

How Guidelines and Appropriate Use Criteria Can Support Oncologic Imaging and Pathology Test Ordering / Decision Making

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HARVARD
MEDICAL SCHOOL



MASSACHUSETTS
GENERAL HOSPITAL



Disclosure

- I have no personal financial interests to disclose
- I serve as Chair of the Board of Chancellors for the American College of Radiology (ACR)
- National Decision Support Company is the exclusive distributor for ACR's Appropriateness Criteria through its Decision Support Mechanism, ACR Select

Inappropriate Imaging Examinations

Signs and Symptoms: Abdominal Pain

History:

Clinical Question: To view appendix and ovaries if female

Comments:

Ord By: [REDACTED] /Ord Callback/Pager # [REDACTED]

Visit Pt Loc:

EDPD

Pressure for rapid throughput:

Sometimes, imaging exams are requested before anyone has seen the patient!

THE ACR APPROPRIATENESS CRITERIA

- 25 years of continuous work
- 176 Clinical conditions
- 1570 Ordering scenarios
- >6,000 literature references
- Hundreds of clinical experts
- Multi-specialty based
- Rigorous SOE methodology
- AHRQ NGC transparency
- Continuous updates
- Widely referenced



ACR
Appropriateness Criteria®

AUC METHODOLOGY

DIAGNOSTIC PROCEDURES

<i>Rating</i>	<i>Category Name</i>	<i>Category Definition</i>	<i>Disagreement</i>
7, 8, or 9	Usually appropriate	The study or procedure is indicated in certain clinical settings at a favorable risk-benefit ratio for patients, as supported by published peer-reviewed scientific studies, supplemented by expert opinion.	The dispersion of the individual ratings from the panel median rating is assessed to determine if there is no disagreement. When the individual ratings are too dispersed from the panel median (disagreement), “May be appropriate” is the rating with a note that there was disagreement.
4, 5, or 6	May be appropriate	The study or procedure may be indicated in certain clinical settings, or the risk-benefit ratio for patients may be equivocal as shown in published peer-reviewed, scientific studies, supplemented by expert opinion.	
1, 2, or 3	Usually not appropriate	Under most circumstances, the study or procedure is unlikely to be indicated in these specific clinical settings, or the risk-benefit ratio for patients is likely to be unfavorable, as shown in published peer-reviewed, scientific studies supplemented by expert opinion.	

The RAND/UCLA Appropriateness Method

THE ACR APPROPRIATENESS CRITERIA

Radiologic Procedures		Rating	Comments	
Mammography diagnostic		3	If further evaluation is needed to better characterize the calcification	NR1,2
C/S breast		4	Only after diagnostic mammographic workup demonstrates suspicious microcalcifications with an associated extensive distribution and an underlying invasive component is suggested	??
Mammography short interval follow-up				
MRI breast without and with contrast		2		Q
PET breast		1		
To-often vertebral scan breast		1		??
Core biopsy breast		1		Q
Fine needle aspiration breast		1		?? ??
Imaging localization for surgical excision breast		1		?? ??
Breast, ducts: I,2,3,4 usually not appropriate; 4,5,6 may be appropriate; 7,8,9 usually appropriate		1		NS
				NS
				NS

Radiologic Procedures		Rating	Comments	
Mammography diagnostic		3		NR1,2
C/S breast		4	Only after diagnostic mammographic workup demonstrates suspicious microcalcifications with an associated extensive distribution and an underlying invasive component is suggested	??
Mammography short interval follow-up				
MRI breast without and with contrast		1		Q
PET breast		1		
To-often vertebral scan breast		1		??
Core biopsy breast		1		Q
Fine needle aspiration breast		1		?? ??
Imaging localization for surgical excision breast		1		?? ??
Breast, ducts: I,2,3,4 usually not appropriate; 4,5,6 may be appropriate; 7,8,9 usually appropriate		1		NS
				NS
				NS

Radiologic Procedures		Comments		Breast Radiation Level
Mammography diagnostic	Rating			
C/W breast	0			NB
	4	Only after diagnostic mammographic workup demonstrates suspicious microcalcifications with an associated mass/focal asymmetry or having an extensive distribution and an underlying invasive component is indicated.		NB
Mammography short interval follow-up				
SILF breast without and with contrast	1			(C)
PCT breast	1			
Tx-99m sestamibi scan breast	1			(C)
Core biopsy breast	1			(C)
Fine needle aspiration breast	1			(C)
Targeted localization for surgical excision breast	1			(C)
	1			(C)
	1			(C)

Note: NB=Not appropriate; C=Could be appropriate; T=Treaty appropriate; F=Fully appropriate; G=Grossly appropriate

Patient Name: TEST, IGNORE MRN: 0000006 Ordering Physician: .
 Save Exam Print Form Exit Exam

Chest CT



Alternate procedures to consider:



Additional Information:

Other Protocols (optional)

☐ Reformats (sagittal/coronal) ☐ Stereotactic

At least one box **MUST** be selected from either of the following groups

SIGNS / SYMPTOMS

- | | |
|---|---|
| ☐ Back pain | ☐ Chest pain acute, cardiac origin |
| ☐ Chest pain acute, pulmonary origin | ☐ Chest pain chronic, cardiac origin |
| ☐ Chest pain, normal EKG | ☐ Chest wall pain |
| ☐ Cough (persistent) | ☐ Fatigue and malaise |
| ☐ Fever | ☐ Hemoptysis |
| ☐ Lymphadenopathy | ☐ Night sweats |
| ☐ Rales | ☒ Shortness of breath |
| ☐ Mass or lump on chest or back | ☐ Weight loss |

KNOWN DIAGNOSES (NOT Rule/out!)

- | | |
|--|---|
| ☐ Aortic dissection | ☐ Brachial Plexus abnormality |
| ☐ Bronchiectasis | ☐ Bronchiectasis w/ acute exacerbation |
| ☐ Congenital heart disease | ☐ Emphysema |
| ☐ Injury to trunk | ☐ Interstitial Lung Disease (Acute) |
| ☐ Interstitial Lung Disease (Chronic) | ☐ Neoplasm - Esophageal cancer |

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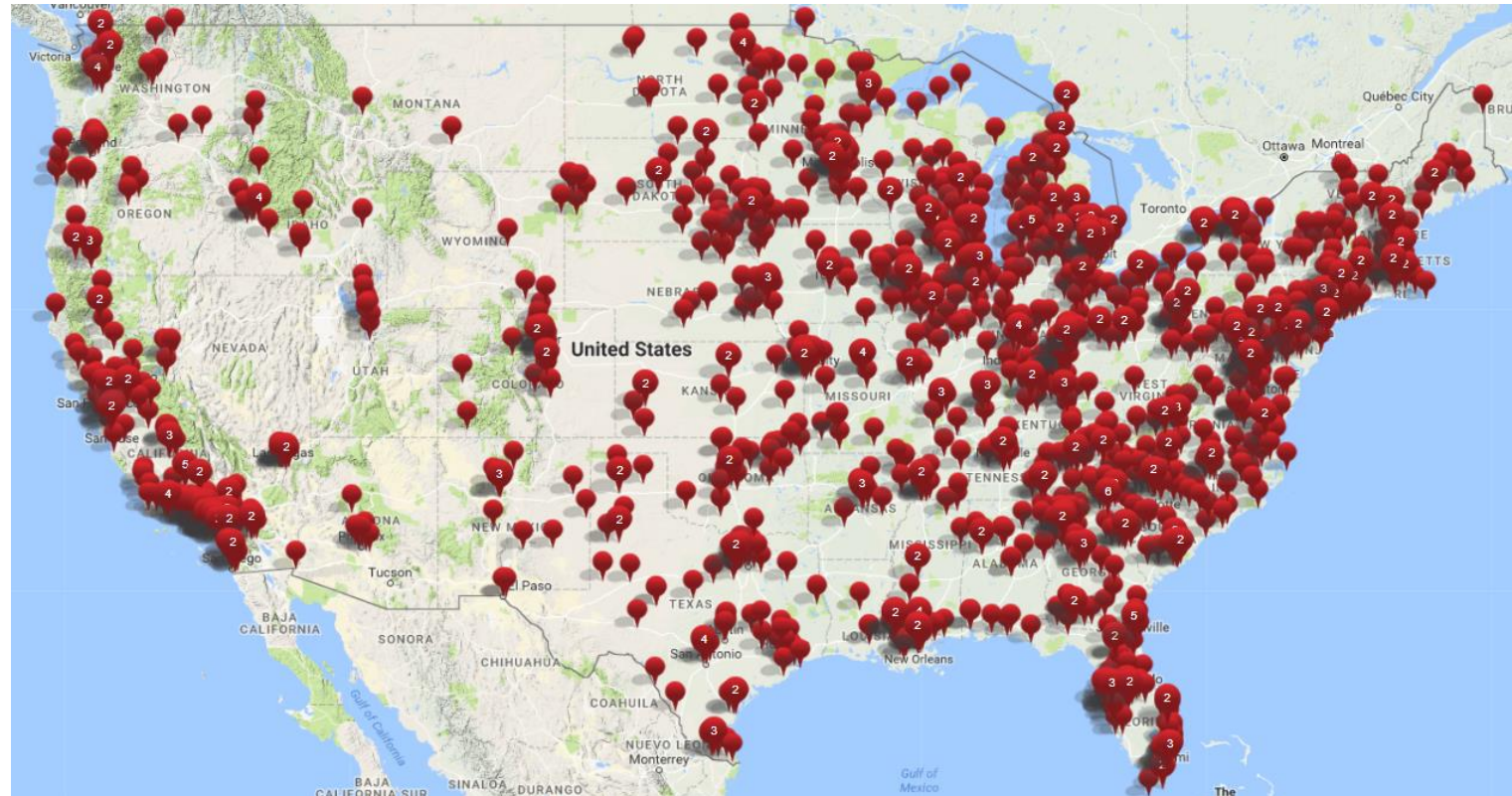
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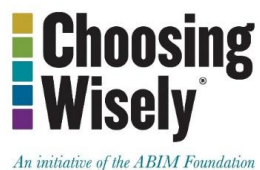
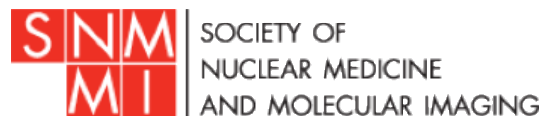
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HEALTHCARE

NDSC solutions have been adopted by over 500 health systems covering 2,000 facilities which process over 5 million decision support transactions monthly.





Oncologic AUC: ACR vs. NCCN

- ACR Oncologic AUC
 - 319 Scored Indications, 22 Cancer Types
 - 143 Unscored Indications (in deference to NCCN)
 - Purpose: Staging + <Screening, Diagnosis in full AC>
 - Some Follow-up/Surveillance for Breast and Genitourinary Cancers
- NCCN Imaging AUC
 - 1001 Indications, 51 Cancer Types
 - Purpose: Screening, Diagnostic, Staging, **Treatment Response Assessment, Follow-up/Surveillance**

NCCN – Cervical Cancer

Filters: *Cervical Cancer v.1.2018* > *Cervical Cancer* > *Follow-up/Surveillance* > *MRI*

Default Sort 

Showing 1 to 2 of 2 entries

Search:

	 											
		Clinical Setting	Guideline Page	Category of Evidence	ICD-10 Codes	Stage	Additional Description of Stage	T	N	Indication	Imaging Recommendation	Purpose
		Cervical Cancer	CERV-10 CERV-A (2 of 3)	2A	C53.0, C53.1, C53.8, C53.9, Z80.49, Z85.40, Z85.41, Z85.44	IA1,IA2,IB1,IB2				Fertility sparing	Consider pelvic MRI with contrast	Follow-up/Surveillance

M:

Histology:

Frequency: MRI:

6 mo after surgery
Annually thereafter for 2-3 yrs

Imaging Notes:

Additional imaging as indicated based on symptomatology and clinical concern for recurrent/metastatic disease (Factors may include abnormal physical exam finding or new pelvic, abdominal, or pulmonary symptoms). CT and MRI with contrast unless contraindicated.

4	☐	Cervical Cancer	CERV-10 CERV-A (2 of 3)	2A	C53.0, C53.1, C53.8, C53.9, Z80.49, Z85.40, Z85.41, Z85.44	IIA1, IIA2, IIB, IIIA, IIIB, IVA				- Whole body PET/CT (preferred) or Chest/Abdomen/Pelvic CT with contrast - Consider pelvic MRI with contrast	Follow-up/Surveillance
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M:

Histology:

Frequency: PET/CT, CT or MRI

Within 3-6 mo after completion of therapy

Imaging Notes:

Additional imaging as indicated based on symptomatology and clinical concern for recurrent/metastatic disease (Factors may include abnormal physical exam findings such as palpable mass or adenopathy, new pelvic, abdominal, or pulmonary symptoms). CT and MRI with contrast unless contraindicated.