



# Claim Reporting for Appropriate Use Criteria for Advanced Diagnostic Imaging

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## I. Purpose

The purpose of this issue brief is to provide information regarding the Center for Medicare & Medicaid Services' (CMS) Appropriate Use Criteria (AUC) for Advanced Diagnostic Imaging program. The program requires actions to be taken by both ordering and rendering providers for advance diagnostic imaging services (defined below), including reporting specific data related to the services in professional and institutional claims. The claims reporting requirements start on January 1, 2020 with an educational and operations testing period for one year. As of January 1, 2021, claims will be denied and not paid if the required AUC data are not reported. It is important to note that the AUC program is specific to the Medicare program and is only reported on claims for Medicare beneficiaries.

## II. Background

The Protecting Access to Medicare Act of 2014<sup>1</sup> (PAMA) authorized CMS to establish a program to promote the use of AUC for advanced diagnostic imaging services. It establishes the AUC and mechanisms through which providers will consult criteria and report specific data in the professional and institutional claims for the rendered service.

## III. Scope

This issue brief will provide an overview of the AUC program components and claim reporting requirements for inpatient and outpatient Medicare claims for advanced diagnostic imaging services.

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<sup>1</sup> Public Law 113-93—Apr.1, 2014

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## IV. Introduction

Under the authority of PAMA, CMS created the AUC program and reporting requirements to decrease the use of inappropriate advanced diagnostic imaging services provided to Medicare beneficiaries. The legislation called for the U.S. Department of Health and Human Services (HHS) Secretary to promote the use of AUC for applicable advanced diagnostic imaging services furnished in an applicable setting by ordering professionals and furnishing professionals. Examples of advanced diagnostic imaging services include:

- Computed tomography (CT)
- Magnetic resonance imaging (MRI)
- Positron emission tomography (PET), and
- Nuclear medicine

The intent of the AUC is to present information to the ordering provider in a manner that links the patient's clinical condition; one or more services; and an assessment of the appropriateness of the service(s). The AUC are based on evidence-based guidelines for specific clinical scenarios and presenting symptoms or condition. It is to assist the ordering provider in selecting the advanced diagnostic imaging service that is most likely to improve health outcomes for the patient based on their individual clinical presentation.

The regulations through which these requirements have been further established are the annual Physician Fee Schedule (PFS) Final Rules for 2016, 2017, 2018, and 2019. Additional regulations are expected to continue to finalize the remaining program requirements.

### Definitions

PAMA defines the following terms:

**“Appropriate use criteria”** is defined as criteria developed or endorsed by national professional medical specialty societies or other provider-led entities (PLE), to assist ordering professionals and furnishing professionals in making the most appropriate treatment decision for a specific clinical condition for an individual.

**“Applicable imaging service”** is defined as an advanced diagnostic imaging service for which there is one or more applicable appropriate use criteria and there are one or more qualified clinical decision support mechanisms (CDSM).

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**“Applicable setting”** is defined as:

- Physician offices;
- Hospital outpatient departments, including emergency departments;
- Ambulatory surgical centers, and
- Independent diagnostic testing facilities, (added in the 2019 PFS Final Rule)

**“Ordering professional”** is defined as a physician or a practitioner who orders an applicable advanced diagnostic imaging service. The 2019 PFS Final Rule expanded the definition to allow the AUC consultation to be done by clinical staff under direct supervision of the ordering professional.

**“Furnishing professional”** is defined as a physician or a practitioner who furnishes an applicable advanced diagnostic imaging service.

\*The legislation uses the terms “ordering professional” and “furnishing professional,” but this paper will hereafter use the more common industry terms of “ordering provider,” “rendering provider,” or “provider.”

## Components of the AUC Program

The four major components of the AUC program are:

- Establishment of AUC
- Identification of mechanisms for consultation with AUC
- AUC consultation by the ordering provider and reporting by the rendering provider; and
- Annual identification of outlier ordering providers for services furnished

### 1. Establishment of AUC

The 2016 PFS Final Rule established the requirements for the development of evidence-based AUC. It defined PLEs and established the process through which PLEs may become qualified to develop AUC. PLEs can be national professional medical societies, health systems, hospitals, clinical practices, and collaborations.

The first list of qualified PLEs was posted to the CMS website in June 2016. The list continues to be updated at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Appropriate-Use-Criteria-Program/PLE.html>.

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## 2. Mechanism for AUC Consultation

The 2017 PFS final rule identified the mechanism for AUC consultation, called CDSMs. It established the requirements and qualification process for CDSMs. The CDSM is an interactive, electronic tool through which the ordering provider consults the AUC when ordering an advanced diagnostic imaging test to determine if it is appropriate, per evidence-based guidelines, for the patient. The CDSMs can be stand-alone or integrated into an electronic health record (EHR).

When queried, the CDSM provides information that identifies one of the following results:

- Appropriate – The proposed advanced diagnostic imaging service is appropriate based on the patient’s clinical condition.
- Not appropriate – The proposed advanced diagnostic imaging service is not appropriate based on the patient’s clinical condition.
- Not applicable – There is no defined criteria for the patient’s condition and the proposed advanced diagnostic imaging service.

The first list of qualified CDSMs was posted to the CMS website in July 2017. The current list is available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Appropriate-Use-Criteria-Program/CDSM.html>.

## 3. AUC Consultation and Reporting

CMS recently released an MLN Matters article in July 2019 providing updated information about the claims processing requirements. The article is available at: <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/MM11268.pdf>.

The ordering provider will be required to consult a CDSM for every advanced diagnostic imaging service ordered. The rendering provider will then report the following data on both the professional (837P<sup>2</sup>) claim for the professional component and institutional (837I<sup>3</sup>) claim for the technical component.

- The CDSM consulted by the ordering provider;
- Whether the service adhered to the applicable AUC, did not adhere to the applicable AUC, or whether no criteria in the CDSM were applicable to the patient’s clinical scenario; and
- The National Provider Identifier (NPI) of the ordering provider.

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<sup>2</sup>Version 005010X222A2 Health Care Claim: Professional (837P), see References for full citation

<sup>3</sup>Version 005010X223A3 Health Care Claim: Institutional (837I), see References for full citation

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## Exceptions

The following are exceptions to the requirement to consult the CDSM:

- Emergencies,
- Inpatient advanced diagnostic imaging services, and
- Ordering provider meets one of the following hardship exceptions:
  - Insufficient internet access
  - EHR or CDSM vendor issues
  - Extreme and uncontrollable circumstances

## Reporting the CDSM

CMS established Healthcare Common Procedure Coding System (HCPCS) G-codes as the mechanism to report in the claim which CDSM was queried by the ordering provider. A HCPCS code will be assigned to each qualified CDSM.

The identifying HCPCS code is to be reported as a separate service line, in addition to the procedure code identifying the advanced diagnostic imaging service that was performed.

The following are the HCPCS G-codes as of July 2019:

- G1000 - Clinical Decision Support Mechanism Applied Pathways
- G1001 - Clinical Decision Support Mechanism eviCore
- G1002 - Clinical Decision Support Mechanism MedCurrent
- G1003 - Clinical Decision Support Mechanism Medicalis
- G1004 - Clinical Decision Support Mechanism National Decision Support Company
- G1005 - Clinical Decision Support Mechanism National Imaging Associates
- G1006 - Clinical Decision Support Mechanism Test Appropriate
- G1007 - Clinical Decision Support Mechanism AIM Specialty Health
- G1008 - Clinical Decision Support Mechanism Cranberry Peak
- G1009 - Clinical Decision Support Mechanism Sage Health Management Solutions
- G1010 - Clinical Decision Support Mechanism Stanson
- G1011 - Clinical Decision Support Mechanism, qualified tool not otherwise specified

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## Reporting the CDSM Response

CMS also created HCPCS modifiers to identify the response received by the CDSM.

The modifier is required to be reported on the same service line as the procedure code for the advanced diagnostic imaging service.

The modifiers as of July 2019 are:

- MA - Ordering professional is not required to consult a clinical decision support mechanism due to service being rendered to a patient with a suspected or confirmed emergency medical condition
- MB - Ordering professional is not required to consult a clinical decision support mechanism due to the significant hardship exception of insufficient internet access
- MC - Ordering professional is not required to consult a clinical decision support mechanism due to the significant hardship exception of electronic health record or clinical decision support mechanism vendor issues
- MD - Ordering professional is not required to consult a clinical decision support mechanism due to the significant hardship exception of extreme and uncontrollable circumstances
- ME - The order for this service adheres to the appropriate use criteria in the clinical decision support mechanism consulted by the ordering professional
- MF - The order for this service does not adhere to the appropriate use criteria in the qualified clinical decision support mechanism consulted by the ordering professional
- MG - The order for this service does not have appropriate use criteria in the clinical decision support mechanism consulted by the ordering professional
- MH - Unknown if ordering professional consulted a clinical decision support mechanism for this service, related information was not provided to the furnishing professional or provider

Note that there are modifiers for the exceptions and they must be reported in the claim, when applicable. The lists of HCPCS G-codes and modifiers were included in the July 2019 MLN Matters article at the link provided above.

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## AUC Workflow

The following is the workflow for meeting the AUC requirements:

1. The provider sees a patient who is a Medicare beneficiary and plans to order an advanced diagnostic imaging service.
2. The provider consults the AUC for the proposed service through a CDSM. (The CDSM will either be integrated into the EHR or a separate portal.)
  - a. If a hardship exception exists, the ordering provider will include it with the order.
3. The CDSM will search for and present the AUC relevant to the patient's condition.
4. The CDSM response will indicate if the proposed service adheres to the AUC, does not adhere to the AUC, or if there is no applicable AUC.
  - a. If the service adheres to the AUC, the provider will proceed with ordering the service.
  - b. If the service does not adhere, the provider must make a decision about ordering a different service or proceeding with the proposed service despite it not adhering to the AUC.
5. The provider orders the service and includes with the order the CDSM queried, AUC response, and their NPI.
6. The patient undergoes the service at the rendering provider.
7. The rendering provider reports in the 837P and 837I\* the CDSM HCPCS G-code, the AUC modifier, and the ordering provider's NPI.

\*CMS is aware that the 837I does not have the capability at this time to report at the service line level the ordering provider's NPI. It is working with X12, the standards developer of the 837I, to identify a solution. A solution is expected to be available from X12 prior to December 31, 2019 at: <http://rfi.x12.org/>.

In 2020, which is an education and testing period, claims submitted without the AUC data or without the correct AUC data will not be denied. When the program is fully implemented, which is expected to be in 2021, claims will be paid only if the appropriate AUC data is reported, even if the data is not valid or the service did not adhere to the AUC. In other words, the rendering provider will be accountable for reporting the data, but not the underlining meaning of the data.

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## Voluntary Reporting

The 2018 PFS final rule established a voluntary reporting period from July 2018 through December 2019, which is optional for participation. CMS created a HCPCS modifier specific for the voluntary reporting period and indicates only that a CDSM was consulted.

- QQ - Ordering professional consulted a qualified clinical decision support mechanism for this service and the related data was provided to the furnishing professional

The modifier can be reported by the rendering provider at the claim service line level with the procedure code for the service when they are aware that the AUC query has been completed.

## Implementation Date

Initially the deadline for reporting the AUC data in the claim was January 1, 2017. This date was subsequently delayed as CMS worked through various implementation details of the program.

As of the 2019 PFS Final Rule, the implementation date is set for January 1, 2020. CMS intends for the first year to be an educational and operations testing period. During 2020, claims will not be denied if the AUC data is not complete, misreported, or inaccurate. Reporting of the complete data as accurately as possible is strongly encouraged to prepare for the full implementation.

On January 1, 2021, full implementation of the program is expected. Claims will be denied and not paid if the AUC data are not reported.

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## 4. Identification of Outliers

The final component of the AUC program is to identify outlier ordering providers. The legislation calls for identification on an annual basis of no more than five percent of the total number of ordering providers who are outliers. The use of two years of data is required for this analysis. Outliers will be determined based on low adherence to applicable AUC or comparison to other ordering providers.

The focus of the analysis of outliers will be on priority clinical areas. The following priority clinical areas were named in the 2017 PFS final rule.

- Coronary artery disease (suspected or diagnosed)
- Suspected pulmonary embolism
- Headache (traumatic and non-traumatic)
- Hip pain
- Low back pain
- Shoulder pain (to include suspected rotator cuff injury)
- Cancer of the lung (primary or metastatic, suspected or diagnosed)
- Cervical or neck pain

CMS estimates that the current list of priority clinical areas represents about 40 percent of advanced diagnostic imaging services paid for by Medicare, as of 2014. Additional priority clinical areas may be added in the future.

Providers who are deemed to be outliers of the AUC will be required to complete prior authorizations for advanced diagnostic imaging services. CMS is still developing the process through which outliers will be identified. Further details are expected in subsequent regulations.

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## V. Summary

PAMA authorized the start of a new program by CMS for Medicare beneficiaries to monitor the appropriate delivery of advanced diagnostic imaging services. The program requires actions to be taken by the provider ordering the service and specific data to be reported in the professional and institutional claims. After a few years of delay, the reporting requirements are set to start on January 1, 2020 with an educational and operations testing period for one year.

In preparing this paper, the Claims Subworkgroup identified additional work on the business impacts of the AUC reporting requirements, including:

- Workflow impacts
  - Transmitting the AUC data from the ordering provider to the rendering provider
  - Transmitting the AUC data from the clinical system to the claims/practice management system
  - Awareness by the rendering provider that an ordering provider is an “outlier” and prior authorization is required for his/her orders
- Claim reporting impacts
  - Crossover claims
  - Reporting multiple AUC services in one claim

## VI. Acknowledgements

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- Nancy Spector, American Medical Association
- Rose Hodges, Aetna, Claims SWG Co-chair
- Stanley Nachimson, Nachimson Advisors, Claims SWG Co-chair

## VI. References

ASC X12 Standards for Electronic Data Interchange Technical Report Type 3—Health Care Claim: Institutional (837), May 2006, ASC X12/N005010X223, and Type 1 Errata to Health Care Claim: Institutional (837), ASC X12 Standards for Electronic Data Interchange Technical Report Type 3, June 2010, ASC X12N/005010X223A2

ASC X12 Standards for Electronic Data Interchange Technical Report Type 3—Health Care Claim: Professional (837), May 2006, ASC X12N/005010X222, and Type 1 Errata to Health Care Claim: Professional (837), ASC X12 Standards for Electronic Data Interchange Technical Report Type 3, June 2010, ASC X12N/005010X222A1

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## APPENDIX A – Abbreviations, Acronyms and Definitions

**837I** – Version 005010X223A2 Health Care Claim Institutional

**837P** – Version 005010X222A1 Health Care Claim Professional

**AUC** – Appropriate use criteria

**CDSM** – Clinical decision support mechanism

**CMS** – Centers for Medicare & Medicaid Services

**EHR** – Electronic health record

**HCPCS** – Healthcare Common Procedure Coding System

**HHS** – U.S. Department of Health and Human Services

**NPI** – National Provider Identifier

**PAMA** – Protecting Access to Medicare Act of 2014

**PFS** – Physician Fee Schedule (regulatory rule)

**PLE** – Provider-led entity

**X12** – X12, Inc. is the standards development organization that develops and maintains the 837P and 837I.

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# APPENDIX B – Resources

## CMS MLN Matters Articles

- [Appropriate Use Criteria for Advanced Diagnostic Imaging – Fact Sheet](#)
- [Appropriate Use Criteria for Advanced Diagnostic Imaging – Voluntary Participation and Reporting Period - Claims Processing Requirements – HCPCS Modifier QQ \(MM10481\)](#)
- [Appropriate Use Criteria \(AUC\) for Advanced Diagnostic Imaging - Educational and Operations Testing Period - Claims Processing Requirements \(MM11268\)](#)

## CMS Change Requests

- [Appropriate Use Criteria for Advanced Diagnostic Imaging – Voluntary Participation and Reporting Period - Claims Processing Requirements – HCPCS Modifier QQ \(CR10481, Transmittal 2040\)](#)
- [Appropriate Use Criteria \(AUC\) for Advanced Diagnostic Imaging - Educational and Operations Testing Period - Claims Processing Requirements \(CR11268, Transmittal 2323\)](#)