

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 ≥ 5	1
Incentive spirometry $< 50\%$ predicted	1
Respiratory rate ≥ 20	1
Poor cough	<u>1</u>
Total	4



RIB FRACTURE ADMISSION ALGORITHM



STEP 1

Admission if, after pain control using outpatient regimen, ≥ 2 of these:

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

PO (outpatient) pain regimen:

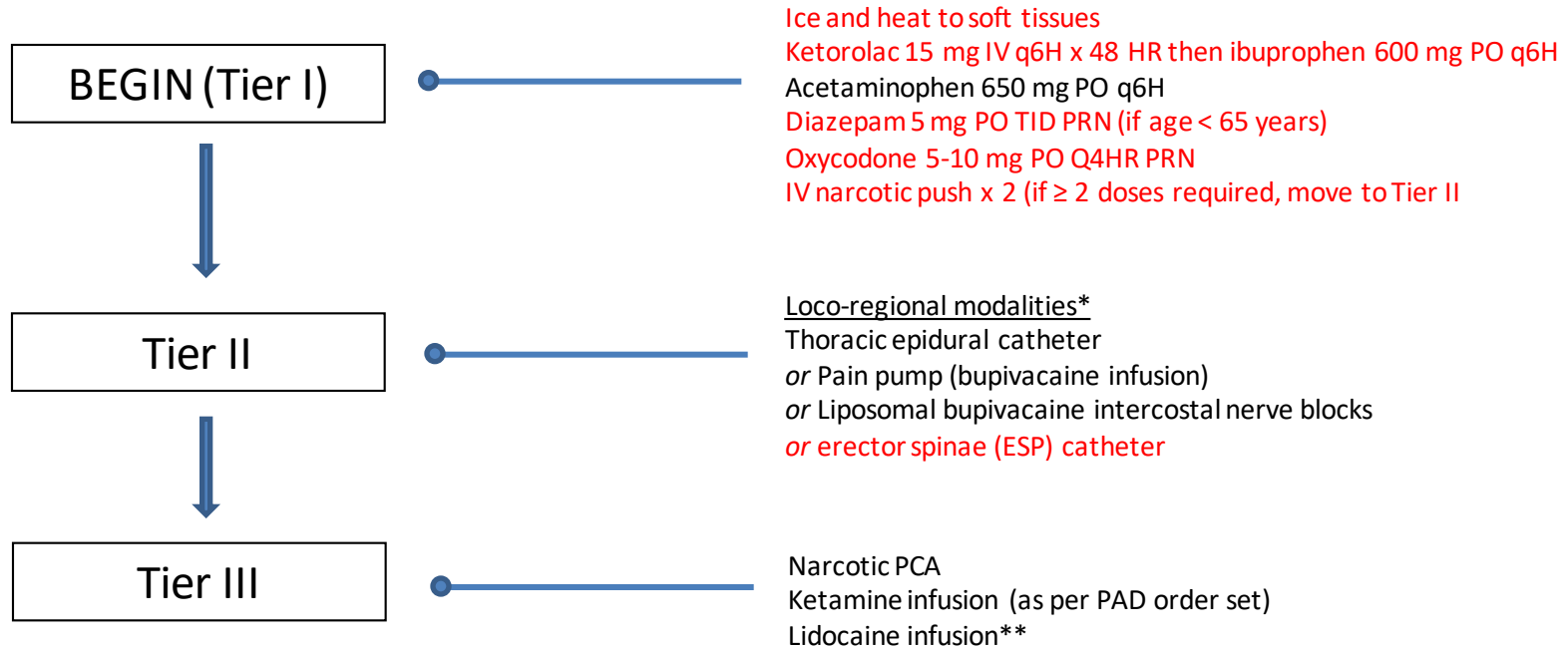
- Incentive spirometer
- Acetaminophen 650 mg PO q6H
- Ibuprofen 600 mg PO q6H
- Diazepam 5 mg TID PRN
- Oxycodone 5-10 mg PO Q4H PRN

STEP 2

If admission to hospital, PCU admission if 1 of these, SICU admission if ≥ 2 of these:

- Age ≥ 65 years
- ≥ 6 fractures
- IS < 60% predicted*
- Flail chest
- > 4 L O₂ 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

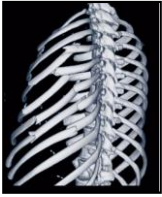
* Prior to choice, consult research team to evaluate for study enrollment

** Requires PCU/ICU admission and attending authorization

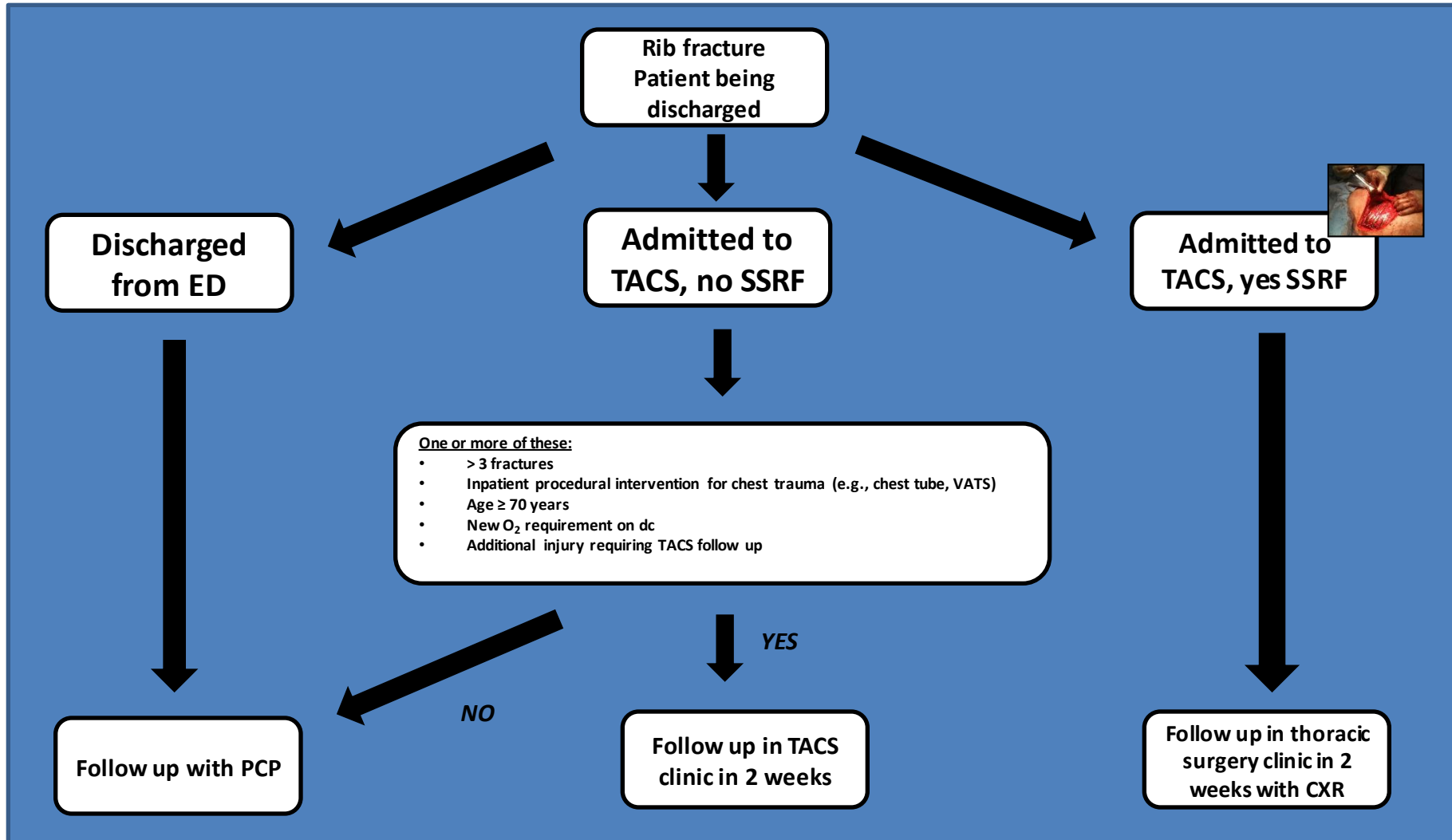
Rib Fracture Physical Therapy Guidelines

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

