



# Evolut Clinical Guideline 2027110 for Fetal Magnetic Resonance Imaging (MRI)~~RI~~

<b>Guideline <del>or Policy</del> Number:</b> <b>Evolut_CG_ <u>2027</u>410</b>	<b><u>Applicable Codes</u></b>	
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## STATEMENT

### General Information

- *It is an expectation that all patients receive care/services from a licensed clinician.- All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. -If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.*
- *Where a specific clinical indication is not directly addressed in this guideline, medical necessity determination will be made based on widely accepted standard of care criteria.- These criteria are supported by evidence-based or peer-reviewed sources such as medical literature, societal guidelines and state/national recommendations.*
- *The guideline criteria in the following sections were developed utilizing evidence-based and peer-reviewed resources from medical publications and societal organization guidelines as well as from widely accepted standard of care, best practice recommendations.*

### Purpose

Fetal MRI should be performed only for a valid medical reason and only after careful consideration of sonographic findings or family history of an abnormality for which screening with MRI might be beneficial. Before 18 weeks gestational age, a fetal MRI may not provide additional diagnostic information due to the small size of the fetus and fetal movement when compared with sonography. The need for early diagnosis should be balanced against the advantages of improved resolution later in pregnancy, with the choice dependent on the anomalies to be assessed.

### Special Note

For evaluating the placenta or imaging the maternal pelvis without need for fetal assessment, use the Pelvis MRI (Evolent\_CG\_2045037) Guideline

## INDICATIONS FOR FETAL MRI

To better define or confirm any of the following:

- Known or suspected abnormality of the fetus after ultrasound has been performed <sup>(1)</sup>
- Fetal surgery is planned

- Make a decision about therapy, delivery, or to advise the family about prognosis <sup>(1)(4)</sup>

## Combination Studies

### *Pelvis~~and~~Fetal MRI*

- When medical necessity has been met for Pelvis MRI (such as for suspected placenta accreta or percreta when ultrasound is indeterminate <sup>(2)(2)</sup>) **AND** medical necessity has been met for Fetal MRI (such as suspected fetal abnormality after ultrasound has been performed), two separate authorizations are required: Pelvis MRI~~Pelvis MRI~~ (CPT 72195, 72196, 72197) and Fetal MRI (CPT 74712, +74713).

## CODING AND STANDARDS

### Coding

### ~~CPT~~ Codes

74712, +74713

### Applicable Lines of Business

<input checked="" type="checkbox"/>	CHIP (Children's Health Insurance Program)
<input checked="" type="checkbox"/>	Commercial
<input checked="" type="checkbox"/>	Exchange/Marketplace
<input checked="" type="checkbox"/>	Medicaid
<input checked="" type="checkbox"/>	Medicare Advantage

## BACKGROUND

### Contraindications and Preferred Studies

- Contraindications and reasons why a CT/CTA cannot be performed may include: impaired renal function, significant allergy to IV contrast, pregnancy (depending on trimester)
- Contraindications and reasons why an MRI/MRA cannot be performed may include:

impaired renal function, claustrophobia, non-MRI compatible devices (such as non-compatible defibrillator or pacemaker), metallic fragments in a high-risk location, patient exceeds weight limit/dimensions of MRI machine.

## **SUMMARY OF EVIDENCE**

### **MRI of Placenta Accreta, Placenta Increta, and Placenta Percreta: Pearls and Pitfalls** <sup>(2)</sup>

**Study Design:** This study provides a primer for radiologists performing MRI for suspected placenta accreta, increta, and percreta. It discusses imaging protocols, normal placental appearance, elements for reporting, and diagnostic features of invasive placentation.

**Target Population:** The study focuses on high-risk patients, particularly women with previous cesarean sections and placenta previa, which are major risk factors for placenta accreta.

#### **Key Factors:**

- **Imaging Protocols:** MRI sequences with high temporal resolution and good contrast-to-noise ratios are used to freeze underlying fetal motion. The examination is typically performed on a 1.5-T system with a multichannel phased-array surface coil.
- **Diagnostic Features:** MRI is indicated when ultrasound evaluation is equivocal or for patients with high clinical risk factors for placenta accreta. It is often used to plan cesarean section delivery and peripartum hysterectomy.
- **Safety:** Pelvic MRI has been in use for over 30 years with no evidence of adverse effects to the fetus in both clinical and laboratory investigations.

### **ISUOG Practice Guidelines (updated): performance of fetal magnetic resonance imaging** <sup>(1)</sup>

**Study Design:** This study provides updated practice guidelines for the performance of fetal MRI by the International Society of Ultrasound in Obstetrics and Gynecology (ISUOG). It aims to complement expert ultrasound examinations by confirming ultrasound findings or acquiring additional information.

**Target Population:** The guidelines are intended for healthcare practitioners performing fetal MRI, particularly in high-risk cases such as those at risk for brain abnormalities due to affected first-degree relatives.

#### **Key Factors:**

- **Purpose:** Fetal MRI is used to complement expert ultrasound examinations, either by confirming ultrasound findings or acquiring additional information. It is not used as a primary screening tool in prenatal care.
- **Safety:** MRI is not associated with known adverse fetal effects at any point in pregnancy when performed without administration of contrast media. Both 1.5-T and 3-T systems may be used.

- **Indications:** Fetal MRI is indicated following an expert ultrasound examination in which diagnostic information about an abnormality is incomplete or if there is a suspicion of an abnormality that cannot be confirmed by ultrasound alone.
- **Performance:** The guidelines recommend performing fetal MRI between 26 and 32 weeks of pregnancy, when pathologies related to abnormal development are more fully evolved.

## ANALYSIS OF EVIDENCE

### Shared Conclusions <sup>(1,2)</sup>

Both articles emphasize the importance of fetal MRI in complementing ultrasound examinations, particularly in high-risk cases. They agree that MRI is not a primary screening tool but is used to confirm ultrasound findings or acquire additional information. Both studies highlight the safety of MRI, with no known adverse fetal effects when performed without contrast media 1 2.

### Summary <sup>(1,2)</sup>

In summary, both articles provide valuable evidence for the use of fetal MRI in prenatal care, highlighting its role in complementing ultrasound examinations and improving diagnostic accuracy. Kilcoyne et al. (2016) focus on invasive placentation, while Prayer et al. (2023) offer comprehensive guidelines for various fetal conditions.

●

## POLICY HISTORY

### SUMMARY

Date	Summary
<u>June 2025</u>	<ul style="list-style-type: none"> <li>● <u>This guideline replaces Evolent Clinical Guideline 110 for Fetal MRI</u></li> <li>● <u>Added third bullet to General Information</u></li> <li>● <u>Checked Medicare Advantage Line of Business</u></li> <li>● <u>Added Summary of Evidence and Analysis of Evidence per Medicare requirements</u></li> </ul>

June 2024	<ul style="list-style-type: none"> <li>Combination Studies section added</li> <li>Reduced background</li> </ul>
March 2023	<ul style="list-style-type: none"> <li>Modified background</li> <li>General Information moved to beginning of guideline with added statement on clinical indications not addressed in this guideline</li> <li>Updated references</li> <li>Removed Additional Resources</li> </ul>

## LEGAL AND COMPLIANCE

### Guideline Approval

#### Committee

Reviewed / Approved by Evolent Specialty Services Clinical Guideline Review Committee

### Disclaimer

Evolent Clinical Guidelines do not constitute medical advice. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Evolent uses Clinical Guidelines in accordance with its contractual obligations to provide utilization management. Coverage for services varies for individual members according to the terms of their health care coverage or government program. Individual members' health care coverage may not utilize some Evolent Clinical Guidelines. Evolent clinical guidelines contain guidance that requires prior authorization and service limitations. A list of procedure codes, services or drugs may not be all inclusive and does not imply that a service or drug is a covered or non-covered service or drug. Evolent reserves the right to review and update this Clinical Guideline in its sole discretion. Notice of any changes shall be provided as required by applicable provider agreements and laws or regulations. Members should contact their Plan customer service representative for specific coverage information.

Evolent Clinical Guidelines are comprehensive and inclusive of various procedural applications for each service type. Our guidelines may be used to supplement Medicare criteria when such criteria is not fully established. When Medicare criteria is determined to not be fully established, we only reference the relevant portion of the corresponding Evolent Clinical Guideline that is applicable to the specific service or item requested in order to determine medical necessity.~~Evolent Clinical Guidelines do not constitute medical advice. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Evolent uses~~



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## REFERENCES

1. Prayer D, Malinge G, De Catte L, et al. ISUOG Practice Guidelines (updated): performance of fetal magnetic resonance imaging. *Ultrasound in Obstetrics & Gynecology*. 2023;61(2):278-287. doi:10.1002/uog.26129
2. Kilcoyne A, Shenoy-Bhangle AS, Roberts DJ, Sisodia RC, Gervais DA, Lee SI. MRI of Placenta Accreta, Placenta Increta, and Placenta Percreta: Pearls and Pitfalls. *American Journal of Roentgenology*. 2017;208(1):214-221. doi:10.2214/AJR.16.16281

~~1. Prayer D, Malinge G, De Catte L, De Keersmaecker B, Gonçalves L et al. ISUOG Practice Guidelines (updated): performance of fetal magnetic resonance imaging. *Ultrasound in obstetrics gynecology: the official journal of the International*. 2023; 61: 278-287. 10.1002/uog.26129.~~

~~2. Kilcoyne A, Shenoy-Bhangle A, Roberts D, Sisodia R, Gervais D. MRI of Placenta Accreta, Placenta Increta, and Placenta Percreta: Pearls and Pitfalls. *American Journal of Roentgenology*. 2016; 208: 214-221. 10.2214/AJR.16.16281.~~