

Pricing Transparency and Appropriate Use Criteria

Revenue Cycle Challenges in 2019



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Pricing Transparency

- Per the 2019 Inpatient Prospective Payment System Final Rule, effective 1/1/2019 CMS required hospitals to “make public a list of standard charges for all items and services provided by the organization” in an effort to promote pricing transparency
- Applies to all hospitals operating within the United States

**What does that
mean for my
hospital?**



Pricing Transparency

- Hospitals must publish a machine readable file on their website with
 - All items and services provided by the organization
 - All DRGs (diagnosis-related groups)
 - The chargemaster itself or in another form of your choice

➤ *The file must be updated at least annually*
- Hospital concerns
 - Chargemasters have almost no relationship to patient financial responsibilities for most payors, but that concept will be lost on patients seeking clarity around pricing for healthcare services.
 - Attempting to navigate chargemasters and to understand how charges relate to their bill will frustrate patients and consume hospital resources, jeopardizing the hospital-patient relationship.

Pricing Transparency

- CMS response to hospital concerns
 - Hospitals are encouraged to undertake efforts to engage in consumer friendly communication to help patients understand their potential financial liability
 - Enable patients to compare charges for similar services across hospitals



Pricing Transparency

- This presents both an opportunity and a challenge to develop compliant, cost-effective processes that add value for patients, and promote fair and accurate comparisons.
- Prepare to assist patients through this change and mitigate any damage to revenue or reputation



Descriptions

- Patients have to understand the service to understand the price
- The Chargemaster descriptions should make sense to an average, non medical person

CDM Review - Descriptions

- What do your current descriptions tell patients?

CDM#	Description	CPT	Fee
	LEVEL III	99283	\$454.00
	LEVEL IV	99284	\$700.00
	LEVEL II	99282	\$267.00
	LEVEL V	99285	\$987.36
	LEVEL I	99281	\$167.00
	KUB	74000	\$254.83
	IVP	74400	\$702.34
	HERNIA REPAIRS IN LOWER ABDOMEN	00830	\$1,038.16
	VENTRAL AND INCISIONAL HERNIAS	00832	\$1,427.47
	VENTRAL AND INCISIONAL HERNIAS	00832	\$624.00
	HERNIA REPAIRS IN LOWER ABDOMEN	00830	\$1,297.70

Challenges of Pricing Transparency



- Chargemaster data can be confusing to patients.
- A direct interpretation of CDM pricing is misleading, since many payors bundle charges and reimburse contractual allowed amounts rather than retail prices.
- Patients are responsible for the copay, deductible or coinsurance
 - Based on the allowed amounts for commercial payors
 - Charges for Medicare in CAH
- The published chargemaster will not provide this information to your patients.
- Outdated pricing or sliding scale markups can also contribute to confusion for your patients and their families.

Challenges - DRGs

- What price do you assign to DRGS?
- How are they displayed on your website?
- Explained to patients?

DRG Definition	Provider State	Average Covered Charges
004 - TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	LA	\$260,583.83
013 - TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES W/O CC/MCC	LA	\$86,747.94
036 - CAROTID ARTERY STENT PROCEDURE W/O CC/MCC	LA	\$41,976.24
061 - ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W MCC	LA	\$90,539.23
062 - ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W CC	LA	\$79,404.84
063 - ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W/O CC/MCC	LA	\$69,264.22
097 - NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W MCC	LA	\$67,524.03
100 - SEIZURES W MCC	LA	\$42,730.84
101 - SEIZURES W/O MCC	LA	\$23,141.58
190 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	LA	\$31,973.72
191 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W CC	LA	\$24,269.69
192 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC	LA	\$18,249.80
193 - SIMPLE PNEUMONIA & PLEURISY W MCC	LA	\$39,570.53
194 - SIMPLE PNEUMONIA & PLEURISY W CC	LA	\$25,669.31
195 - SIMPLE PNEUMONIA & PLEURISY W/O CC/MCC	LA	\$19,404.29
250 - PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W MCC	LA	\$85,392.48
251 - PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W/O MCC	LA	\$65,855.05
282 - ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W/O CC/MCC	LA	\$26,525.24
283 - ACUTE MYOCARDIAL INFARCTION, EXPIRED W MCC	LA	\$52,177.57

Challenges - Supplies

- How are supplies reported?
 - Medically necessary only?
 - Convenience items?
- How do they look in the CDM?
 - Sliding scale mark up
 - Accurately priced at “each”



Challenges of Pricing Transparency



- Chargemasters shared between PPS and non PPS (CAH hospitals) tend to meet the needs of the parent hospital
- Medicare coinsurance at CAH is based on charges
- How does pricing affect patient perception?
- Patient reality?

Patient Questions

- The “menu” provided online doesn’t necessarily answer patient questions
 - What are “hidden” add-on costs?
 - What is **my** cost??
 - How does this compare to other facilities?



June 2016 MedPac Report



- “Medicare beneficiary coinsurance at CAHs is based on charges and the Medicare program’s reimbursement to CAHs is cost-based, the relationship between costs and charges is critical. If the growth in charges outpaces the growth in costs, the coinsurance burden increases for beneficiaries”
- NEED FOR A POLICY CHANGE FOR BENEFICIARY COINSURANCE

Recent On-line CDM Analysis

CDM#	DESCRIPTION	CPT	CAH COINS	OPPS PAYMENT	OPPS COINS
	CT HEAD W CONTRAST	70460	\$375.60	201.74	\$40.35
	CT HEAD W WO CONTRAST	70470	\$480.00	\$201.748	\$40.35
	MRI PELVIS	72196	\$461.40	\$385.88	\$77.18
	MRI LOW EXT NON-JT W WO RIGHT	73720	\$375.60	\$385.88	\$77.18
	MRI LOW EXT JOINT RT	73721	\$343.85	\$230.56	\$46.12
	MRI LOW EXT JOINT RIGHT W/WO	73723	\$436.00	\$385.88	\$77.18
	MRI ABD WO CONTRAST	74181	\$407.40	\$230.56	\$46.12
	MRI ABD WO AND W CONTRAST	74183	\$489.00	\$385.88	\$77.18

Procedure Price Lookup

Planning an outpatient procedure?

You may have options for where you have your outpatient procedure.

Compare national average prices for procedures done in **both** ambulatory surgical centers and hospital outpatient departments.

You'll see how much the patient pays with Original Medicare and no supplement (Medigap) policy.

Search by procedure name or code.

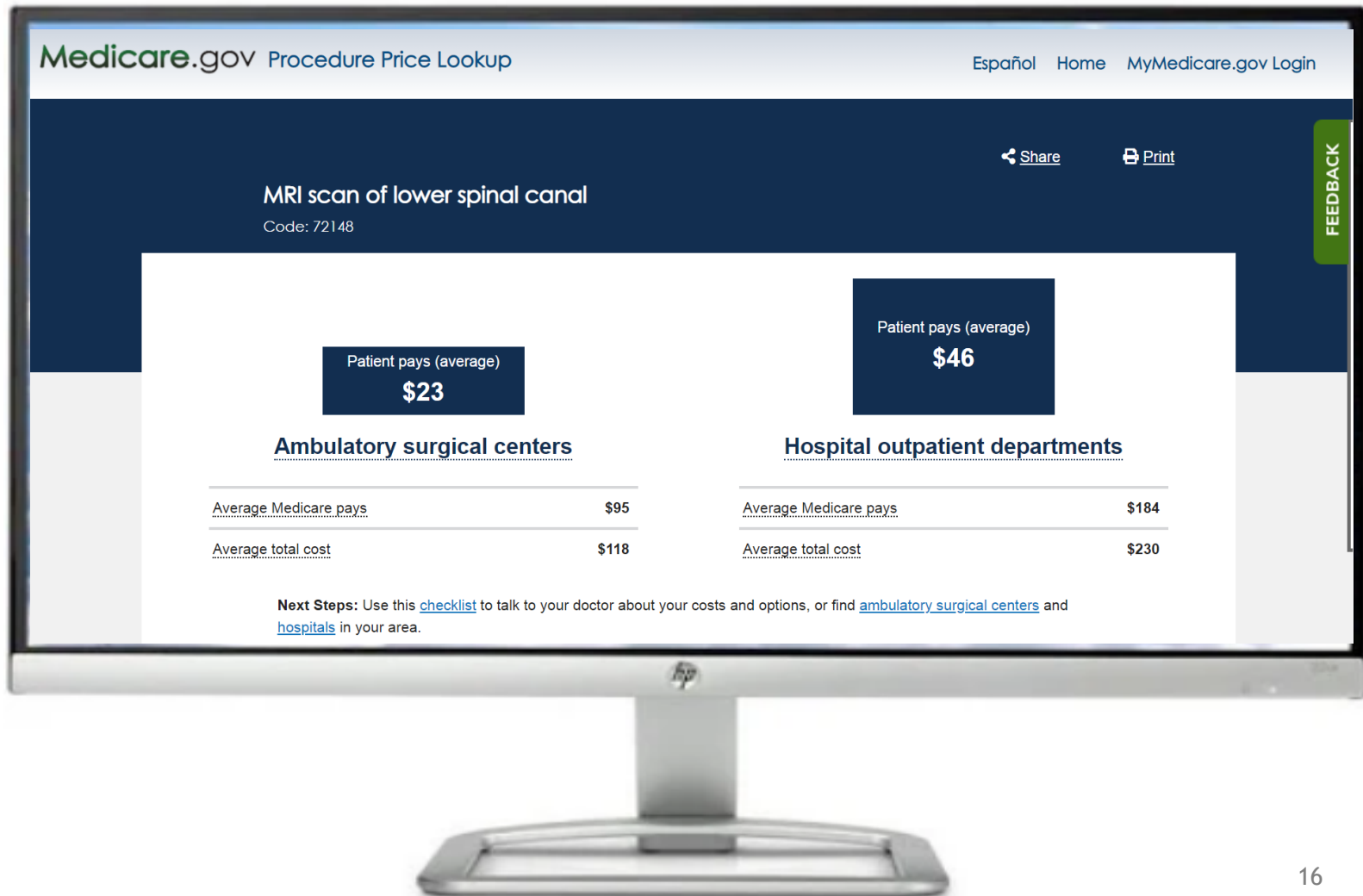
Type a procedure or code and select one from the list. [Need help?](#)

MRI scan of lower spinal canal (72148)

MRI scan of arm joint (73221)

MRI scan (76498)

Website with prices

A screenshot of the Medicare.gov Procedure Price Lookup page, displayed on a computer monitor. The page title is "Medicare.gov Procedure Price Lookup". Navigation links include "Español", "Home", and "MyMedicare.gov Login". The procedure being looked up is "MRI scan of lower spinal canal" with code "72148". There are "Share" and "Print" icons. A vertical "FEEDBACK" button is on the right. The page shows two columns of pricing data: "Ambulatory surgical centers" and "Hospital outpatient departments". Each column has a box for "Patient pays (average)" and a table for "Average Medicare pays" and "Average total cost".

Medicare.gov Procedure Price Lookup

Español Home MyMedicare.gov Login

Share Print

FEEDBACK

MRI scan of lower spinal canal
Code: 72148

Ambulatory surgical centers	Hospital outpatient departments
Patient pays (average) \$23	Patient pays (average) \$46
Average Medicare pays \$95	Average Medicare pays \$184
Average total cost \$118	Average total cost \$230

Next Steps: Use this [checklist](#) to talk to your doctor about your costs and options, or find [ambulatory surgical centers](#) and [hospitals](#) in your area.

Recent On-line CDM Reviews

- Example
 - 6 departments noted with prices set at \$0.00
 - 64, or 52%, of departments noted with prices set lower than Medicare rates
 - 98, or 79%, of departments noted with prices set lower than 2X Medicare
 - 92, or 74%, of departments noted with prices set higher than 5X Medicare rates
- Overall:
 - 8.77% of all codes examined were set lower than Medicare
 - 19.31% of all codes examined were set lower than 2X Medicare
 - 27.01% of all codes examined were set higher than 5X Medicare

Fallout

- Medicare is already advertising the benefits of having elective procedures at ASCs vs. OPPI hospitals
- Will they do the same to CAHs?
- How will you measure up?
- What will your message be? Are you prepared?



Photo: Ford Motor Company

Pricing Transparency CDM Review

- Review viability and consistency of the current pricing methodology
- Examine the contents of each chargemaster to include areas such as pricing, description, inclusion of deleted codes, etc.
- To identify pricing variability payable codes were compared to published Medicare rates

Pricing Transparency

- Patients seek clarity from staff with which they have the most contact, but who may be the least prepared to answer financial questions:
 - Medical staff
 - Technicians
 - Nurses
- The best person for patients to speak with is a Financial Counselor.

Pricing Transparency- Next steps

- Still time to get it right
- Per statement from CMS Administrator Seema Verma on Thursday, January 10, 2019
 - The agency has no means of enforcing its new price transparency rule
 - There are no penalties at this time
 - There is no timeline for penalty implementation
 - Seeking information on what the enforcement mechanism for the rule should be
 - Expectation that all hospitals will comply



Take Steps

- Review and clean up CDM
 - Implement a patient centric, defensible pricing methodology
 - Update CDM to reflect current service provision
 - Review chargemaster and pricing through the patient's eyes
- Use website to guide patients to Financial Counselors
 - "Itemized charges may not reflect the payor or patient responsibility for services or supplies provided as part of a service or surgical package. Bundled rates apply that reflect significant discounts. Patients are encouraged to contact a Financial Counselor to review expected services and to obtain an accurate quote."
 - [Contact Financial Counselor](#) Link to Financial Counselor email and/or extension
 - [Frequently Asked Questions](#) Link to FAQs page
- Educate staff to refer all questions to Financial Counselors
- Train Financial Counselors
 - Read CDM
 - Know payor guidelines
 - Understand reimbursement structures
 - Create effective and accurate estimates

Website Design



Sample Language

Itemized charges may not reflect the payor or patient responsibility for services or supplies provided as part of a service or surgical package.

Contact a Financial Counselor to review expected services and to obtain an accurate quote.

[Contact Financial Counselor](#)
[Frequently Asked Questions](#)

FAQs

Will I be charged the published rates?

It is unlikely that you will be charged the published rate for services.

- 1. Insurance first applies discounts before applying patient copays, coinsurance or deductibles*
- 2. Guidelines exist that require bundling of certain services when performed together*
- 3. Self Pay discounts are available*
- 4. Financial assistance is available for those who qualify*

FAQ Page contd.

How do I compare to price match?

The price you pay is set by your insurance. Our Financial Counselors can work with you and your insurance to determine your responsibilities.

How will I be charged for drugs and supplies?

Drugs and supplies may be bundled into payment for primary services, if so, there will be no additional patient responsibility after the primary service. Please see a Financial Counselor to learn more about your responsibility after insurance

What if my planned procedure changes after the procedure starts?

Pricing for similar or expanded services can be anticipated and accurate estimates can be created.

[Contact a Financial Counselor for more information on these and other questions](#)

[Proceed to additional pricing information](#)



Financial Advocates

- Ambassadors for the hospital
- Train staff to understand patient responsibilities and *have the correct conversation*
- **Capture correct insurance information**
- Listen to the patient
- Ask clarifying questions
- Restate the patient's needs or concerns to ensure accuracy
- Communicate with the CDM coordinator, or Finance for clarification

Financial Advocates

- Understand payor specific guidelines
 - Bundling rules
 - Payor specific NCCI guidelines, MUEs
 - Supply and medications
- Medicare
 - Understand the total cost of patient-responsible charges
 - Able to explain charges to patients
- Self Pay
 - Qualify for Medicaid
 - Qualify for Financial Assistance
 - Discuss prepayment discounts, payment plans, payment options
- Create accurate estimates, assist in next steps
 - Get services scheduled, authorized, approved
- Collect deposit in advance for high dollar deductibles, or self-pay

Summary

- Scrutinize the CDM
- Update accurate, defensible pricing
- Create understandable descriptions
 - Provide clarity around Charge components
 - Professional
 - Facility
 - Anesthesia
- Evaluate DRG explanations and pricing
- Steer patients to Financial Counselors
- Train Financial Counselors
- Prepare for annual update process

Appropriate Use Criteria

- Effective July 1, 2020, providers must consult appropriate use criteria (AUC) through a qualified Clinical Decision Support Mechanism (CDSM)
- CMS has not yet solved all of the roadblocks for compliance
- How do we prepare for compliance?

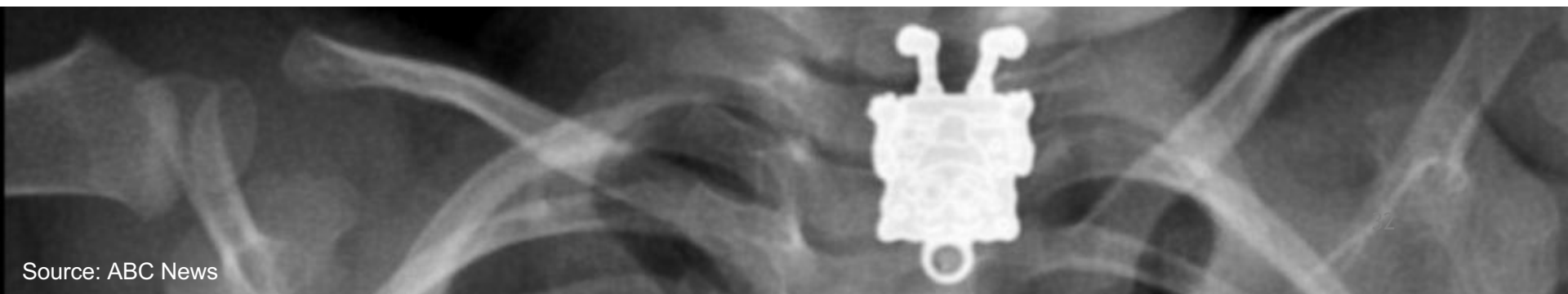
Appropriate Use Criteria (AUC)

- Set or library of criteria to establish the appropriate use criteria.
- Translation: Library of organized, searchable data identifying effectiveness of radiological techniques for diagnosis and/or staging of conditions known or suspected.
 - The data set includes measured exposure to radiation, and effectiveness of radiology modalities compared to other options
- Evidence-based
- Clinical scenario based
 - Patient's presenting symptoms or condition
- Stand alone or integrated
- Intended for use during patient visit
- Drive interactive, patient/provider decisions



Why

- Assistance deciding: ordering, delaying or not performing a test
- Provide assistive clinical judgement
- Obtain option pros and cons
 - Radiation dose
 - Costs
 - Likelihood of false positives
 - Rabbit holes: Incidental radiologic findings of unclear significance that can trigger a cascade of costly and unnecessary testing, cause undue patient anxiety, and result in additional radiation exposure.⁴



Major Components of Policy

November 15, 2015

- AUC established

Consultation mechanisms identified with AUC

- Ongoing

AUC consultation by ordering professionals beginning July 2019

- Reporting on AUC consultation

Annual identification of outlier ordering professionals by services

- CMS will begin gathering data January 1, 2020
- First outlier reporting begins January 2021

Training requirements or standards

- CMS will not establish

CMS Implementation Schedule

July 2019-Jan 2020: Voluntary Period

- Append modifier QQ

Jan 2020

- Ordering professionals must consult specified applicable AUC through qualified CDSMs
- CMS begins educational and operations testing
- “Continue to pay claims whether or not they correctly include AUC consultation information”

Jan 2021: Full Implementation

- Require orders to contain consultation information
- Require consultation information on the furnishing professional and furnishing facility claim for the advanced diagnostic imaging service
- Deny:
 - ❑ Global services in applicable settings
 - ❑ TC component from applicable settings
 - ❑ PC reading component

Acronyms

CDSM	Clinical Decision Support Mechanism	<ul style="list-style-type: none">• Program that houses library of AUC data
PLE	Provider Led Entity	<ul style="list-style-type: none">• National professional medical specialty society or other organization predominately providing direct patient care• Develop, modify or endorse Appropriate Use Criteria established
UCI	Unique Consultation Identifier	<ul style="list-style-type: none">• One code to include all the information required under section including an indication of AUC adherence, nonadherence and not applicable responses• Under consideration, not part of the 2020 implementation

CDSM

- Interactive, electronic tool for use by clinicians
- Communicates AUC information to the user
- Provides evidence-based guidance for clinical decisions regarding diagnostic imaging based on:
 - Presenting symptoms and/or condition
 - Clinical presentation
- Each CDSM assigned specific G Codes for reporting purposes
- “Should” be able to provide with orders:
 - CDSM specific G-Code
 - Modifier to report
- Approved by CMS
- Must re-apply every five years

CDSM

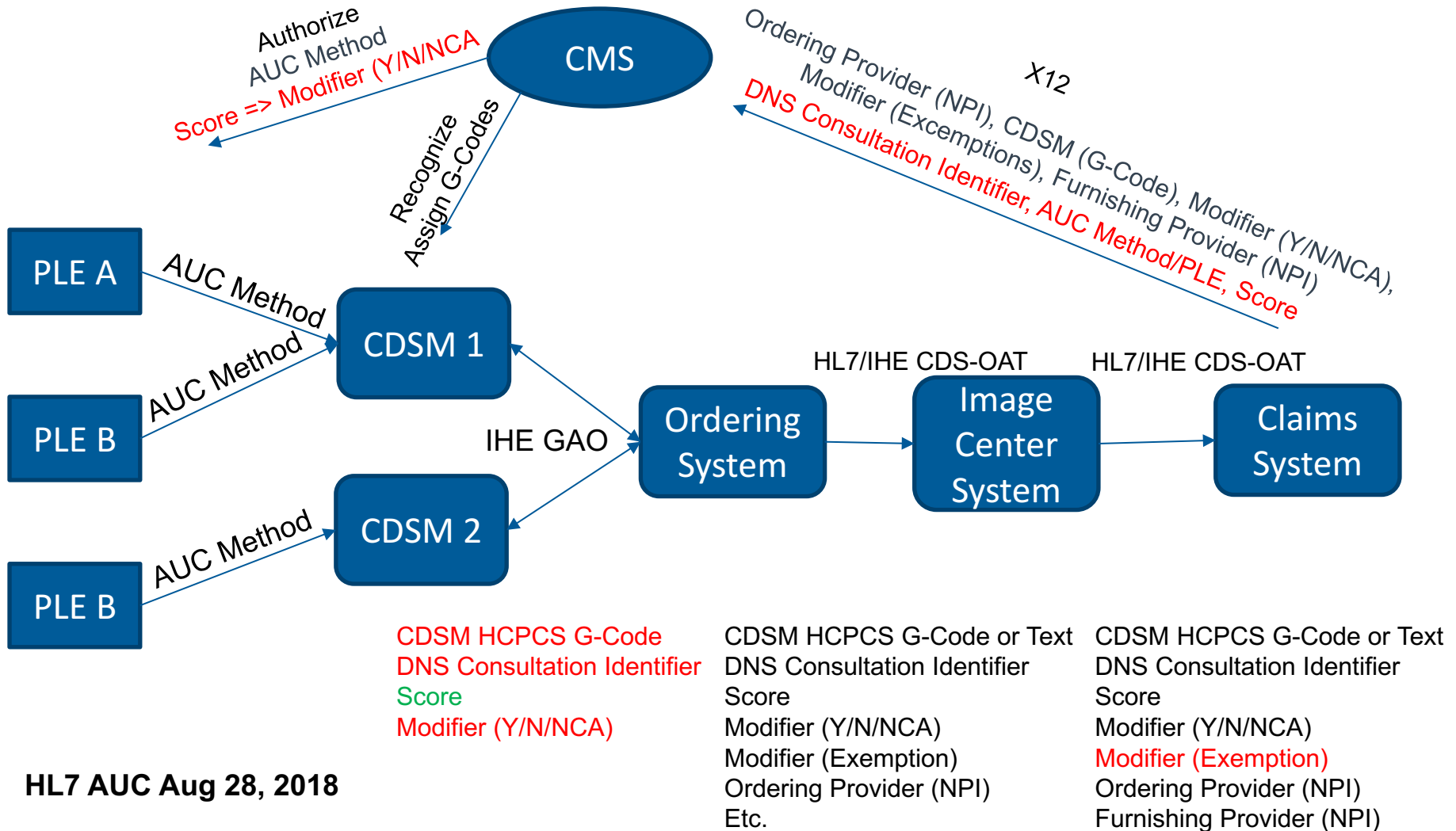
- Integrated with, or modules within EMR
- Separate tool:
 - Utilize interface to pull relevant AUC information in
 - Utilize interface to bring EMR data to AUC tool
 - Manually enter pertinent information
 - Specific patient characteristics
 - Laboratory results
 - Lists of co-morbid diseases
- “Should be” accessible during patient workup

Applicable Guidelines

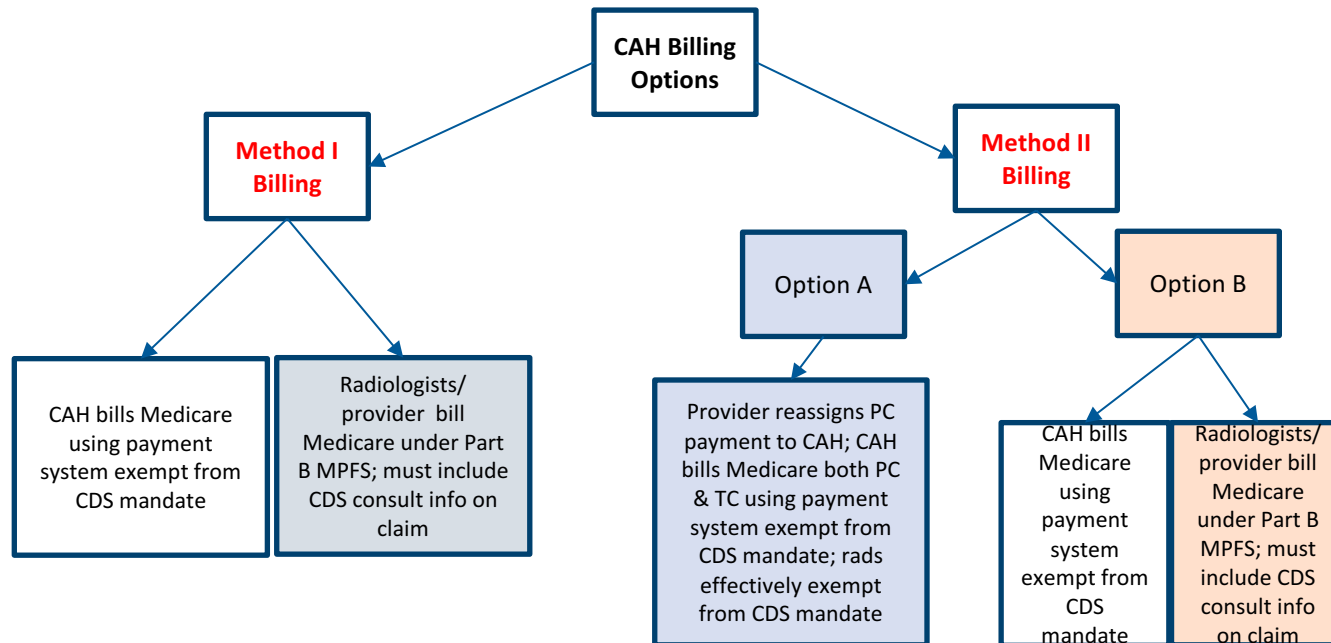
- Reporting required on all claims for applicable imaging service, paid for under applicable payment system
 - Physician Fee Schedule:
 - Applies when billed globally
 - PC or TC depending on site
 - OPPS (including Emergency Room)
 - ASC
 - Independent Testing Facilities
 - Any other provider-led outpatient setting determined appropriate
 - Will not, at this time match PC and TC claims for compliance
- Ordered on or after January 1, 2020
- Report the AUC consultation information on the claim for furnishing provider services

CMS Appropriate Use Criteria: Core Concepts

Policy, System and Standards Interactions



CAH Billing Method Impact



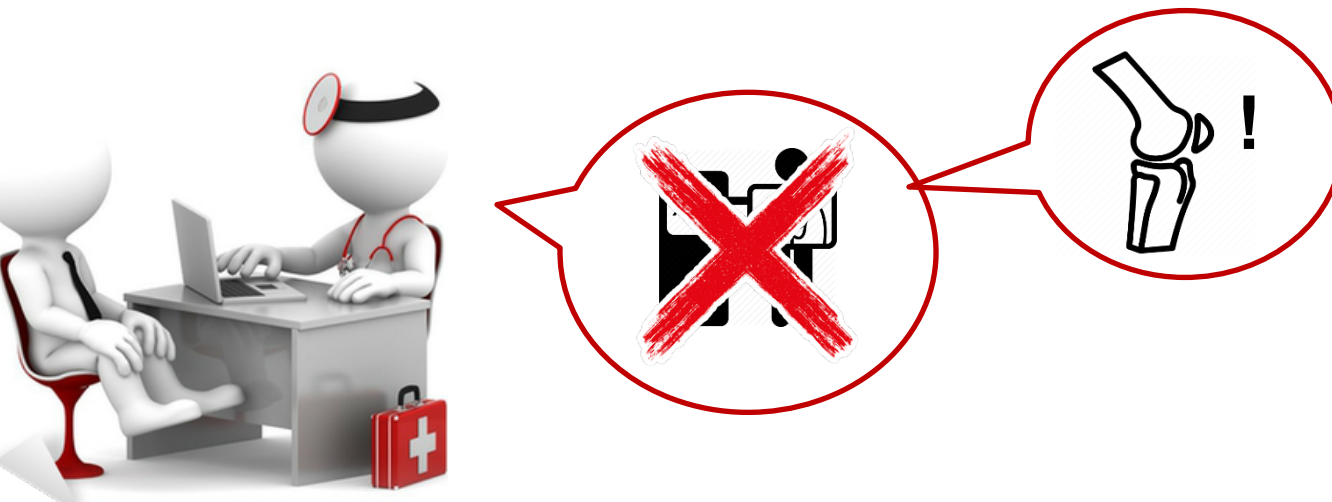
Ordering Professionals

- Consult with CDSM
- Interact with patient
 - Discuss imaging needs or lack thereof
 - Appropriateness
 - Risks/benefits
- Provide required information along with order to furnishing professional



Who Can Change Order

- Ordering physician
- Furnishing professional may perform their own AUC consultation to verify information
- Cannot replace original order
- Physical Therapists cannot order, or change order

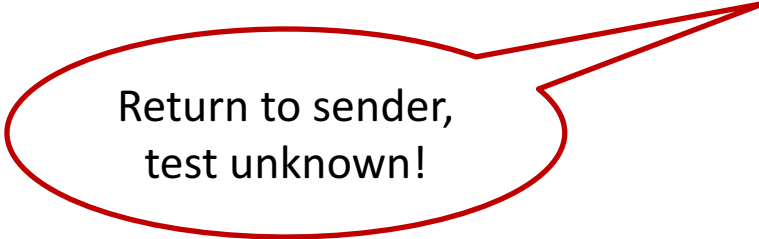


Ordering Professional: Options

- Clinical staff can consult with CDSM
- Requires “level of clinical knowledge necessary to effectively coordinate and communicate with the treating clinician”
- Typically work “*incident to*” the practitioner’s professional service, and able to:
 - Perform care management services including
 - Chronic care management (CCM),
 - Behavioral health integration (BHI)
 - Transitional care management (TCM) service
- “Close relationship between the ordering professional and individual consulting the AUC”
- Available to ordering professional to discuss results and any adjustments

Ordering Professional - Options

- CMS assumes non adherence with CDSM will be reported back to ordering provider to:
 - Consider different test
 - Approve original test
- Ordering professional is ultimately responsible for the consultation
- Ordering NPI is on the line
- Could be identified as an outlier ordering professional



Return to sender,
test unknown!



Furnishing Professional

- Furnishing professional accurately reports CDSM information on claims for applicable imaging services
- NPI of ordering professional
- G-codes identifying CDSM consulted. If there is more than one imaging service, a single G-code will be attributed to all images
- Modifiers to report consultation information on claims
 - Service ordered adheres to the applicable appropriate use criteria;
 - Service ordered does not adhere to such criteria;
 - Criteria is not applicable to the service ordered;
 - Hardship categories
- Modifiers under consideration for services
 - Ordered in one location and furnished at another
 - Furnished after a second consultation has occurred,
 - Result of interpretation-only services.
- ? Multiple exams, different CDSMs same DOS

Claim Requirements

- NPI of the ordering professional (if different from the furnishing professional)
- The G-Code representing qualified CDSM consulted
- Applicable modifiers
 - Whether the service ordered would or would not adhere to specified applicable AUC;
 - Specified applicable AUC consulted was not applicable to the service ordered;
 - Exception modifiers

Bugs

- Ordering Physician NPI required on the Furnishing provider claim
 - Where?
 - *CMS response: Will work to identify a potentially appropriate place on the furnishing facility so that fields on the claims are correctly populated*
 - *Claim form changes may be needed*
 - *Will consider other implementation options*

32. SERVICE FACILITY LOCATION INFORMATION		33. BILLING PROVIDER INFO & PH # ()	
a. NPI	b.	a. NPI	b.

1500 Form

76 ATTENDING	NPI	QUAL	
LAST		FIRST	
77 OPERATING	NPI	QUAL	
LAST		FIRST	
78 OTHER	NPI	QUAL	
LAST		FIRST	
79 OTHER	NPI	C	
LAST		FIRST	

UB-04

Bugs

- What if more than one CDSM consulted?
 - Patient brings multiple exams for second opinion
 - Multiple providers order exams and patient schedules same day
 - Cannot map CDSM G-codes to exams
 - Cannot map multiple consulting NPIs
 - *Per CMS multiple claims not optimal*
 - *UCI under consideration*
- CAH performs test, non exempt provider reads exam
- Single event hardships – gray area

Outlier Reporting

- Reporting will begin with Priority Clinical Areas identified
- Match NPI of ordering provider on furnishing provider claims
- Identify adherence to AUC determination
- Outlier professionals will be subject to additional Prior Authorization requirements
- Other penalties or restrictions as determined by future rulemaking
- Per Final Rule 2019
- “We will not have identified any outlier ordering professionals by that date (January 2020). As such, implementation of the prior authorization component is delayed.”

Priority Clinical Areas

- AUC consultation is required for all advanced diagnostic imaging services, not just those within the priority clinical areas.
- Priority Clinical Areas
 - 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.
 - Additional priority clinical areas will be proposed in future rulemaking.

Single Exam Exceptions

- Inpatient paid under Part A
- Emergency medical condition as defined in section 1867(e)(1) of the Act,
- ...”Absence of immediate medical attention could reasonably be expected to result in—
 - Placing the health of the individual (or, with respect to a pregnant woman, the health of the woman or her unborn child) in serious jeopardy,
 - Serious impairment to bodily functions, or
 - Serious dysfunction of any bodily organ or part; or
 - With respect to a pregnant woman who is having contractions—
 - That there is inadequate time to effect a safe transfer to another hospital before delivery, or
 - That transfer may pose a threat to the health or safety of the woman or the unborn child.”

Single Exam Exceptions

- Suspected but not yet confirmed, for example,
 - Severe pain
 - Severe allergic reactions
- Exception is applicable even if it is determined later that the patient did not in fact have an emergency medical condition

Hardship Exceptions

- Physician granted significant hardship exception - self attestation required:
 - Insufficient internet access as specific to the location where an advanced diagnostic imaging service is ordered by the ordering professional
 - Insurmountable barriers to obtaining infrastructure to have internet access (that is, lack of broadband)
 - Temporary technical problems, installation or upgrades that temporarily impede access to the CDSM
 - CDSM vendor ceases operation, or CMS de-qualifies CDSM
 - If integrated into EHR, and installation issues associated with switching to a new vendor



Hardship Exceptions

- Extreme and uncontrollable circumstances
- Disasters, natural or man-made, that have a significant negative impact on
 - Healthcare operations
 - Area infrastructure or communication systems
- Designated by FEMA as a major disaster
- Public health emergency declared by the Secretary
- Identify the ordering professional's self-attested significant hardship category.



Hardship Exceptions

- Losing CDSM usernames and password does not qualify
- Slow internet does not constitute hardship
- No CDSM G-Code is required when exception applies
- Hardship modifier must be added to furnishing provider claim
- Self Attestation of ordering provider

Appropriate Use Considerations

- Condition known or suspected
- Review optional exams
- Effectiveness of options
- Evidence-based tables
 - Studies available to support ratings
 - Identify and compare radiation exposure

Radiation Dose

- Measures radiation absorbed
- Effective dose measured in mSv - millisievert
- Measures absorbed radiation
- Evaluates pediatrics and adults



Chronic Hip Pain

- Chronic hip pain. First test.
- Radiographs negative, equivocal, or non diagnostic.
- Evaluate cartilage. Next test after radiographs
 - Suspect extrararticular non infections soft tissue abnormality, such as tendonitis
 - Suspect impingement
 - Suspect labral tear w/w out findings consistent or suggestive of impingement
- Radiographs positive. Arthritis of uncertain type. Infection is considered

https://acsearch.acr.org/list?_ga=2.268378317.2120238737.1556040914-1258174711.1552496327

Hip Pain: Musculoskeletal

Topic Name	Narrative & Rating Table	Evidence Table	Lit Search	Appendix
Acute Hand and Wrist Trauma	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Acute Hip Pain-Suspected Fracture	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Acute Trauma to the Ankle	 Narrative & Rating Table	 Evidence Table		 Appendix
Acute Trauma to the Foot	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Acute Trauma to the Knee	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Chronic Ankle Pain	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Chronic Back Pain: Suspected Sacroiliitis/Spondyloarthropathy	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Chronic Elbow Pain	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Chronic Extremity Joint Pain–Suspected Inflammatory Arthritis	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix
Chronic Foot Pain	 Narrative & Rating Table	 Evidence Table		 Appendix
Chronic Hip Pain	 Narrative & Rating Table	 Evidence Table	 Lit Search	 Appendix

Radiation Level Designation

Relative Radiation Level Designations		
Relative Radiation Level*	Adult Effective Dose Estimate Range	Pediatric Effective Dose Estimate Range
O	0 mSv	0 mSv
☢	<0.1 mSv	<0.03 mSv
☢☢	0.1-1 mSv	0.03-0.3 mSv
☢☢☢	1-10 mSv	0.3-3 mSv
☢☢☢☢	10-30 mSv	3-10 mSv
☢☢☢☢☢	30-100 mSv	10-30 mSv

*RRL assignments for some of the examinations cannot be made, because the actual patient doses in these procedures vary as a function of a number of factors (eg, region of the body exposed to ionizing radiation, the imaging guidance that is used). The RRLs for these examinations are designated as “Varies”.

Research Library

Literature Search Performed on:

Beginning Date:

End Date:

Database:

Summary

Source	#Unique Refs	#Retained Refs
Old bibliography	47	29
Literature Search(es)	447	20
Author Added	5	2
Supporting Docs	1	1
Total		52

References from the literature search that were not retained had a poor study design, were not relevant to the topic, or had unclear or biased results.

Hip Pain: Appropriateness Criteria

Acute Hip Pain-Suspected Fracture



Reference	Study Type	Patients/Events	Study Objective(Purpose of Study)	Study Results	Study Quality
20. Cannon J, Silvestri S, Munro M. Imaging choices in occult hip fracture. J Emerg Med. 2009;37(2):144-152.	Review/Other-Dx	N/A	To review the literature focused on hip fracture detection and discuss advantages and limitations of each major imaging modality.	Plain radiographs are usually sufficient for diagnosis as they are at least 90% sensitive for hip fracture. However, in the 3%-4% of emergency department patients having hip X-ray studies who harbor an occult hip fracture, the emergency physician must choose among several methods, each with intrinsic limitations, for further evaluation. These methods include CT, scintigraphy, and MRI.	4



Meta-analysis	<ul style="list-style-type: none"> Good quality – the study design, methods, analysis, and results are valid and the conclusion is supported. Inadequate quality – the study design, analysis, and results lack the methodological rigor to be considered a good meta-analysis study. 	n/a	n/a
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Hip Pain

Variant 1: Acute hip pain. Fall or minor trauma. Suspect fracture. Initial imaging.

Procedure	Appropriateness Category	SOE	Adult RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Radiography hip	Usually appropriate	References	⊕⊕⊕ 1-10 mSv		9	9	0	0	0	0	0	0	1	3	10
Radiography pelvis	Usually appropriate	Limited References	⊕⊕ 0.1-1mSv	⊕⊕ 0.03-0.3 mSv [ped]	9	9	0	0	0	0	0	0	2	3	9
Radiography pelvis and hips	Usually appropriate	Limited References	⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	9	9	1	0	0	0	0	0	0	0	13
US hip	Usually not appropriate	Limited References	○ 0 mSv	○ 0 mSv [ped]	1	1	13	0	1	0	0	0	0	0	0
CT pelvis and hips without IV contrast	Usually not appropriate	Limited References	⊕⊕⊕ 1-10 mSv		1	1	9	0	1	0	2	1	1	0	0
CT pelvis and hips with IV contrast	Usually not appropriate	Expert Consensus	⊕⊕⊕ 1-10 mSv		1	1	11	1	1	0	0	1	0	0	0
CT pelvis and hips without and with IV contrast	Usually not appropriate	Expert Consensus	⊕⊕⊕⊕ 10-30 mSv		1	1	12	1	0	0	0	1	0	0	0
MRI pelvis and affected hip without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	10	1	1	0	0	1	0	1	0
MRI pelvis and affected hip without and with IV contrast	Usually not appropriate	Limited References	○ 0 mSv	○ 0 mSv [ped]	1	1	11	1	2	0	0	0	0	0	0

Need help? Please contact us with any questions or concerns.

Hip Pain

Revised 2018

**American College of Radiology
ACR Appropriateness Criteria®
Acute Hip Pain-Suspected Fracture**

Variant 1: **Acute hip pain. Fall or minor trauma. Suspect fracture. Initial imaging.**

Procedure	Appropriateness Category	Relative Radiation Level
Radiography hip	Usually Appropriate	☼☼☼
Radiography pelvis	Usually Appropriate	☼☼
Radiography pelvis and hips	Usually Appropriate	☼☼☼
CT pelvis and hips with IV contrast	Usually Not Appropriate	☼☼☼
CT pelvis and hips without and with IV contrast	Usually Not Appropriate	☼☼☼☼
CT pelvis and hips without IV contrast	Usually Not Appropriate	☼☼☼
MRI pelvis and affected hip without and with IV contrast	Usually Not Appropriate	O
MRI pelvis and affected hip without IV contrast	Usually Not Appropriate	O
Tc-99m bone scan hips	Usually Not Appropriate	☼☼☼
US hip	Usually Not Appropriate	O

- Imaging after total hip arthroplasty
 - 11 Variants, Each with unique decision criteria
- Follow-up malignant or aggressive musculoskeletal tumor

Sample Exam - ACR Manual Process



- Acute hip pain suspected fracture
- Chronic hip pain
- Follow-up malignant or aggressive musculoskeletal tumor
- Osteonecrosis of the hip
- Imaging after total hip arthroplasty
 - 11 Variants, Each with unique decision criteria
- Follow-up malignant or aggressive musculoskeletal tumor

CDSM for Quality Improvement

- Identify suspected overuse technology
- 25+ cases
- Choose anatomic area
- Choose procedure group (CT, MR etc.)
- Establish goals
- Partner with radiologist and physicians
- Patient engagement
- Retrospective review
 - Prior authorization team
 - Business office
 - Financial counselor
- <http://qcdsm.nationaldecisionsupport.com/>

Questions



Resources

- <http://www.medpac.gov/docs/default-source/reports/june-2016-report-to-the-congress-medicare-and-the-health-care-delivery-system.pdf?sfvrsn=0>
- <http://www.medpac.gov/docs/default-source/contractor-reports/medicare-copayments-for-critical-access-hospital-outpatient-services-update.pdf?sfvrsn=0>
- <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/AUCDiagnosticImaging-909377.pdf>

Thank You



- Stroudwater Revenue Cycle Solutions was established to help our clients navigate through uncertain times and financial stress. Increased denials, expanding regulatory guidelines and billing complexities have combined to challenge the financial footing of all providers.
- Our goal is to provide resources, advice and solutions that make sense and allow you to take action.
- We focus on foundational aspects which contribute to consistent gross revenue, facilitate representative net reimbursement and mitigate compliance concerns. Stroudwater Revenue Cycle Solutions helps our clients to build processes which ensure ownership and accountability within your revenue cycle while exceeding customer demands.
- **Contact us to see how we can help.**

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