ICR-AMI-011

Cardiology · critical care

Updated 20 Jun 2026

CRITICAL CARE ORDER SET

# Acute Myocardial Infarction

Initial ED / inpatient management of adult AMI. For suspected STEMI, activate the cath lab immediately — time is muscle. Give aspirin, load a $P2Y_{12}$ inhibitor, anticoagulate, and start guideline-directed medical therapy while pursuing reperfusion. Adapt every dose to your institutional protocol, formulary, cath-lab access, and the patient in front of you.

| PATIENT | MRN | WEIGHT (KG) | TYPE — STEMI / NSTEMI |
|---|---|---|---|
| | | | |
| **ALLERGIES** | **SYMPTOM ONSET TIME** | **ORDERING CLINICIAN** | **CODE STATUS** |
| | | | |

## 01 Admission & level of care

**TIME IS MUSCLE** For suspected STEMI (or new LBBB with strong suspicion), **activate the cath lab now** — door-to-balloon goal ≤ 90 minutes. Do not delay reperfusion for ancillary testing.

### ADMIT TO

- [ ] **Cardiac ICU / high-acuity stepdown** — STEMI, high-risk NSTEMI, hemodynamic instability

OR

- [ ] **Telemetry unit** — lower-risk NSTEMI / unstable angina
- [ ] Code status: [ ] Full code [ ] Other: _____

### NOTIFY SERVICES

- [ ] **Interventional cardiology STAT** — suspected STEMI or high-risk NSTEMI

- [ ] Cardiology consult
- [ ] ICU / CCU team if not primary

## 02 Monitoring & nursing

- [ ] Continuous cardiac monitoring (telemetry)
- [ ] Vital signs: `q15 min × 1 h`, then `q30 min × 2 h`, then `q4 h` (or per ICU protocol)
- [ ] Continuous pulse oximetry
- [ ] Strict intake & output; daily weight
- [ ] Bed rest initially; assist with bathroom / commode
- [ ] Falls precautions

## 03 Diagnostics

### IMMEDIATE — STAT

- [ ] **12-lead ECG now** (if not already obtained)
- [ ] Repeat 12-lead ECG `q15–30 min` if ongoing chest pain or deterioration
- [ ] High-sensitivity troponin (or institutional biomarker)
- [ ] CBC with differential
- [ ] CMP (electrolytes, BUN, Cr, liver enzymes)
- [ ] Coagulation panel — PT / INR, aPTT
- [ ] Lipid panel (fasting if feasible; do not delay treatment)
- [ ] HbA1c
- [ ] Type & screen (or cross if high bleeding risk / procedure)
- [ ] Magnesium, phosphorus
- [ ] Serum β-hCG (childbearing potential)
- [ ] Chest x-ray (portable preferred)

### WITHIN 24 HOURS

- [ ] Transthoracic echocardiogram — LV function, wall motion, complications, valvular disease
- [ ] Repeat troponin per protocol (e.g., at 3 and 6 h from presentation)

## 04 Oxygen & symptom control

### OXYGEN

- [ ] Target $SpO_2$ ≥ **90–92%** (≥ 94% if no COPD)
- [ ] Nasal cannula **2–4 L/min only if** $SpO_2$ < 90–92% or respiratory distress

### PAIN / ANXIETY

- [ ] **Nitroglycerin SL 0.4 mg q5 min × up to 3 doses** PRN chest pain

**HOLD NITRO IF** SBP < 90 mmHg or ≥ 30 mmHg drop from baseline · HR < 50 or > 100 with hypotension · suspected RV infarct · recent PDE5 inhibitor (sildenafil / vardenafil within 24 h, tadalafil within 48 h).

- [ ] Morphine **1–2 mg IV q5–10 min** PRN severe pain not relieved by nitro — use cautiously (hypotension, bradycardia, respiratory depression)
- [ ] Consider low-dose IV / PO benzodiazepine PRN severe anxiety if hemodynamically stable

## 05 Antiplatelet therapy

### ASPIRIN — IF NO TRUE ALLERGY / ACTIVE MAJOR BLEEDING

- [ ] **Aspirin 325 mg PO (chewed)** once now
- [ ] Then **aspirin 81 mg PO daily**

### $P2Y_{12}$ INHIBITOR — PRIMARY PCI / EARLY INVASIVE (CHOOSE ONE)

- [ ] **Ticagrelor** 180 mg PO load, then 90 mg PO BID

OR

- [ ] **Clopidogrel** 600 mg PO load (300 mg if older / frail / bleeding risk), then 75 mg PO daily

OR

- [ ] **Prasugrel** 60 mg PO load, then 10 mg PO daily

  Prasugrel contraindications: prior stroke / TIA · age ≥ 75 (relative) · weight < 60 kg (consider 5 mg daily)

### $P2Y_{12}$ INHIBITOR — FIBRINOLYSIS STRATEGY (STEMI WITHOUT TIMELY PCI)

- [ ] Age ≤ 75: clopidogrel **300 mg PO load**, then 75 mg PO daily

- [ ] Age > 75: clopidogrel **`75 mg PO daily`** without loading

## 06 Anticoagulation

### Primary PCI strategy

- [ ] **UFH** IV bolus **`60–70 units/kg`** (max 4,000–5,000), then **`12–15 units/kg/h`** (max ~1,000/h), titrate to aPTT / anti-Xa or cath-lab protocol
- [ ] Check baseline aPTT, platelets; repeat per protocol

ALTERNATIVE

- [ ] Bivalirudin regimen for PCI (per cardiology protocol)
- [ ] GP IIb/IIIa inhibitor (eptifibatide / tirofiban / abciximab) — only if directed by interventional cardiology (large thrombus, bail-out)

### Conservative NSTEMI / UA (no immediate PCI)

- [ ] UFH infusion as above

OR

- [ ] **Enoxaparin 1 mg/kg SC q12h** (q24h if CrCl < 30 mL/min); adjust for obesity / renal function

### Fibrinolytic strategy (STEMI)

- [ ] Follow local protocol — usually UFH infusion or enoxaparin with weight / age / renal adjustments

## 07 Reperfusion / invasive strategy

STEMI (OR NEW LBBB WITH STRONG SUSPICION)

- [ ] **Activate cath lab for primary PCI** — door-to-balloon goal ≤ 90 min
- [ ] If PCI unavailable within guideline times and no contraindications: **fibrinolytic therapy** per protocol (e.g., tenecteplase weight-based IV bolus, or alteplase regimen)

**BEFORE LYSIS** Screen for absolute / relative contraindications: prior intracranial hemorrhage, recent stroke, intracranial neoplasm / AVM, active bleeding, suspected aortic dissection, significant head trauma or recent major surgery.

- [ ] Post-lysis transfer for rescue or routine PCI per protocol

### NSTEMI / HIGH-RISK UNSTABLE ANGINA

- [ ] **Early invasive strategy** — diagnostic ± interventional coronary angiography within 24 h (sooner if instability, refractory angina, arrhythmias, or high-risk features)
- [ ] Conservative strategy only if low risk or major contraindications to angiography — ensure close monitoring

## 08 Anti-ischemic & guideline-directed medical therapy

### BETA-BLOCKER — IF NO CONTRAINDICATIONS

> **CAUTION** Start within 24 h if hemodynamically stable. **Avoid** in acute heart failure, cardiogenic shock, bradycardia, or high-degree AV block.

- [ ] **Metoprolol tartrate 25–50 mg PO q6–12h**; titrate to HR 50–60 and BP tolerance
- [ ] If IV considered: metoprolol 5 mg IV q5 min × 3, then oral (caution in borderline hemodynamics / older patients)

### ACE INHIBITOR / ARB

- [ ] Start within 24 h if LV systolic dysfunction (EF ≤ 40%), anterior MI, diabetes, or CKD — and not hypotensive / in shock
- [ ] **Lisinopril 2.5–5 mg PO daily**, titrate as tolerated
- [ ] If ACEI-intolerant (cough, angioedema): losartan 25–50 mg PO daily or valsartan 40 mg PO BID

### HIGH-INTENSITY STATIN

- [ ] **Atorvastatin 80 mg PO once now**, then 80 mg PO nightly
- [ ] If intolerant: rosuvastatin 20–40 mg nightly or moderate-intensity alternative

### NITRATES (BEYOND SL) & MRA

- [ ] For persistent angina or hypertension without hypotension: **nitroglycerin IV infusion** (start 5–10 mcg/min, titrate) — hold in RV infarct, hypotension, or PDE5 use
- [ ] After stabilization, if EF ≤ 40% with diabetes or HF ($K^+$ and creatinine appropriate): MRA — spironolactone 12.5–25 mg PO daily

## 09 Glycemic management

- [ ] Target blood glucose `140–180 mg/dL` (avoid tight control / hypoglycemia)
- [ ] POC glucose on arrival, then before meals and at bedtime (or `q6 h` if NPO)
- [ ] Basal/bolus insulin or IV insulin per ICU protocol for persistent hyperglycemia
- [ ] Hold most oral hypoglycemics acutely (metformin with renal dysfunction / hypotension / contrast; SGLT2 inhibitors, etc.)

## 10 Supportive & preventive orders

- [ ] **NPO** initially if urgent PCI anticipated; liberalize diet after procedure / stabilization

### DVT PROPHYLAXIS — IF NOT FULLY ANTICOAGULATED / HIGH BLEED RISK

- [ ] Enoxaparin 40 mg SC daily, or UFH 5,000 units SC q8–12h per protocol

### GI PROPHYLAXIS & BOWEL REGIMEN

- [ ] PPI if high GI-bleed risk (age, prior ulcer, dual antiplatelet, anticoagulant use)
- [ ] Docusate ± senna PRN constipation, particularly if opioids given

### VACCINATION REVIEW

- [ ] Consider influenza and pneumococcal vaccines before discharge per guidelines

## 11 Serial assessment & complication surveillance

- [ ] Serial physical exams for signs of HF, shock, new murmurs, or mechanical complications
- [ ] Daily ECG if indicated; immediate ECG and biomarkers for recurrent chest pain
- [ ] Telemetry for arrhythmia detection (VT/VF, AF, AV block)
- [ ] Titrate therapies based on BP, HR, renal function, and symptoms

## 12 Discharge planning — start during hospitalization

### SECONDARY PREVENTION

- [ ] Aspirin 81 mg PO daily indefinitely (unless contraindicated)
- [ ] $P2Y_{12}$ inhibitor for 12 months post-MI (shorter / longer per bleeding risk & cardiology)
- [ ] High-intensity statin (atorvastatin 80 mg daily)
- [ ] Beta-blocker
- [ ] ACEI / ARB ± MRA when indicated

### LIFESTYLE / REHAB

- [ ] Cardiac rehabilitation referral
- [ ] Smoking cessation counseling + pharmacotherapy PRN
- [ ] Dietitian consult (Mediterranean-style / cardioprotective diet)
- [ ] Physical therapy / exercise recommendations as appropriate

### FOLLOW-UP

- [ ] Cardiology follow-up within 1–2 weeks of discharge
- [ ] PCP follow-up within 2–4 weeks