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.

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

<table>
<thead>
<tr>
<th>Health System</th>
<th>Phone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altru Health System – Grand Forks</td>
<td>701-780-5206 or 1-855-425-8781 Fax: 701-780-1097</td>
</tr>
<tr>
<td>Essentia Health System - Fargo</td>
<td>701-364-8401 Fax: 701-364-8405</td>
</tr>
<tr>
<td>Sanford Health System- Bismarck</td>
<td>1-855-550-1225 Fax: 701-323-5751</td>
</tr>
<tr>
<td>Sanford Health System- Fargo</td>
<td>701-234-6304 or 1-877-647-1225 Fax: 701-234-7203</td>
</tr>
<tr>
<td>St. Alexius Medical Center - Bismarck</td>
<td>701-530-7699 or 1-877-735-7699 Fax: 701-530-7005</td>
</tr>
<tr>
<td>Trinity Health System - Minot</td>
<td>701-857-3000 or 1-800-223-1596 Fax: 701-857-3260</td>
</tr>
</tbody>
</table>

**AHA Mission: Lifeline Ideal STEMI Treatment Goals:**
- First Medical Contact-to-First ECG time \( \leq 10 \) minutes unless pre-hospital ECG obtained
- All eligible patients receiving any Reperfusion (PCI or fibrinolysis) therapy
- Fibrinolytic–eligible patients with Door-to-Needle time \( \leq 30 \) minutes
- Reperfusion – eligible patients transferred to a PCI receiving center with referring center Door in- Door out time (Length of Stay) \( \leq 45 \) minutes
- Referring Center ED Door-to- PCI device time \( \leq 120 \) 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 whom smoke receive 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 (0.1mV) 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)

### STANDARD ORDERS & LABS
- Apply Continuous Cardiac Monitor.
- Insert (2) peripheral large bore IV’s (0.9% NaCl TKO or Saline lock)
- CK, CK-MB, Glucose, INR
- (Standard) Panel, Magnesium, aPTT
- CBC, Troponin
- *Do not delay transfer for results – fax when available

<table>
<thead>
<tr>
<th>Code Status</th>
<th>Full Code</th>
<th>DNR</th>
</tr>
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<tbody>
<tr>
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</tbody>
</table>

If DNR consult with accepting physician prior to transfer

### 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 *(do not give both Platix & Brilinta)*
- 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%

### Optional Medications
- Nitroglycerin IV 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 than110, 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)

### 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%

### PHYSICIAN’S ORDERS
- Regional Hospital:
- Regional Hospital City:
- Regional ED Phone: __________________ Fax: __________________
- ED Physician (print name): __________________
- Revised 2-13-14
Mission: Lifeline ND STEMI (ST-Segment Elevation Myocardial Infarction) Guideline
R.U.S.H. (Rural United STEMI Hospitals) Inter-Hospital Transfer
NURSING DOCUMENTATION Tool (Page 2 of 2)

Tenecteplase (TNKase) Dosing

<table>
<thead>
<tr>
<th>Patient weight (kg)</th>
<th>TNK (mg)</th>
<th>TNK (mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 60 kg</td>
<td>30 mg</td>
<td>6 mL</td>
</tr>
<tr>
<td>60 or more but less than 70</td>
<td>35 mg</td>
<td>7 mL</td>
</tr>
<tr>
<td>70 or more but less than 80</td>
<td>40 mg</td>
<td>8 mL</td>
</tr>
<tr>
<td>80 or more but less than 90</td>
<td>45 mg</td>
<td>9 mL</td>
</tr>
<tr>
<td>90 or more kg</td>
<td>50 mg</td>
<td>10 mL</td>
</tr>
</tbody>
</table>

ABSOLUTE CONTRAINDICATIONS FOR FIBRINOLYSIS (TNK) IN STEMI
1. Any prior intracranial hemorrhage
2. Known structural cerebral vascular lesion (e.g., arteriovenous malformation)
3. Known malignant intracranial neoplasm (primary or metastatic)
4. Ischemic stroke within 3 months except acute ischemic stroke within 3 hours
5. Suspected aortic dissection
6. Active bleeding or bleeding diathesis (excluding menses)
7. Significant closed-head or facial trauma within 3 months

RELATIVE CONTRAINDICATIONS FOR FIBRINOLYSIS: (TNK) IN STEMI
1. History of chronic, severe, poorly controlled hypertension
2. Severe uncontrolled hypertension on presentation
3. History of prior ischemic stroke more than 3 months, dementia, or known intracranial pathology not covered in contraindications
4. Traumatic or prolonged CPR (over 10 minutes)
5. Major surgery (within last 3 weeks)
6. Recent internal bleeding (within last 2-4 weeks)
7. Noncompressible vascular punctures
8. Streptokinase/ankistreplase: prior exposure (more than 5 days ago) or prior allergic reaction to these agents
9. Pregnancy
10. Active peptic ulcer
11. Current use of anticoagulants: the higher the INR __
12. Symptom Onset > 6 hrs. prior to presentation consult Cardiology

Notes:

☐ 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: ____________________________

Patient Name: ____________________________

□ 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)

RN Name (Print): ____________________________
RN Signature: ____________________________
RN Initials: _______ Date: __________ Time: __________

Allergies:

________________________________________

Emergency Contact Name: ____________________________
Phone: ________-_______-__________

Revised 2-13-14