The Weill Cornell Hip Pain Appropriate Use Criteria (AUC) addresses twenty-two clinical conditions common to patients presenting with Hip Pain and makes recommendations to optimize diagnostic effectiveness.

Common Clinical Conditions – Hip Pain	
0	Not Hip Pain
1	Acetabular Labral Tear Suspected
2	Arthroplasty Loosening Suspected - Status Post
3	Avascular Necrosis Suspected - Hip
4	Cancer Suspected - Hip
5	Hematoma - Hip
6	Hernia Suspected
7	Heterotopic Bone Suspected - Hip
8	Hip Pain without Trauma
9	Iliopsoas Subluxation
10	Impingement - Hip
11	Infection Suspected - Hip
12	Inflammatory Arthritis Suspected - Hip
13	Lateral Femoral Cutaneous Nerve Compression
14	Mass Suspected - Hip
15	Muscle Tendon Disorder
16	Osteoarthritis Suspected - Hip
17	Piriformis Syndrome - Sciatic Nerve Irritation
18	Post-Fracture Healing Assessment - Hip
19	Preoperative Planning or Known Hip Fracture
20	Soft Tissue Injury - Hip
21	Tendon Injury Repair Hip - Status Post
22	Traumatic Hip Pain - Suspected Fracture

The Hip Pain AUC is activated when a user orders one of the following fourteen Advanced Imaging Procedures.

Advanced Imaging Procedures	
1	CT Arthrogram Hip
2	CT Hip without Contrast
3	CT Hip with Contrast
4	CT Hip with and without contrast
5	MR Arthrogram Hip
6	MR Hip without Contrast
7	MR Hip with Contrast
8	MR Hip with and without Contrast
9	CT Pelvis without Contrast
10	CT Pelvis with Contrast
11	CT Pelvis with and without Contrast
12	MR Pelvis without Contrast
13	MR Pelvis with Contrast
14	MR Pelvis with and without Contrast

The Hip Pain AUC recommends one of the following twelve Imaging Procedures based on the clinical condition.

Recommended Imaging Procedures	
1	CT Arthrogram Hip
2	CT Hip without Contrast
3	CT Hip with Contrast
4	CT Hip with and without contrast
5	MR Arthrogram Hip
6	MR Hip without Contrast
7	MR Hip with Contrast
8	MR Hip with and without Contrast
9	MR Lumbar Plexus without Contrast
10	NM Bone Scan
11	XR Hip
12	US Hip

Logic Tables

The following Clinical Condition Logic Tables provide the Hip Pain AUC logic for each clinical condition.
The logic includes priors, contraindications, metal reduction and advanced US techniques where applicable.

Key

Value	Score
Blank	No Score Assigned
0	AUC Not Applicable
1	Inappropriate
2	Contact Radiology
3	Appropriate
4	Appropriate Preferred

Condition 0 – Not Hip Pain AUC Logic Activated, AUC Not Applicable

Condition	CT Arth	CT w	CT wo	CT wwo	MR w	MR wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Not Hip Pain	0	0	0	0	0	0	0	0					0	0	0	0	0	0

Condition 1 - Acetabular Labral Tear Suspected

Condition	Contraindications	CT Hip Arth	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Acetabular Labral Tear		1	1	1	1	1	4	1	4					1	1	1	1	1	1
Acetabular Labral Tear	GAD	1	1	1	1	1	4	1	1					1	1	1	1	1	1
Acetabular Labral Tear	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 2 - Arthroplasty Loosening Suspected - Status Post

Condition	Priors Metal Reduction?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Arthroplasty Loosening	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Arthroplasty Loosening	XR, Yes		1	1	4	1	1	4	1	1					1	1	1	1	1	1
Arthroplasty Loosening	XR, Yes	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1
Arthroplasty Loosening	XR, No	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1
Arthroplasty Loosening	XR, No	CT MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 3 – Avascular Necrosis Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Avascular Necrosis	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Avascular Necrosis	XR		1	1	1	1	1	4	1	1					1	1	1	1	1	1
Avascular Necrosis	XR	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 4 – Cancer Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Cancer	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Cancer	XR		1	1	3	1	1	3	4	1		3			1	1	1	1	1	1
Cancer	XR	GAD	1	3	3	1	1	4	1	1		3			1	1	1	1	1	1
Cancer	XR	IOD	1	1	3	1	1	3	4	1		3			1	1	1	1	1	1
Cancer	XR	MR	1	3	3	1	1	1	1	1		3			1	1	1	1	1	1
Cancer	XR	CT	1	1	1	1	1	3	4	1		3			1	1	1	1	1	1
Cancer	XR	GAD IOD	1	1	3	1	1	4	1	1		3			1	1	1	1	1	1
Cancer	XR	GAD CT	1	1	1	1	1	4	1	1		3			1	1	1	1	1	1
Cancer	XR	MR, IOD	1	1	4	1	1	1	1	1		3			1	1	1	1	1	1
Cancer	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 5 – Hematoma Suspected

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Hematoma		1	1	4	1	1	4	1	1				4	1	1	1	1	1	1
Hematoma	MR	1	1	4	1	1	1	1	1				4	1	1	1	1	1	1
Hematoma	CT	1	1	1	1	1	4	1	1				4	1	1	1	1	1	1
Hematoma	MR CT	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1

Condition 6 – Hernia Suspected

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Hernia	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1
Hernia	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1
Hernia	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1
Hernia	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 7 – Heterotopic Bone Suspected

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Heterotopic Bone		1	1	4	1	1	4	1	1					1	1	1	1	1	1
Heterotopic Bone	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1
Heterotopic Bone	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1
Heterotopic Bone	MR, CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 8 – Hip Pain without Trauma

Base condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Hip Pain wo Trauma	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Hip Pain wo Trauma	XR		1	1	1	1	1	4	1	1					1	1	1	1	1	1
Hip Pain wo Trauma	XR	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 9 – Iliopsoas Subluxation

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Iliopsoas Subluxation	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1
Iliopsoas Subluxation	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1
Iliopsoas Subluxation	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1
Iliopsoas Subluxation	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 10 – Impingement

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Impingement	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Impingement	XR		1	1	3	1	1	4	1	4					1	1	1	1	1	1
Impingement	XR	MR	4	1	4	1	1	1	1	1					1	1	1	1	1	1
Impingement	XR	CT	1	1	1	1	1	4	1	4					1	1	1	1	1	1
Impingement	XR	MR, CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 11 – Infection Suspected

Condition	Prior Studies	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Infection	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Infection	XR		1	1	3	1	1	3	4	1		3			1	1	1	1	1	1
Infection	XR	GAD	1	3	3	1	1	4	1	1		3			1	1	1	1	1	1
Infection	XR	IOD	1	1	3	1	1	3	4	1		3			1	1	1	1	1	1
Infection	XR	MR	1	3	3	1	1	1	1	1		3			1	1	1	1	1	1
Infection	XR	CT	1	1	1	1	1	3	4	1		3			1	1	1	1	1	1
Infection	XR	GAD IOD	1	1	3	1	1	4	1	1		3			1	1	1	1	1	1
Infection	XR	GAD CT	1	1	1	1	1	4	1	1		3			1	1	1	1	1	1
Infection	XR	MR, IOD	1	1	4	1	1	1	1	1		3			1	1	1	1	1	1
Infection	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 12 – Inflammatory Arthritis Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Inflammatory Arthritis	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Inflammatory Arthritis	XR		1	1	1	1	1	4	3	1					1	1	1	1	1	1
Inflammatory arthritis	XR	GAD	1	1	1	1	1	4	1	1					1	1	1	1	1	1
Inflammatory arthritis	XR	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 13 – Lateral Femoral Cutaneous Nerve Compression

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Lateral Femoral Cutaneous		1	1	1	1	1	1	1	1	4				1	1	1	1	1	1
Lateral Femoral Cutaneous	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 14 – Mass Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Mass	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Mass	XR		1	1	3	1	1	3	4	1		3			1	1	1	1	1	1
Mass	XR	GAD	1	3	3	1	1	4	1	1		3			1	1	1	1	1	1
Mass	XR	IOD	1	1	3	1	1	3	4	1		3			1	1	1	1	1	1
Mass	XR	MR	1	3	3	1	1	1	1	1		3			1	1	1	1	1	1
Mass	XR	CT	1	1	1	1	1	3	4	1		3			1	1	1	1	1	1
Mass	XR	GAD IOD	1	1	3	1	1	4	1	1		3			1	1	1	1	1	1
Mass	XR	GAD CT	1	1	1	1	1	4	1	1		3			1	1	1	1	1	1
Mass	XR	MR IOD	1	1	4	1	1	1	1	1		3			1	1	1	1	1	1
Mass	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 15 - Muscle Tendon Disorder

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Muscle Tendon Disorder	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1
Muscle Tendon Disorder	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1
Muscle Tendon Disorder	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1
Muscle Tendon Disorder	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 16 - Osteoarthritis Suspected - Hip

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Osteoarthritis	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Osteoarthritis, Fracture and/or Surgical Candidate	XR		1	1	4	1	1	4	1	1					1	1	1	1	1	1
Osteoarthritis, Fracture and/or Surgical Candidate	XR	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1
Osteoarthritis, Fracture and/or Surgical Candidate	XR	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1
Osteoarthritis, Fracture and/or Surgical Candidate	XR	MR, CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2
Osteoarthritis, No Fracture and/or Surgical Candidate	XR		1	1	1	1	1	1	1	1					1	1	1	1	1	1

Condition 17 – Piriformis Syndrome - Sciatic Nerve Irritation

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Piriformis Sciatica		1	1	1	1	1	1	1	1	4				1	1	1	1	1	1
Piriformis Sciatica	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 18 – Post-Fracture Healing Assessment

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Post-Fracture Healing	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Post-Fracture Healing	XR		1	1	4	1	1	1	1	1					1	1	1	1	1	1
Post-Fracture Healing	XR	CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 19 – Preoperative – Known Fracture

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Preop-Fracture		1	1	4	1	1	4	1	1					1	1	1	1	1	1
Preop-Fracture	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1
Preop-Fracture	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1
Preop-Fracture	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 20 - Soft Tissue Injury - Hip

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Soft Tissue Injury	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1
Soft Tissue Injury	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1
Soft Tissue Injury	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1
Soft Tissue Injury	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 21 – Hip Tendon Repair - Status Post

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Hip Tendon Repair		1	1	4	1	1	1	1	1					1	1	1	1	1	1
Hip Tendon Repair	CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Condition 22 – Traumatic Hip Pain – Fracture Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo
Hip Trauma Suspected Fracture	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1
Hip Trauma Suspected Fracture	XR		1	1	3	1	1	4	1	1					1	1	1	1	1	1
Hip Trauma Suspected Fracture	XR	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1
Hip Trauma Suspected Fracture	XR	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1
Hip Trauma Suspected Fracture	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2

Sources

The Hip Pain AUC has been developed by Weill Cornell Medicine utilizing the following twenty-one published sources.

No.	Source
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