

Ultrasound

1. MCG Criteria Used

Clinical Criteria: MCG Care Guidelines, 30th Edition

- Abdominal Ultrasound (MCG ORG: A-0100 AC, 30th Edition)
- Pregnant Uterus Fetal Biophysical Profile with or without Nonstress Testing (MCG ORG: A-0435 AC, 30th Edition)

Applicable CPT / HCPCS Codes:

CPT / HCPCS Code	Description
76700, 76705	Ultrasound, abdominal, real time with image documentation; complete and limited
76770, 76775	Ultrasound, retroperitoneal, real time with image documentation; complete and limited
76776	Ultrasound, transplanted kidney, real time with duplex Doppler
76801-76817	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation
76818, 76819	Fetal biophysical profile, with and without nonstress testing
59025	Fetal nonstress test

2. Statement of Rationale

Akido Labs uses the criteria in MCG Care Guidelines (30th Edition) to supplement the general Medicare criteria regarding diagnostic ultrasonography, including complete and limited abdominal and retroperitoneal ultrasound and the fetal biophysical profile with or without nonstress testing, where Medicare coverage criteria are not fully established or require additional clinical specificity. MCG criteria are used to ensure consistency in reviewing the conditions to be met for coverage of ultrasound services and to determine when such services are medically necessary. Although ultrasonography uses no ionizing radiation, inappropriate utilization carries real clinical cost: underuse can delay diagnosis of treatable abdominal pathology or fail to detect fetal compromise, while overuse generates incidental findings that drive a cascade of further imaging, biopsy, and patient anxiety. Absent consistent, evidence-based selection criteria, there is material risk of both inappropriate denial of medically necessary studies and inappropriate approval of studies that are not indicated.

Potential Clinical Harms:

Abdominal Ultrasound: Inappropriate denial of abdominal or retroperitoneal ultrasound in a patient with right upper quadrant pain, suspected cholelithiasis or biliary obstruction, abdominal aortic aneurysm surveillance, or unexplained abnormal liver chemistries could delay diagnosis of a surgically or medically treatable condition. Inappropriate approval for nonspecific indications generates incidental findings that prompt unnecessary downstream testing.

Fetal Biophysical Profile: Inappropriate denial of the fetal biophysical profile in a pregnancy with risk factors for uteroplacental insufficiency could fail to detect fetal compromise, increasing the risk of stillbirth or neonatal morbidity. Inappropriate approval in low-risk pregnancies generates equivocal results that prompt unnecessary intervention, including avoidable labor induction or cesarean delivery.

Clinical Benefits:

Abdominal Ultrasound: MCG criteria specify validated indications for abdominal and retroperitoneal ultrasound drawn from radiology specialty society appropriateness criteria, including right upper quadrant pain, suspected biliary or renal pathology, abdominal aortic aneurysm screening and surveillance, and evaluation of abnormal liver or renal function. By requiring a defined indication, these criteria directly mitigate the harm of delayed diagnosis identified above while limiting the incidental-finding cascade that follows from nonspecific imaging.

Fetal Biophysical Profile: MCG criteria reserve the fetal biophysical profile for pregnancies with defined risk factors for fetal compromise and apply the validated scoring framework in which a score of 8 to 10 is normal, 6 is equivocal, and 4 or less is abnormal. This evidence-based selection directly counters the harm of undetected fetal compromise in at-risk pregnancies while preventing the unnecessary obstetric intervention that follows from testing low-risk pregnancies. The clinical benefits of using MCG Care Guidelines are highly likely to outweigh any clinical harms, including delayed or decreased access to services, because the criteria incorporate appropriateness thresholds drawn from current specialty society guidelines and are unlikely to lead to inappropriate denials.

3. Explanation of Supplementation

Basis for Use: Original Medicare clinical criteria are not fully established and require supplementation to ensure consistent medical necessity determinations for diagnostic ultrasonography. While Medicare statutes establish the general 'reasonable and necessary' standard, they do not specify the clinical indications (e.g., which presentations warrant abdominal ultrasound, or which pregnancy risk factors warrant fetal biophysical profile testing) required to distinguish indicated from nonindicated ultrasound studies.

Applicable Medicare References: Social Security Act Section 1862(a)(1): 'Reasonable and necessary' standard Code of Federal Regulations: 42 CFR 410.32 (diagnostic tests; ordering and medical necessity) Medicare Benefit Policy Manual, Chapter 15: Covered Medical and Other Health Services (CMS IOM Publication 100-02) Medicare Program Integrity Manual, Chapter 6, Section 6.5 (CMS IOM Publication 100-08) Code of Federal Regulations: 42 CFR 419.22; 42 CFR 422.101 Medicare Coverage Database: <https://www.cms.gov/medicare-coverage-database/search.aspx> For these ultrasound services, no specific NCD or LCD fully establishes clinical indication thresholds; Original Medicare criteria are not fully established, requiring supplementation. Within the above statutes and regulations, MCG criteria assist in determining the appropriateness of abdominal and retroperitoneal ultrasound based on defined clinical indications, and the appropriateness of fetal biophysical profile testing based on defined pregnancy risk factors and the validated scoring framework. Use of these criteria helps ensure ultrasound services are not incorrectly denied when medically appropriate, nor incorrectly approved when not reasonable and necessary, and may decrease inappropriate denials by creating a consistent set of evidence-based review criteria.

4. Summary of Clinical Evidence

Note: The following evidence summary is derived directly from MCG Care Guidelines, 30th Edition (guidelines A-0100 and A-0435). The reference lists below are drawn from those respective MCG guidelines.

Background

Abdominal Ultrasound (MCG ORG: A-0100 AC) Abdominal ultrasound is a noninvasive, real-time imaging study used to evaluate the liver, gallbladder and biliary tree, pancreas, spleen, kidneys, and abdominal aorta. Indications include right upper quadrant pain, suspected cholelithiasis or biliary obstruction, abnormal liver or renal chemistries, palpable mass, and screening or surveillance of abdominal aortic aneurysm. Because it uses no ionizing radiation, it is frequently the first-line imaging modality, but indication-based selection limits the downstream burden of incidental findings.

Fetal Biophysical Profile (MCG ORG: A-0435 AC) The fetal biophysical profile is a noninvasive test used to gauge the presence or absence of fetal asphyxia and the risk of fetal death in the antenatal period. It uses ultrasound to score fetal breathing movement, fetal body movement, fetal tone, fetal heart rate reactivity (nonstress testing), and amniotic fluid volume, each scored 0 or 2 for a maximum of 10; a score of 8 to 10 is normal, 6 is equivocal, and 4 or less is abnormal. It is indicated in pregnancies with risk factors for uteroplacental insufficiency or fetal compromise.

Evidence Summary

Abdominal Ultrasound (MCG ORG: A-0100 AC) This guideline (30th Edition) is supported by an extensive body of peer-reviewed literature and specialty society appropriateness criteria addressing the indications for abdominal and retroperitoneal ultrasound across hepatobiliary, renal, and vascular contexts, supporting indication-based selection as first-line imaging.

Fetal Biophysical Profile (MCG ORG: A-0435 AC) This guideline (30th Edition) is supported by peer-reviewed articles and obstetric consensus guidelines establishing the biophysical profile as a validated tool for antepartum fetal surveillance in at-risk pregnancies, with scoring thresholds that guide the need for further evaluation or delivery.

Rationale (from MCG) Use of these MCG care guidelines helps the clinician identify patient-specific clinical factors that establish the medical necessity of diagnostic ultrasonography. The evidence-based clinical criteria ensure patients receive the most appropriate diagnostic evaluation for their specific condition, reduce unnecessary downstream testing, and provide a standard that can reduce disparities in care. These guidelines supplement but do not replace, modify, or supersede existing Medicare regulations or applicable NCDs or LCDs.

Related CMS Coverage Guidance (as cited in MCG 30th Edition): Code of Federal Regulations (CFR): 42 CFR 410.32; 42 CFR 419.22; 42 CFR 422.101; CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 15; CMS IOM Publication 100-08, Medicare Program Integrity Manual, Chapter 6, Section 6.5; Medicare Coverage Database: <https://www.cms.gov/medicare-coverage-database/search.aspx>

References with Citation Summary -- Abdominal Ultrasound (MCG ORG: A-0100 AC, 30th Edition)

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