) • BP Tracker (English / Spanish)
Healthy Eating	• Blood Pressure and the DASH Diet (English / Spanish) • The Mediterranean Eating Style (English / Spanish) • Live Well, Eat Well (English / Spanish)	• Snack Wisely (English / Spanish) • Traffic Light Eating Plan (English / Spanish) • Eat Meals Together (English / Spanish)
Healthy Lifestyle	• Life's Essential 8 • 8 to LiVe By Habit Builder (English / Spanish) • Move More (English / Spanish) • Sit Less and Limit Screen Time (English / Spanish)	• Stress Less (English / Spanish) • Get enough Sleep (English / Spanish) • Sleeping Well (English / Spanish)

Find other Intermountain Patient Education Handouts in both English and Spanish here.

References

1. Gestational Hypertension and Preeclampsia: ACOG Practice Bulletin, Number 222. *Obstet Gynecol.* 2020;135(6):e237-e260. doi:10.1097/AOG.0000000000003891
2. Lewey J, Beckie TM, Brown HL, et al. Opportunities in the postpartum period to reduce cardiovascular disease risk after adverse pregnancy outcomes: a scientific statement from the American Heart Association. *Circulation.* 2024;149(7):e330-e346. doi:10.1161/CIR.0000000000001212
3. American College of Cardiology. Postpartum hypertension clinic development toolkit. https://www.acc.org/HTNinPregnancy Accessed 12/20/2024/
4. Poon LC, Nguyen-Hoang L, Smith GN, et al. Hypertensive disorders of pregnancy and long-term cardiovascular health: FIGO Best Practice Advice. Int J Gynaecol Obstet. 2023;160 Suppl 1:22-34. doi:10.1002/ijgo.14540
5. Lopes Perdigao J, Lewey J, Hirshberg A, et al. Furosemide for accelerated recovery of blood pressure postpartum in women with a hypertensive disorder of pregnancy: A Randomized Controlled Trial. Hypertension. 2021;77(5):1517-1524. doi:10.1161/HYPERTENSIONAHA.120.16133
6. Ford ND, Cox S, Ko JY, et al. Hypertensive disorders in pregnancy and mortality at delivery hospitalization - United States, 2017-2019. *MMWR Morb Mortal Wkly Rep.* 2022;71(17):585-591. Published 2022 Apr 29. doi:10.15585/mmwr.mm7117a
7. Hauspurg A, Lemon L, Cabrera C, et al. Racial differences in postpartum blood pressure trajectories among women after a hypertensive disorder of pregnancy. *JAMA Netw Open.* 2020;3(12):e2030815. Published 2020 Dec 1. doi:10.1001/jamanetworkopen.2020.30815
8. Freaney PM, Khan SS, Lloyd-Jones DM, Stone NJ. The role of sex-specific risk factors in the risk assessment of atherosclerotic cardiovascular disease for primary prevention in women. *Curr Atheroscler Rep.* 2020;22(9):46. Published 2020 Jul 16. doi:10.1007/s11883-020-00864-6
9. McDonald SD, Malinowski A, Zhou Q, Yusuf S, Devereaux PJ. Cardiovascular sequelae of preeclampsia/eclampsia: a systematic review and meta-analyses. *Am Heart J.* 2008;156(5):918-930. doi:10.1016/j.ahj.2008.06.042
10. Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK501922/ Accessed 12/23/24
11. Briggs GG, Freeeman RK, Tower CV, et al. *Brigg's Drugs in Pregnancy and Lactation: A Reference Guide to Fetal and Neonatal Risk.* 12th ed. Lippincott Williams & Williams; 2021, https://www.wolterskluwer.com/en/solutions/ovid/briggs-drugs-in-pregnancy-and-lactation-a-reference-guide-to-fetal-and-neonatal-risk-730, Accessed 12/23/24
12. Nguyen AT, Curtis KM, Tepper NK, et al. U.S. Medical Eligibility Criteria for Contraceptive Use, 2024. MMWR Recomm Rep 2024;73(No. RR-4):1–126. DOI: http://dx.doi.org/10.15585/mmwr.rr7304a1
13. Society for Maternal-Fetal Medicine (SMFM), Gibson KS, Combs CA, et al. Society for Maternal-Fetal Medicine Special Statement: Quality metric for timely postpartum follow-up after severe hypertension. Am J Obstet Gynecol. 2022;227(3):B2-B8. doi:10.1016/j.ajog.2022.05.045

Clinical Guideline Expert Consultants

Donna Dizon-Townson, MD, CPHQ;
Medical Director for Quality in Obstetrics and MFM (Canyons)

Kirstin Hesterberg, DO, FACC;
Non-invasive Cardiologist, Cardio-Obstetrics (Peaks)

Sarah Iannacone, PharmD, BCACP
Advanced Clinical Pharmacist

Kismet Rasmusson, DNP, FNP, FAHA;
Clinical and Program Development APP, Cardiology

Heidi Thompson, PhD;
Senior Medical Writer

Anitha Vijayan, MD;

Senior Medical Director, Intermountain Health Kidney Services

Program Responsibilities

Owner	Cardiovascular Clinical Program
Consulting	Women's Health and Neonatal Clinical Program
	Primary and Preventative Care Clinical Program
	Kidney Services
	Pharmacy

This CPM presents a model of best care based on the best available scientific evidence at the time of publication. It is not a prescription for every physician or every patient, nor does it replace clinical judgment. All statements, protocols, and recommendations herein are viewed as transitory and iterative. Although physicians are encouraged to follow the CPM to help focus on and measure quality, deviations are a means for discovering improvements in patient care and expanding the knowledge base. Send feedback to Cardiovascular Clinical Program Manager, Suzanne Carlile; suzanne.s.carlile@imail.org

Intermountain Health