Mission: Lifeline ND STEMI
Inter-Hospital Transfer Guideline
R.U.S.H. Rural United STEMI (ST-Segment Elevation Myocardial Infarction) Hospitals

Altru Health System – Grand Forks
Phone: 701-780-5206 or 1-855-425-8781
Fax: 701-780-1097

Essentia Health System - Fargo
Phone: 701-364-8401
Fax: 701-364-8405

Sanford Health System- Bismarck
Phone: 1-855-550-1225
Fax: 701-323-5751

Sanford Health System- Fargo
Phone: 701-234-6304 or 1-877-647-1225
Fax: 701-234-7203

St. Alexius Medical Center - Bismarck
Phone: 701-530-7699 or 1-877-735-7699
Fax: 701-530-7005

Trinity Health System - Minot
Phone: 701-857-3000 or 1-800-223-1596
Fax: 701-857-3260

AHA Mission: Lifeline Ideal STEMI Treatment Goals:
• First Medical Contact-to-First ECG time ≤10 minutes unless pre-hospital ECG obtained
• All eligible patients receiving any Reperfusion (PCI or fibrinolysis) therapy
• Fibrinolytic–eligible patients with Door-to-Needle time ≤ 30 minutes
• Reperfusion – eligible patients transferred to a PCI receiving center with referring center Door in- Door out time (Length of Stay) ≤ 45 minutes
• Referring Center ED Door-to- PCI device time ≤ 120 minutes (includes transport time)
• All STEMI patients without a contraindication receiving aspirin before ED discharge

Patients with a contraindication to transfer or PCI:
• Aspirin within 24 hours of hospital arrival, and aspirin at discharge
• Beta blocker at discharge
• LDL >100 who receive statins or lipid lowering drugs
• STEMI patients with left ventricular systolic dysfunction on ACEI/ARB at discharge
• STEMI patients that smoke with smoking cessation counseling at discharge

Upon Transfer Fax the following documents to the accepting facility: 12 L ECG, ED Record, Lab Results, Current Medication Record, ND M:L STEMI RUSH documentation
### Diagnostic Criteria for STEMI

- ST elevation at the J point in at least 2 contiguous leads of ≥2 mm (0.2 mV) in men or ≥1.5 mm (0.15 mV) in women in leads V2–V3 and/or of ≥1 mm (0.1 mV) in other contiguous chest leads or the limb leads.
- New or presumably new LBBB at presentation occurs infrequently, may interfere with ST-elevation analysis, and should not be considered diagnostic of acute myocardial infarction (MI) in isolation. If doubt persists, immediate referral for invasive angiography may be necessary. Consult with PCI receiving center.
- ECG demonstrates evidence of ST depression suspect of a Posterior MI consult with PCI receiving center.
- (If initial ECG is not diagnostic but suspicion is high for STEMI, obtain serial ECG at 5-10 minute intervals)

### Optional Medications

- **Nitroglycerin IV or 0.4 mg SL**
- **Morphine Sulfate 1 - 5 mg IV**
- **Ondansetron (Zofran) 4 mg oral or IV**
- **Metoprolol 25 mg oral**
  - CONTRAINDICATION FOR METOPROLOL
  - Do not give if any of the following: Signs of heart failure or shock, heart rate less than 60 or more than 110, systolic blood pressure less than 100, second or third degree heart block, severe asthma or reactive airway disease
- **Eptifibatide (Integrilin) per standard**
  - (Consult with Cardiologist before starting)

### Choose One Pathway

- **PRIMARY PCI – Direct to CATH LAB for PCI**
  - Goal: First Medical Contact to PCI LESS THAN < 120 minutes
    - **Aspirin 324 mg chewed**
    - **Ticagrelor (Brilinta) 180 mg PO OR**
    - **Clopidogrel (Plavix) 600 mg PO**
    - **Heparin IV Bolus (70 Units/kg, max 5,000 Units)**
    - **Heparin IV Drip (15 Units/kg/hr, max 1,000 Units/hr)**
    - **Transport** patient directly to Cath Lab for Percutaneous Coronary Intervention. Do not give Fibrinolytics (TNKase, rPA, or TPA)
    - **Administer Oxygen as needed** to keep SpO2 > 92%

- **FIBRINOLYSIS**
  - Goal: When First Medical Contact to PCI anticipated ≥ 120 min, Door to lytic administration goal LESS THAN < 30 minutes
    - **Aspirin 324 mg chewed**
    - **Tenecteplase IV (TNKase) per attached protocol**
    - **Plavix 300 mg PO** (if patient > 75 yrs. consult with cardiologist and consider reducing dosage to 75 mg PO)
    - **Heparin IV Bolus (60 Units/kg, max 4,000 Units)**
    - **Heparin IV Drip (12 Units/kg/hr, max 1,000 Units/hr)**
    - **Transport** patient directly to PCI capable hospital
    - **Administer Oxygen as needed** to keep SpO2 > 92%

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**PHYSICIAN’S ORDERS**

Regional Hospital: ____________________________
Regional Hospital City: ________________________
Regional ED Phone: ____________________________
Fax: ________________________________________
ED Physician (print name): ________________________

Revised 2-13-14
NOTE: Early Presentation: Pre-hospital ECG time is critical in obtaining effective therapy.}

**Patient Information**

- **Weight**: lb. kg
- **Height**: in.
- **Age**: yrs

**Medication**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
<th>Time Start</th>
<th>Time Stop</th>
<th>RN (Initials)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirin (81 mg chew x 4)</td>
<td>324 mg</td>
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<tr>
<td>Ticagrelor <em>(Brilinta) Oral (PPCI therapy arm only)</em></td>
<td>180 mg</td>
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<tr>
<td><em>(Do not give Brilinta and Plavix together)</em></td>
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<tr>
<td>Clopidogrel (Plavix) Oral</td>
<td>300 mg</td>
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<tr>
<td>Lytic therapy dose</td>
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<tr>
<td>Heparin IV Bolus</td>
<td></td>
<td></td>
<td>Units</td>
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</tr>
<tr>
<td>PCI Dose 70 U/kg, max 5000 Units</td>
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<td></td>
<td>Units</td>
<td></td>
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<tr>
<td>Lytic Dose 60 U/kg, max 4000 Units</td>
<td></td>
<td></td>
<td>Units</td>
<td></td>
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<tr>
<td>Heparin IV Infusion</td>
<td></td>
<td></td>
<td>Units/hr</td>
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<tr>
<td>PCI Dose 15 U/kg/hr, max 1000 U/hr</td>
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<td>Units/hr</td>
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<tr>
<td>Lytic Dose 12 U/kg/hr, max 1000 U/hr</td>
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<td></td>
<td>Units/hr</td>
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<tr>
<td>Tenecteplase (TNKase) IV</td>
<td>mg (L mL)</td>
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<tr>
<td><em>(Do not give Ticagrelor with Lytic (TNK))</em></td>
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<tr>
<td>Nitroglycerin Sublingual</td>
<td>0.4 mg</td>
<td>__________</td>
<td>__________</td>
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<tr>
<td>*Erectile Dysfunction Medication within past 24 hrs.</td>
<td>0.4 mg</td>
<td>__________</td>
<td>__________</td>
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<tr>
<td>□ Yes □ No</td>
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<td>__________</td>
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<tr>
<td>Nitroglycerin IV Infusion</td>
<td>mcg/min</td>
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<tr>
<td>Morphine Sulfate IV</td>
<td>mg</td>
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<tr>
<td>Ondansetron (Zofran) Oral</td>
<td>4 mg</td>
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<tr>
<td>Ondansetron (Zofran) IV</td>
<td>4 mg</td>
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<tr>
<td>Metoprolol 25 mg or 50 mg Oral</td>
<td>mg</td>
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<tr>
<td>Eptifibatide (Integrilin) IV Bolus                    180 mcg/kg (2 mg/mL vial)</td>
<td>mL</td>
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<td>Eptifibatide (Integrilin) IV Infusion</td>
<td>2 mcg/kg/min (0.75 mg/mL bottle)</td>
<td>mL/hr</td>
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**Notes:**

☐ Copy ECG, ED physician and Nurses documentation and send with patient – do not delay transport

☐ Fax All paperwork to referring Hospital (ECG, Labs, Orders, Physician Order, Notes, Medication administration record)

☐ Call: ____________________________ Hospital

☐ Request Activation of STEMI Protocol

☐ Call Report, when patient leaves your hospital and confirm update ETA

☐ Fax records to ________________

Please Document Times:

1. Initial Chest Pain Onset Pain Scale 0-10 (10 being severe)
2. Pre-Hospital ECG time (if available)
3. Referring Hospital Arrival (Door – In)
4. Referring Hospital 1st ECG Time 2nd ECG Time
5. Time Transport Activated
6. STEMI Alert Activation (STEMI Receiving Hospital contacted)
7. EMS Transport Arrival Time
8. Referring Hospital Departure (Door-Out)

NURSE DOCUMENTATION

Hospital: ____________________________

City: ____________________________ Revised 2-13-14