E·QUAL | EMERGENCY QUALITY NETWORK

Avoidable Imaging Wave II

Working with Radiology to Reduce avoidable imaging: Misconceptions and Frustrations about Emergency Medicine and Radiology

TCPi | Transforming Clinical Practices Initiative

American College of Emergency Physicians®
ADVANCING EMERGENCY CARE

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Improving Value For Patients Through Collaboration Between Radiologists And Emergency Medicine Physicians
April 20, 2017

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Hackensack Radiology Group

Chairman- American College of Radiology MACRA Committee

Financial Disclosures:

No Disclosures

The Why

- Opportunity to improve patient care
- Opportunity to improve patient satisfaction
- Opportunity to improve ED Throughput
- Enhance narcotic avoidance
- Encouraging appropriate resource use
- Organizations will need to have started these initiatives in the coming months.

Hackensack University Medical Center

Hackensack University Medical Center (HackensackUMC) , now a part of The Hackensack Meridian Health Network is an academic 900-bed Tertiary care facility in Hackensack, NJ. We are located about 11 miles from New York City.

Emergency & Trauma Center

Hackensack
Meridian *Health*

CEDR
CLINICAL EMERGENCY DATA REGISTRY

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National Radiology Data Registry

R-SCAN™
Radiology Support, Communication and Alignment Network

ACR®
AMERICAN COLLEGE OF RADIOLOGY

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R-SCAN™

HOME HOW-TO GUIDE WHY R-SCAN? RESOURCES CW TOPICS

Recent Announcements New Imaging 3.0® case study on R-SCAN results published

What is R-SCAN?

R-SCAN™ is a collaborative action plan that brings radiologists and referring clinicians together to improve imaging appropriateness based upon a growing list of imaging Choosing Wisely (CW) topics. R-SCAN delivers immediate access to Web-based tools and clinical decision support (CDS) technology that help you optimize imaging care, reduce unnecessary imaging exams and lower the cost of care. There is no cost to participate.

E-QUAL | EMERGENCY QUALITY NETWORK

R-SCAN™ Radiology Support, Communication and Alignment Network

Reduce Avoidable Testing
for low risk patients through implementation of Choosing Wisely Recommendations

Reduce Avoidable Imaging Initiative

Reducing Avoidable Imaging Goal: To reduce testing and imaging with low risk patients through the implementation of Choosing Wisely Recommendations

Aims for this initiative include:

- Reduce use of high-cost imaging for **low back pain**
- Reduce head CT scan after **minor head injury**
- Reduce chest CT for **pulmonary embolus**
- Reduce abdominal CT for **renal colic**
- Head CT for **syncope**

Why Participate in E-QUAL?

The Avoidable Imaging Initiative Wave II will have a learning period of 6-9 months with numerous benefits:

- Meet new CMS MIPS requirements for

Imaging for Low Back Pain

Don't do imaging for low back pain within the first six weeks, unless red flags are present.

Recommended by the North American Spine Society (NASS), the American College of Physicians, and the American Academy of Family Physicians

CT for Adult Minor Head Trauma

Avoid computed tomography (CT) scans of the head in emergency department patients with minor head injury who are at low risk based on validated decision rules.

Recommended by American College of Emergency Physicians

CTA for Pulmonary Embolism

Do not perform chest CT angiography to evaluate for possible pulmonary embolism in patients with a low clinical probability and negative results of a highly sensitive D-dimer assay.

Recommended by the American College of Physicians, the American College of Chest Physicians, the American Thoracic Society, and the American College of Radiology

Reduce Ordering of CT for Renal Colic

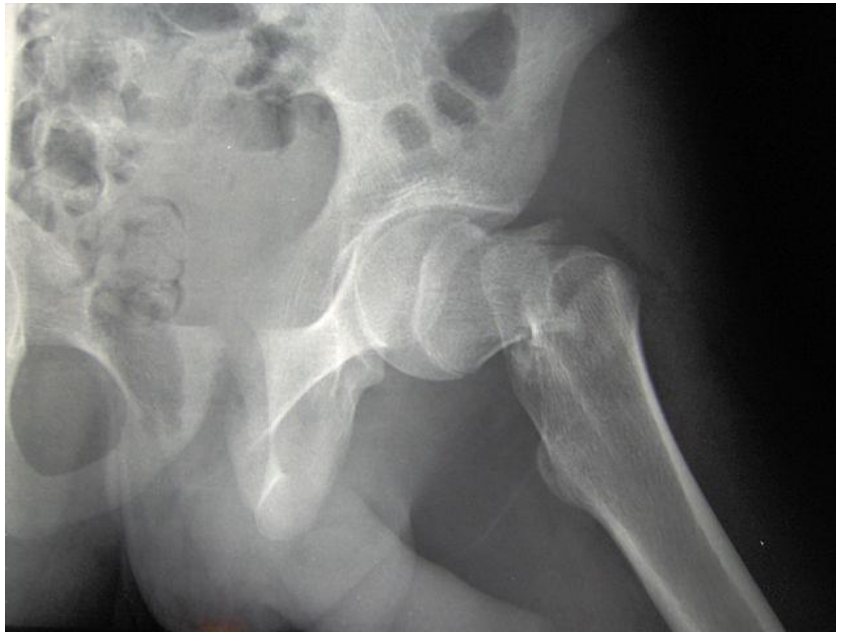
Avoid ordering CT of the abdomen and pelvis in otherwise health emergency department (ED) patients (age <50) with known histories of kidney stones, or urolithiasis, presenting with symptoms consistent with acute uncomplicated renal colic.

Recommended by the American College of Emergency Physicians

Hackensack Meridian *Health*


collaboration
is everything

How did we get here?



Low Back Pain Protocol

Physical Therapy

Claire Gibbons

Radiology

Gregory Nicola, MD

Neurosurgery

Patrick Roth, MD

Patient Safety/ Quality

Portia Chinnery, BSN, RN

Trauma

Sanjeev Kaul, MD

Emergency Medicine

Joseph Feldman, MD

David Zodda, MD

Orthopedics

Dante Implicito, MD

Randy Thomas, RN, BSN

Information Technology

Emmanuel Roldan, RN, BSN

Alex White

Case Management

Linda Davidson, RN

Pharmacology

Gabrielle Procopio, PharmD

Hackensack Meridian *Health*

“We Got Your Back”- Low back pain

Adults with Back Pain Presenting to the Emergency Department

Initial assessment leads to one of 3 pathways

EM Physician or APP driven

Initial Assessment

- Conduct a Focused History & Physical Exam
- Perform a Risk Assessment for Red Flags
- Evaluate for Lumbar Radiculopathy /Stenosis

3 Patient Pathways: (pathways / flowsheet / ED Preferences explained in depth following; based off of questions during ED MD history and physical)

GREEN: Non-specific; no radicular symptoms - treat pain; f/u PCP; D/C home

AMBER: Radicular - treat pain; schedule MRI prn and Spine surgeon appt; D/C home

RED: Red flags – treat pain; schedule prompt MRI; Spine surgeon consult; likely admission

Questions:

#	Question			
1.	Neck, back, or leg pain present?	Y	Y	Y
2.	Shooting radicular pain into arms or legs? - Any numbness or tingling into arms or legs?	N	Y	Y
3.	Weakness, loss of fine motor dexterity, or falls / gait abnormality?	N	N	Y
	Any of the following? T - Trauma Tuberculosis U - Unexplained loss of weight, Night sweats N - Neuroglial Deficits, bowel and bladder incontinence (saddle anesthesia; reduced anal tone) A - Age less than 20 greater than 55 F - Fever I - IVDA, intervertebral injection S - Steroid use or immunosuppressed H - History of Cancer, early morning stiffness, HIV	N	N	Y
5.	Is patient currently under treatment for back pain	N	Y	Y
	PATHWAY:	Green	Amber	Red

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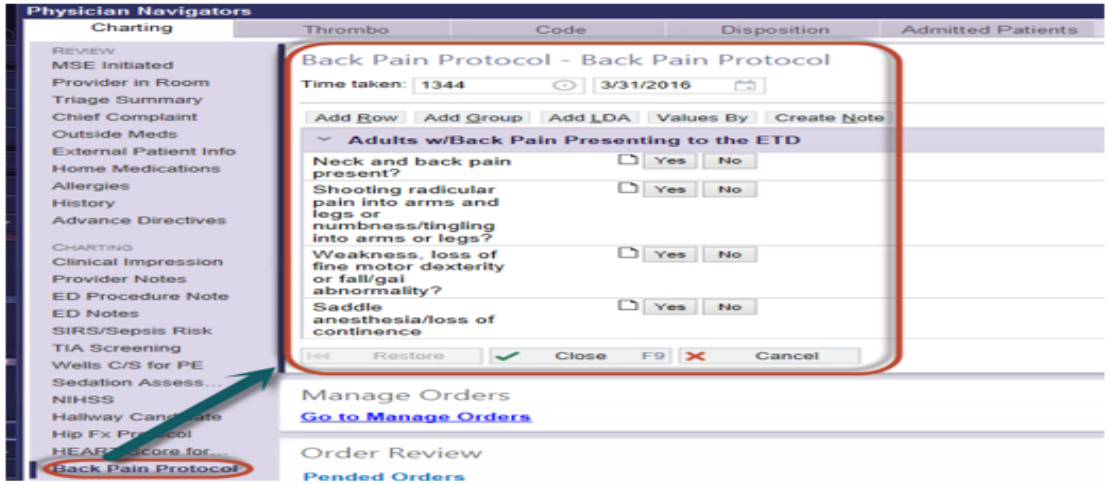
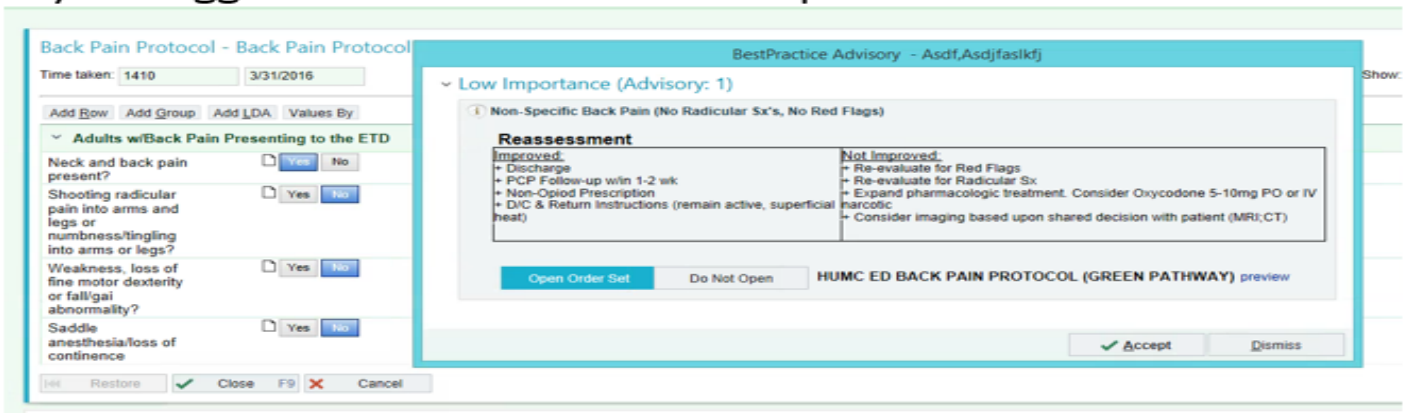


4. There are three (3) different pathways (Green/Amber/Red) that can be generated (depending on how the physician answers the questions to the screening). Depending on what pathway is generated, an order set may be suggested for treatment of this patient:



5. Physicians may “preview” the order set and select the treatment desired for this patient:

The Green Pathway

Non-Specific Back Pain

+ No Radicular Symptoms

+ No Red Flags

Management

Pharmacotherapy:
+ Acetaminophen 975mg PO; NSAIDS; steroids - prn
Adjuncts:
+ Superficial Heat
Large Gel Hot pack to go home with Patient
+ Physical Therapy Evaluation and Education

Reassessment

Improved:
+ Discharge
+ PCP Follow-up w/in 1-2 wk
+ Non-Opioid Prescription
+ D/C & Return Instructions (Remain Active, Superficial Heat)

Not Improved:
+ Re-evaluate for Red Flags
+ Re-evaluate for Radicular Sx
+ Expand pharmacologic treatment. Consider Oxycodone 5-10 mg PO or IV Narcotic
+ Consider imaging based upon a shared decision with patient (MRI; CT)

The Amber Pathway

Radicular Back Pain

+ History and/or Exam Suggests Stenosis / Nerve Impingement

+ Pseudoclaudication

+ SLR

+ CSLR

(No Myelopathy; No Cauda Equina Symptoms

Management

Pharmacotherapy:
+ Mostly acetaminophen; steroids; possible p.o. “light” narcotic
Adjuncts:
+ Superficial Heat
Large Gel Hot pack to go home with patient
+ Physical Therapy Evaluation and Education

Reassessment

Improved:
+ Discharge
+ MRI appointment made within few days
+ Spine surgeon follow-up within few days
+ Non-Opioid Prescription
+ D/C & Return Instructions (Remain Active, Superficial Heat)

Not Improved:
+ Re-evaluate for Red Flags
+ Re-evaluate for Radicular Sx
+ Expand pharmacologic treatment. Consider Oxycodone 5-10 mg PO or IV Narcotic
Note: If pain uncontrolled, refer to Medicine for admission for pain control; consider CT/MRI as inpatient

TUNA FISH- What's In A Name?

	Any of the following? T - Trauma Tuberculosis U - Unexplained loss of weight, Night sweats N - Neuroglial Deficits, bowel and bladder incontinence (saddle anesthesia; reduced anal tone) A - Age less than 20 greater than 55 F - Fever I - IVDA, intervertebral injection S - Steroid use or immunosuppressed H - History of Cancer, early morning stiffness, HIV	N	N	Y

The Red Pathway

History

- Symptoms > 6wk
- Trauma: Fracture / Dislocation
- Recent spine surgery
- Previous history of malignancy: Lytic spine lesions on X-ray
- Age <16 or >50 with new onset pain
- Cancer/ Unexplained weight loss
- Previous long standing steroid use
- Recent serious illness
- Recent significant infection/ IVDU
- History of IVDU
- Immunocompromised
- Syncope / Vascular origin suspected

S/S:

- Abnormal Vital Signs
- Saddle anesthesia
- Reduced anal tone
- Arm or leg weakness
- Generalized neurological deficit
- Progressive spinal deformity
- Urinary retention/ Incontinence
- Non-mechanical pain (worse at rest)
- Fever/ rigors

Management

+ Stabilize Patient

+ Perform diagnostic studies to identify the cause – while in ED

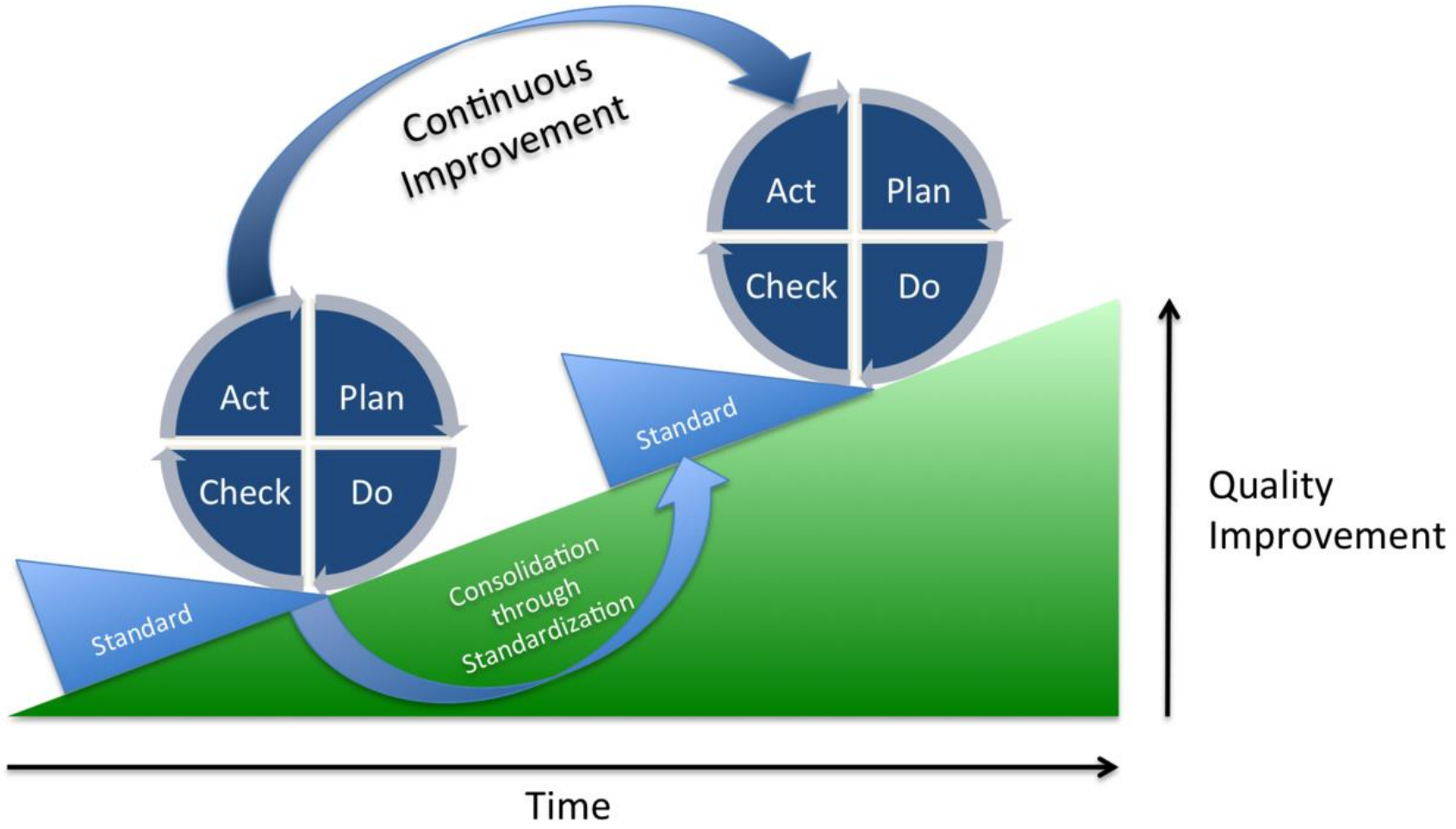
+ Pain Management

+ Spine Surgeon Consultation

+ Plan admission

Next Steps

HackensackUMC Fitness & Wellness | POWERED BY THE GIANTS


Continuous Improvement
Act
Plan
Check
Do
Act
Plan
Check
Do
Standard
Standard
Consolidation through Standardization
Quality Improvement
Time

Technically Challenged?

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What's Next?

- Activate your E-QUAL portal

  Portal invites will be sent out by Monday

- Register for the May Webinar

  www.acep.org/equal

- Questions? Contact the E-QUAL team at equal@acep.org

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