JOHNS HOPKINS HEALTH PLANS	Johns Hopkins Health Plans **Medical Policy Manual** **Medical Policy**	*Policy Number*	CMS24.07
		Effective Date	08/01/2023
		Approval Date	05/21/2023
	Subject **High Risk Obstetrical Home Care**	*Supersedes Date*	N/A
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This document applies to the following Participating Organizations:

EHP Priority Partners

Keywords: Gestational Diabetes, Home Care, Hyperemesis Gravidarum, Preeclampsia

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I. ACTION

X	New Policy	
	Revising Policy Number	
	Superseding Policy Number	
	Retiring Policy Number	

II. POLICY DISCLAIMER

Johns Hopkins Health Plans (JHHP) provides a full spectrum of health care products and services for Advantage MD, Employer Health Programs, Johns Hopkins Health Plan of Virginia Inc., Priority Partners, and US Family Health Plan. Each line of business possesses its own unique contract, benefits, regulations, and regulators' clinical guidelines that supersede the information outlined in this policy.

III. POLICY

For Employer Health Programs (EHP) refer to:

- Plan specific Summary Plan Descriptions (SPD's)

For Priority Partners (PPMCO) refer to: Code of Maryland Regulations

- Code of Maryland Regulations (COMAR) 10.67.06.21 Benefits - Pregnancy-Related Services
- Code of Maryland Regulations (COMAR) 10.67.06.05 Benefits - Home Health Services

IV. POLICY CRITERIA

A. When benefits are provided under the member's contract, JHHP considers high risk obstetrical home care services medically necessary for the following indications when ALL of the specific criteria are met:

1. Diabetes in Pregnancy:
   a. Eligibility Criteria:
      i. Diagnosis of gestational or pre-gestational diabetes; AND,
      ii. Daily insulin injections or insulin pump; AND,
      iii. Unable to reach target goals for blood glucose
   b. Duration of Services:
      i. An initial course of up to 14 days is considered medically necessary.
      ii. Additional courses of up to 14 day spans are considered medically necessary when criteria 1. a. i.-iii. continues to be met, and there is no evidence of nonadherence to the program and/or therapy nonadherence.
   c. Discontinuation of Services:
      i. Member able to self-manage blood sugar and insulin administration; AND,
      ii. Member able to maintain target goals for blood glucose according to ordering clinician, the majority of the time; OR,
      iii. Documentation of nonadherence to the program and/or therapy nonadherence

2. At-Risk for Preeclampsia:
   a. Eligibility Criteria:
      i. Gestational Hypertension:
         • Systolic blood pressure of 140 mm Hg or more or a diastolic blood pressure of 90 mm Hg or more, or both, on 2 occasions at least 4 hours apart after 20 weeks of gestation in a member with a previously normal blood pressure; AND,
         • Absence of proteinuria; OR,
      ii. Chronic Hypertension with unstable or elevated blood pressure; OR,
      iii. History of preeclampsia at < 34 weeks gestation during a previous pregnancy
   b. Duration of Services:
      i. An initial course of up to 14 days is considered medically necessary
      ii. Additional courses of up to 14 day spans are considered medically necessary when Eligibility Criteria 2. a. i.-iii. continues to be met, and there is no evidence of nonadherence to the program and/or therapy nonadherence
   c. Discontinuation of Services:
      i. Greater than 14 days postpartum; OR,
      ii. Documentation of nonadherence to the program and/or therapy nonadherence

3. Preeclampsia:
   a. Eligibility Criteria:
      i. Diagnosed with preeclampsia without *severe features (refer to Definitions)* ; AND,
      ii. Systolic blood pressure 140 mm Hg or more or a diastolic blood pressure of 90 mm Hg or more, or both, on two occasions at least 4 hours apart after 20 weeks of gestation in a member with a previously normal blood pressure
   b. Duration of Services:
      i. An initial course of up to 14 days is considered medically necessary

ii. Additional courses of up to 14 day spans are considered medically necessary for preeclampsia *without severe features (refer to Definitions)*
iii. Course of up to 14 days postpartum is considered medically necessary

c. Discontinuation of Services:
i. Preeclampsia with *severe features (refer to Definitions)* necessitating admission/delivery; OR,
ii. Greater than 14 days postpartum; OR,
iii. Documentation of nonadherence to the program and/or therapy nonadherence

4. Nausea and Vomiting in Pregnancy-Antiemetic Infusion:
a. Eligibility Criteria:
i. Metoclopramide or Ondansetron infusion therapy when ALL of the following criteria are met:
- Intractable vomiting/hyperemesis gravidarum with documented metabolic imbalances; AND,
- 2 or more of the following:
  - Poor response to first line therapies and/or failed attempts of oral antiemetic and/or suppositories
  - Documented ineffectiveness of non-pharmacologic therapies (e.g., dietary changes, ginger, acupressure)
  - 5% pre-pregnancy weight loss
  - Moderate (4.0 mmol/L) to large (8.0-16 mmol/L) urine ketones, or blood ketones 1.6 mmol/L or greater
  - One or more emergency room visits for intravenous (IV) hydration

b. Duration of Services:
i. Initial request of 14 days is considered medically necessary
ii. Additional courses of up to 14 day spans are considered medically necessary when vomiting is uncontrolled

c. Discontinuation of Services:
i. Adequate fluid intake and oral nutrition established; AND,
ii. Able to tolerate oral antiemetic medication, when indicated; AND,
iii. Vomiting is controlled; OR,
iv. Nonadherence to the program and/or therapy nonadherence

5. Nausea and Vomiting in Pregnancy- IV Hydration Therapy:
a. Eligibility Criteria:
i. Hyperemesis gravidarum, AND;
ii. Antiemetics infusion therapy, AND;
iii. Uncontrolled vomiting resulting in dehydration

b. Duration of Services:
i. An initial course of up to 14 days is considered medically necessary
ii. Additional courses of up to 14 day spans are considered medically necessary when vomiting is uncontrolled

c. Discontinuation of Services:
i. Adequate fluid intake and oral nutrition established; AND,
ii. Able to tolerate oral antiemetic medication, when indicated; AND,
iii. Vomiting is controlled; OR,
iv. Nonadherence to the program and/or therapy nonadherence

B. Unless benefits are provided under the member's contract, JHHP considers the following to be unproven and not medically necessary:

1. Administration of 17-Alpha-Hydroxyprogesterone Caproate (Makena®) for the prevention of preterm labor *_Note_ On April 6, 2023, the U.S. Food and Drug Administration (FDA) withdrew approval of Makena, and its generics. The FDA approved Makena under the accelerated approval pathway in 2011, which included a requirement that the sponsor conduct a post-marketing confirmatory study. The ensuing study did not verify clinical benefit.

V. DEFINITIONS

Hyperemesis Gravidarum: Severe nausea and vomiting in pregnancy resulting in weight loss, dehydration, and ketosis.

Preeclampsia with Severe Features:

- Systolic blood pressure of 160 mm Hg or more, or diastolic blood pressure of 110 mm Hg or more on two occasions at least 4 hours apart (unless antihypertensive therapy is initiated before this time)
- Thrombocytopenia (platelet count less than $100{,}000 \times 10^9$/L
- Impaired liver function that is not accounted for by alternative diagnoses and as indicated by abnormally elevated blood concentrations of liver enzymes (to more than twice the upper limit normal concentrations), or by severe persistent right upper quadrant or epigastric pain unresponsive to medications
- Renal insufficiency (serum creatinine concentration more than 1.1 mg/dL or a doubling of the serum creatinine concentration in the absence of other renal disease)
- Pulmonary edema
- New-onset headache unresponsive to medication and not accounted for by alternative diagnoses
- Visual disturbances

VI. BACKGROUND

Diabetes in Pregnancy

The American College of Obstetricians and Gynecologists (ACOG) recommends all pregnant women be screened for gestational diabetes between 24-28 weeks of gestation (2018). Appropriate management of gestational diabetes is essential to decrease the incidence of associated maternal and neonatal morbidity. In a U S Preventive Services Task Force meta-analysis of randomized trials, appropriate management of gestational diabetes through nutrition, blood glucose monitoring, and insulin administration as prescribed, resulted in reductions in preeclampsia, macrosomia, and shoulder dystocia (Durnwald, 2022). For women with pregestational diabetes, ACOG endorses the maintenance of maternal blood glucose at physiologic levels prior to and throughout pregnancy to decrease risks associated with hyperglycemia such as, spontaneous abortion, fetal malformation, fetal macrosomia, fetal death, and neonatal morbidity (2018).

Hypertensive Disorders of Pregnancy:

Hypertensive disorders of pregnancy are a leading cause of maternal and perinatal mortality globally. In a systematic review, 5% of pregnancies in the United States were complicated by preeclampsia (Abalos, Cuesta, Grosso, Chou & Say, 2013). Gestational hypertension and preeclampsia both arise during pregnancy, typically after 20 weeks, and resolve postpartum. According to Melvin & Funai (2022), after an initial diagnosis of gestational hypertension, up to 50% of patients will progress to preeclampsia within one to five weeks. The progression from preeclampsia to preeclampsia with severe features can occur more quickly, even within days. In the ACOG Practice Bulletin, Number 222 (2020), expectant management is recommended up to 37 0/7 weeks of gestation for patients with gestational hypertension and preeclampsia without severe features, to include

frequent fetal and maternal evaluation. Close monitoring of blood pressure measurements and assessment of symptoms of preeclampsia with severe features are recommended, using a combination of office and ambulatory approaches (ACOG, 2020).

Nausea and Vomiting in Pregnancy:

Nausea and vomiting in pregnancy is a common condition occurring in 50-80 percent of pregnancies. Symptoms most often occur between 6-8 weeks of gestation and resolve prior to 20 weeks. Hyperemesis gravidarum is a severe form of this condition characterized by intractable vomiting, dehydration, electrolyte imbalance, ketosis, nutritional deficiencies, and weight loss (McParlin et al., 2016). Although hyperemesis gravidarum is less common, affecting up to 3 percent of pregnancies, it is the most common cause for hospitalization in early pregnancy. Once other causes of nausea and vomiting have been ruled out, the ACOG (2018) recommends a step approach for treatment of pregnancy induced nausea and vomiting beginning with nonpharmacologic management (e.g., dietary changes, ginger, acupressure, acupuncture). If nonpharmacologic management is ineffective, second-line treatments are initiated. These include antiemetic medications and, if necessary, fluid and electrolyte replacement in the case of dehydration and ketosis (McParlin et al., 2016). In a single report, 521 pregnant patients with severe nausea and vomiting were treated with subcutaneous ondansetron via a microinfusion pump, and 50 percent of the patients noted improvement of symptoms to mild to moderate within three days of therapy (Smith, Fox, & Clark, 2022). Smith, Fox, & Clark (2022) also stress the importance of close monitoring, even daily, for patients vomiting most food and liquids. Ambulatory management versus hospital admission may be appropriate for patients with severe symptoms when there is access to intravenous fluid and medication administration with frequent assessment of medical status and response to therapy (Smith, Fox, & Clark, 2022).

VII. CODING DISCLAIMER

Note: The following CPT®/HCPCS codes are included below for informational purposes and may not be all inclusive. Inclusion or exclusion of a CPT®/HCPCS code(s) below does not signify or imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member's specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee of payment. Other policies and coverage determination guidelines may apply.

Note: All inpatient admissions require preauthorization.

Adherence to the provisions in this policy may be monitored and addressed through post-payment data analysis and/or medical review audits.
Employer Health Programs (EHP): Specific Summary Plan Descriptions (SPDs) supersedes JHHP Medical Policy. If there are no criteria in the SPD, apply the Medical Policy criteria.
Priority Partners (PPMCO): Regulatory guidance supersedes JHHP Medical Policy. If there are no criteria in COMAR regulations, or other State guidelines, apply the Medical Policy criteria.

VIII. CODING INFORMATION

CPT® CODES ARE FOR INFORMATIONAL PURPOSES ONLY	
CPT® CODES	**DESCRIPTION**

99601	Home infusion/specialty drug administration, per visit (up to 2 hours)
99602	Home infusion/specialty drug administration, per visit (up to 2 hours); each additional hour (List separately in addition to code for primary procedure)

HCPCS CODES ARE FOR INFORMATIONAL PURPOSES ONLY	
HCPCS	**DESCRIPTION**
S9123	Nursing care, in the home; by registered nurse, per hour
S9145	Insulin pump initiation, instruction in initial use of pump (pump not included)
S9211	Home management of gestational hypertension, includes administrative services, professional pharmacy services, care coordination and all necessary supplies and equipment (drugs and nursing visits coded separately); per diem (do not use this code with any home infusion per diem code)
S9213	Home management of preeclampsia, includes administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing services coded separately); per diem (do not use this code with any home infusion per diem code)
S9214	Home management of gestational diabetes, includes administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately); per diem (do not use this code with any home infusion per diem code)
S9351	Home infusion therapy, continuous or intermittent antiemetic infusion therapy; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and visits coded separately), per diem
S9353	Home infusion therapy, continuous insulin infusion therapy; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
S9374	Home infusion therapy, hydration therapy; 1 liter per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
S9375	Home infusion therapy, hydration therapy; more than 1 liter but no more than 2 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
S9376	Home infusion therapy, hydration therapy; more than 2 liters but no more than 3 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
S9377	Home infusion therapy, hydration therapy; more than 3 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies (drugs and nursing visits coded separately), per diem
S9379	Home infusion therapy, infusion therapy, not otherwise classified; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem

ICD10 CODES ARE FOR INFORMATIONAL PURPOSES	
ICD10 CODES	**DESCRIPTION**
A09	Infectious gastroenteritis and colitis, unspecified
D69.59	Other secondary thrombocytopenia
E86.0	Dehydration
K90.49	Malabsorption due to intolerance, not classified elsewhere
O10.011	Pre-existing essential hypertension complicating pregnancy, first trimester
O10.012	Pre-existing essential hypertension complicating pregnancy, second trimester
O10.013	Pre-existing essential hypertension complicating pregnancy, third trimester
O10.019	Pre-existing essential hypertension complicating pregnancy, unspecified trimester
O01.411	Pre-existing secondary hypertension complicating pregnancy, first trimester
O10.412	Pre-existing secondary hypertension complicating pregnancy, second trimester
O10.413	Pre-existing secondary hypertension complicating pregnancy, third trimester
O10.419	Pre-existing secondary hypertension complicating pregnancy, unspecified trimester
O10.911	Unspecified pre-existing hypertension complicating pregnancy, first trimester
O10.912	Unspecified pre-existing hypertension complicating pregnancy, second trimester
O10.913	Unspecified pre-existing hypertension complicating pregnancy, third trimester
O10.919	Unspecified pre-existing hypertension complicating pregnancy, unspecified trimester
O11.1	Pre-existing hypertension with pre-eclampsia, first trimester
O11.2	Pre-existing hypertension with pre-eclampsia, second trimester
O11.3	Pre-existing hypertension with pre-eclampsia, third trimester
O11.4	Pre-existing hypertension with pre-eclampsia, complicating childbirth
O11.5	Pre-existing hypertension with pre-eclampsia, complicating the puerperium
O11.9	Pre-existing hypertension with pre-eclampsia, unspecified trimester
O14.00	Mild to moderate pre-eclampsia, unspecified trimester
O14.02	Mild to moderate pre-eclampsia, second trimester
O14.03	Mild to moderate pre-eclampsia, third trimester
O16.1	Unspecified maternal hypertension, first trimester
O16.2	Unspecified maternal hypertension, second trimester
O16.3	Unspecified maternal hypertension, third trimester
O16.4	Unspecified maternal hypertension, complicating childbirth
O16.5	Unspecified maternal hypertension, complicating the puerperium
O16.9	Unspecified maternal hypertension, unspecified trimester

O21.1	Hyperemesis gravidarum with metabolic disturbance
O21.2	Late vomiting of pregnancy
O21.8	Other vomiting complicating pregnancy
O21.9	Vomiting of pregnancy, unspecified
O24.410	Gestational diabetes mellitus in pregnancy, diet controlled
O24.414	Gestational diabetes mellitus in pregnancy, insulin controlled
O24.415	Gestational diabetes mellitus in pregnancy, controlled by oral hypoglycemic drugs
O24.419	Gestational diabetes mellitus in pregnancy, unspecified control
O25.10	Malnutrition in pregnancy, unspecified trimester
O25.11	Malnutrition in pregnancy, first trimester
O25.12	Malnutrition in pregnancy, second trimester
O25.13	Malnutrition in pregnancy, third trimester
O60.00	Preterm labor without delivery, unspecified trimester
O60.02	Preterm labor without delivery, second trimester
O60.03	Preterm labor without delivery, third trimester
O99.210	Obesity complicating pregnancy, unspecified trimester
O99.211	Obesity complicating pregnancy, first trimester
O99.212	Obesity complicating pregnancy, second trimester
O99.213	Obesity complicating pregnancy, third trimester

IX. REFERENCE STATEMENT

Analyses of the scientific and clinical references cited below were conducted and utilized by the Johns Hopkins Health Plans (JHHP) Medical Policy Team during the development and implementation of this medical policy. The Medical Policy Team will continue to monitor and review any newly published clinical evidence and revise the policy and adjust the references below accordingly if deemed necessary.

X. REFERENCES

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XI. APPROVALS

Historical Effective Dates: 08/01/2023