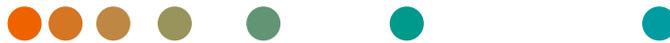


# Imaging Clinical Decision Support and the evolution leading to the PAMA AUC program



**Medical imaging has helped transform healthcare. There is no argument as to the importance of medical imaging as a key diagnostic discipline that defines the course of diagnosis and treatment of diseases. Unfortunately, the possible reliance on diagnoses based on inappropriate imaging exams as well as the progressive over-use of imaging studies has led to waste in healthcare and opened the possibility of suboptimal quality of care. In fact, the U.S. Centers for Medicare & Medicaid Services (CMS) estimates that up to 26.3% of imaging orders are either inappropriate or equivocal when placed without evidence-based standards<sup>1</sup>.**

Choosing the right exam has many positive effects, notably on care delivery, operational efficiency, and cost of care. Ordering the right imaging first time not only leads to faster diagnosis, and thus faster care plan implementation, it could also help protect patients from potential unnecessary exposure to radiation.

This “right imaging, first time” impact is also valuable when considering resource limitations in radiology. For example, it is estimated that there will be 18% growth of imaging because of the aging population in the U.S by 2025<sup>2</sup>. As the elderly population continues to grow, additional stress is placed on existing resources,

highlighting the importance of choosing wisely to ensure radiology resources are focused on delivering the information that can impact quality of care. And cumulatively, reducing unnecessary or unwarranted imaging by focusing on imaging studies aligned to the patient’s clinical presentation eliminates waste, thereby reducing cost. As an example \$ 6.7M is spent on wasteful diagnostic imaging for uncomplicated headache each year in Washington State alone<sup>3</sup>. A priority among payers is fostering the appropriate use of imaging to help standardize imaging use, encourage alignment to evidence-based best practices, and decrease imaging waste without discouraging or hindering ordering physicians.



The Protecting Access to Medicare Act, PAMA – (Section 218 of the Protecting Access to Medicare Act of 2014 (Public Law No: 113-93, signed into law on

<sup>1</sup> [innovation.cms.gov/Files/reports/MedicareImagingDemoEvalRTC.pdf](https://innovation.cms.gov/Files/reports/MedicareImagingDemoEvalRTC.pdf), page 51.

<sup>2</sup> Dall, T. M., Gallo, P. D., Chakrabarti, R., West, T., Semilla, A. P., & Storm, M. V. (2013). An Aging Population And Growing Disease Burden Will Require A Large And Specialized Health Care Workforce By 2025. *Health Affairs*. 32(11), 2013-2020.

<sup>3</sup> [www.radiologybusiness.com/topics/quality/it-appropriate-3-sources-wasteful-imaging-washington-state](http://www.radiologybusiness.com/topics/quality/it-appropriate-3-sources-wasteful-imaging-washington-state)

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## The CMS PAMA AUC Program at glance

**Ordering professional** must consult with a CMS-qualified **Appropriate Use Criteria (AUC)** (provided by a **qualified Provider Led Entity (qPLE)** through a CMS-qualified **Clinical Decision Support Mechanism (CDSM)** when ordering imaging exam for one of **priority clinical areas (PCA)**.

**Furnishing professional** (radiology) must report the **results of the AUC consultation** on the claim submitted in the Medicare beneficiary claim to meet the mandate.

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April 1, 2014<sup>4</sup>) led to the creation of the Medicare Appropriate Use Criteria (AUC) program<sup>5</sup>. This program currently remains in educational and operations testing period and is scheduled to be in full implementation likely January 1, 2023 with payment implications beginning in CY 2023. In summary, the PAMA AUC program requires the healthcare ordering providers to consult appropriate use criteria when ordering advanced diagnostic imaging services for their Medicare patients in an outpatient or emergency setting. The ordering providers need to consult with a CMS-qualified Appropriate Use Criteria (AUC) provided by a qualified Provider Led Entity (qPLE) through a CMS-qualified Clinical Decision Support Mechanism (CDSM) when ordering imaging exam. Furnishing professionals (such as radiologists and cardiologists) must report the results of the AUC consultation on the claim submitted in the Medicare beneficiary claim to meet the mandate or otherwise risk payment denial by Medicare. And because PAMA AUC is mandated by CMS, it is making its way into community hospitals large and small across the U.S.

Substantial unexplained variations exist in how physicians use imaging services. Even when high quality evidence for optimal use of imaging exists, systems to educate, encourage, or if necessary, enforce adoption of this evidence to enable evidence-based care are generally lacking. Empowering Data-Driven Decision-Making with the use of CDSM at the point of order entry, providers have a convenient access to evidence-based standards that consider the patient's clinical condition when offering the recommendation on appropriate imaging studies. Additionally, imaging CDSM should be seamlessly embedded into the physicians' workflow,

thereby enabling operational efficiencies, while also improving communication between clinicians and the radiology departments – all indicative of what true healthcare digitalization can bring into clinical practice.

Delivering on appropriate use also ensures that imaging services are performed when they generate expected health benefits more than negative consequences – including financial cost. Imaging departments must then be guided by the value equation: maximizing quality of imaging care while minimizing cost, both clinical and financial. Both sides of the equation are critical.

$$\text{High Value Care} = \frac{\text{Care Quality}}{\text{Cost of Care}}$$

Radiology departments are often at the forefront of changing clinical practice through digitalization. Driving clinical decision support (CDS) adoption among the ordering or referral community by offering comprehensive services is certainly a new chapter in the radiology department's digitalization journey. But to foster this culture of change, and ensure success in meeting the PAMA AUC mandate, there is a need to continuously measure the impact on operations, the rate of adoption and the adherence to guidelines through analytics, a necessary feedback as part of continuous process improvement. With payment implications beginning in CY 2023, now is the time to focus on the tools and requirements necessary to be successful in the program. Providers must evaluate the direct and indirect impact on their imaging facilities and ordering providers.

<sup>4</sup> [www.congress.gov/bills/113th-congress/house-bill/4302](http://www.congress.gov/bills/113th-congress/house-bill/4302)

<sup>5</sup> [www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Appropriate-Use-Criteria-Program](http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Appropriate-Use-Criteria-Program)

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