

# RibScore

Parameter	Points
≥ 6 fractures	1
Flail chest	1
Bilateral fractures	1
≥ 3 severely displaced fractures	1
≥ 1 anterior, lateral, and posterior fracture	1
First rib fracture	<u>1</u>
Total	6

# SCARF Score

Parameter	Points
Number Pain Score $\geq 5$	1
Incentive spirometry $< 50\%$ predicted	1
Respiratory rate $\geq 20$	1
Poor cough	<u>1</u>
Total	4



# RIB FRACTURE ADMISSION ALGORITHM



## STEP 1

*Admission if, after pain control using outpatient regimen,  $\geq 2$  of these:*

- RR > 18
- IS < 75% predicted\*
- Numeric pain score  $\geq 5$
- Poor cough
- Age  $\geq 65$  years
- $\geq 3$  fractures

PO (outpatient) pain regimen:

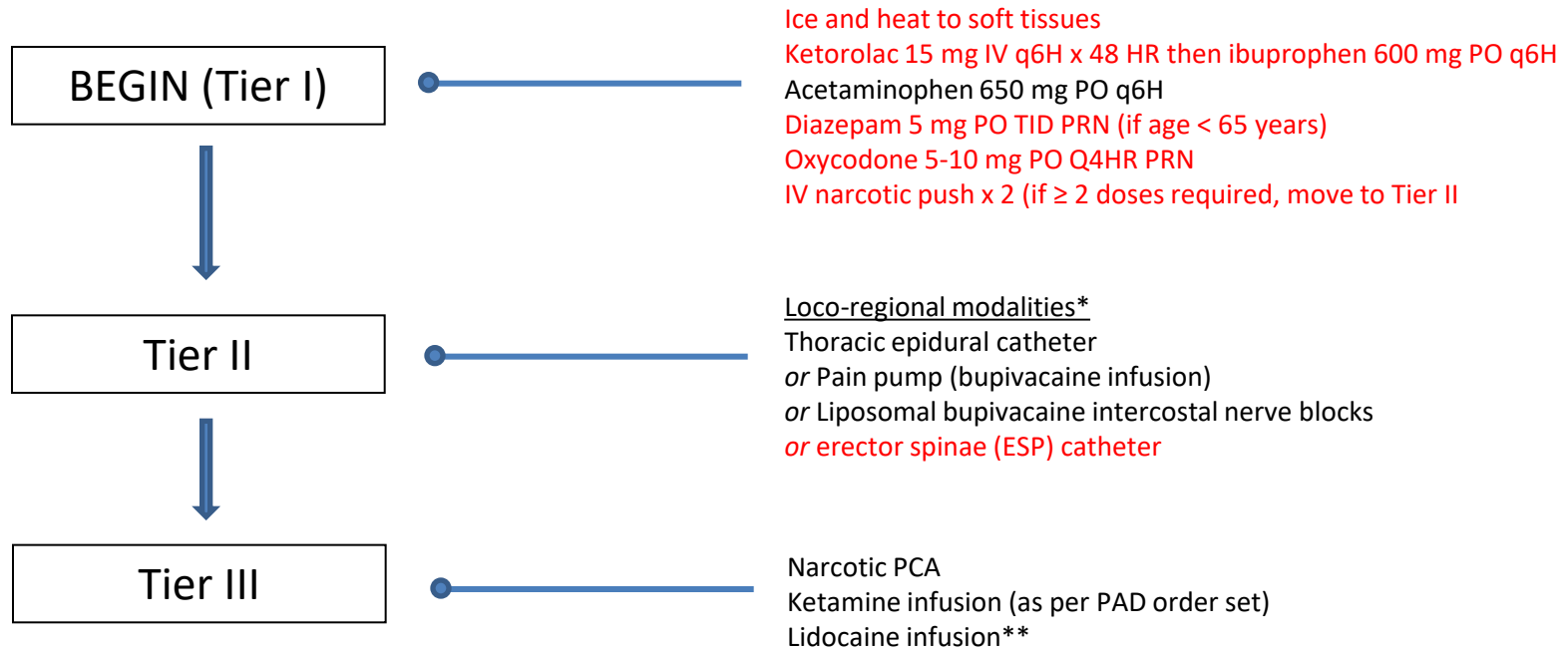
- Incentive spirometer
- Acetaminophen 650 mg PO q6H
- Ibuprofen 600 mg PO q6H
- Diazepam 5 mg TID PRN
- Oxycodone 5-10 mg PO Q4H PRN

## STEP 2

*If admission to hospital, PCU admission if 1 of these, SICU admission if  $\geq 2$  of these:*

- Age  $\geq 65$  years
- $\geq 6$  fractures
- IS < 60% predicted\*
- Flail chest
- > 4 L O<sub>2</sub> required to maintain sat > 90%
- Associated injury requiring PCU or ICU admission
- EM/surgery staff discretion

# ANALGESIA PMG FOR INPATIENTS WITH RIB FRACTURES



Advance to next tier if SCARF score remains ≥ 2 after intervention(s)

## SCARF Score

Parameter	Points
Numeric pain score ≥ 5	1
Incentive spirometry < 50% predicted	1
Respiratory rate ≥ 20	1
Poor cough	1

\* Prior to choice, consult research team to evaluate for study enrollment

\*\* Requires PCU/ICU admission and attending authorization

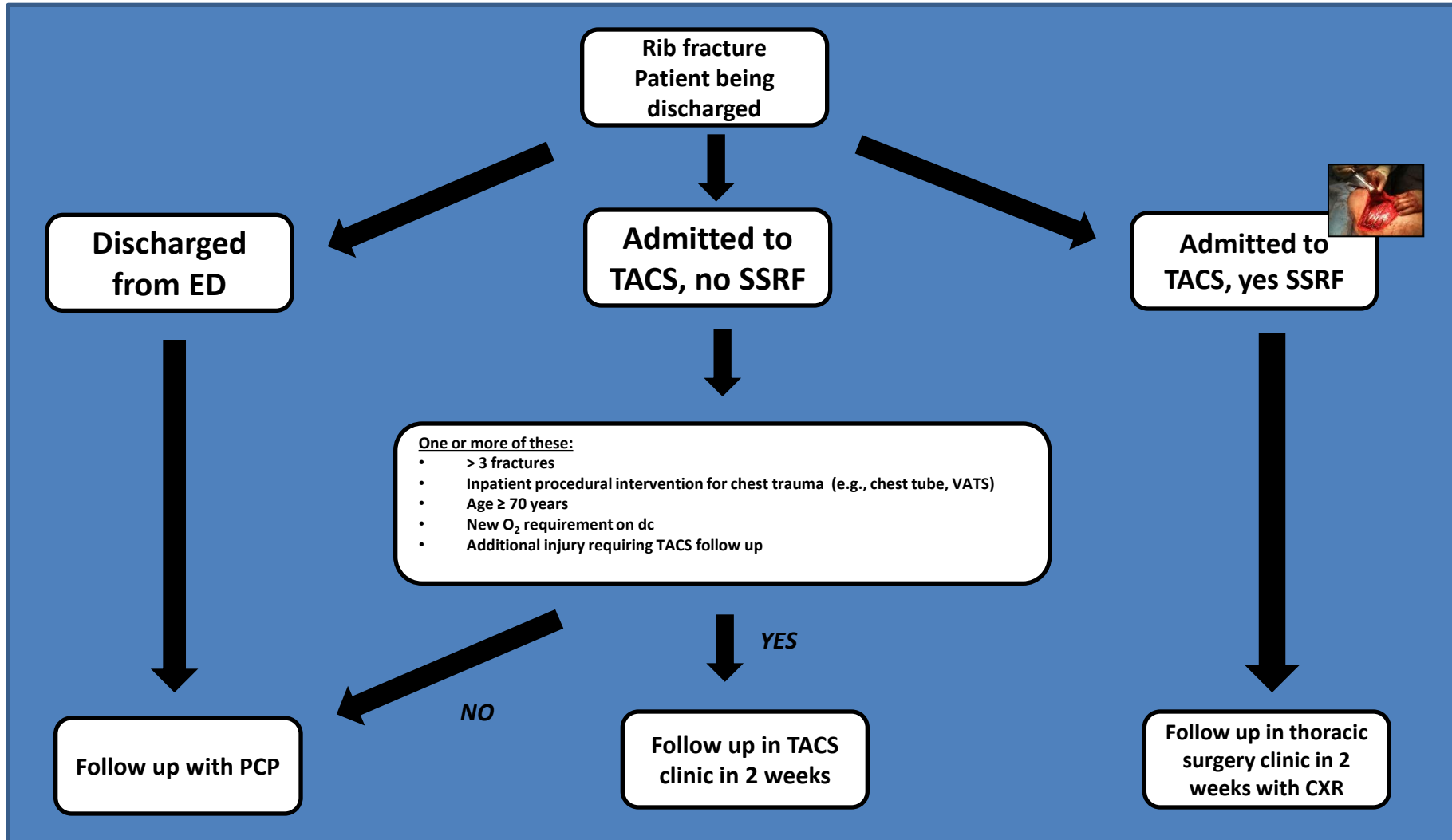
# Rib Fracture Physical Therapy Guidelines

Inpatient physical therapy should include but not limited to

- Full mobility evaluation
  - Ability to get into and OOB
  - Strength or ability to generate power
  - Seated and standing dynamic stability
  - Gait analysis
  - Ability to navigate stairs (applicable)
- Additional recommendations for pain control
  - Soft tissue mobilization to surrounding tissue
  - Relaxation techniques
  - Self splinting during cough, sneeze or rolling in bed
  - Ice or heat
- Education
  - Breathing techniques (diaphragmatic, avoiding holding breath with movement, segmental activation, tripod if tolerated)
  - Posture education
  - Importance of avoiding prolonged REST or BEDREST
  - Modification of home setup
  - Modification of work activity
- Additional Interventions
  - Interval pulmonary training
  - Strength training (functional activity and targeted resistance training)



# Rib Fracture Outpatient Follow Up



\*ED, emergency department; TACS, trauma and acute care surgery, SSRF, surgical stabilization of rib fractures; CXR, chest XRAY



# Rib Fracture Studies at DHMC

