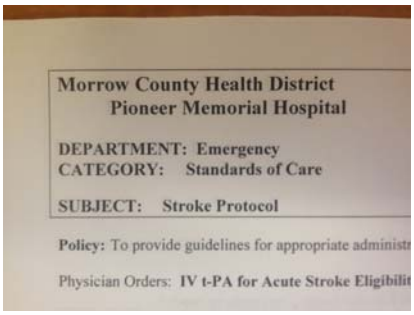
Scenario #1 Drip & Ship

- 83 y/o female, independent, lives on active ranch with husband; history of HTN, obesity, presents with right arm & leg weakness, aphasia. Symptoms: sudden onset @ home while paying bills, husband insisted he take her to hospital, 8 mi away in very rural community. Meds include ASA and BP meds. Exam includes stable vitals, receptive aphasia, left visual impairment, right arm & leg weakness. NIHSS=6. Labs normal. CT normal without obvious prior events.
- *Rural – scenario? Protocols? Transfer? Where/how?*
- *EMS - Transfer process – barriers?*
- *Urban – receiving facility for acute transfers – communication? Records needed? Ever on divert?*

Protocols - size doesn't matter


Morrow County Health District
Pioneer Memorial Hospital

DEPARTMENT: Emergency
CATEGORY: Standards of Care

SUBJECT: Stroke Protocol

Policy: To provide guidelines for appropriate administ

Physician Orders: IV t-PA for Acute Stroke Eligibilit

Urban and Rural Stroke Care
So alike, yet so different

- **Chad Partington** – Flight Paramedic, Emergency Airlift, Flight Base Klamath Falls, OR
- **Molly Rhea**, RN – Director of Nursing, Pioneer Memorial Hospital, Heppner, OR
- **Mark Shene**, RN BSN, BCEN – Emergency Dept. RN, OHSU & Kaiser Sunnyside, Portland, OR
- **Susie Fisher**, RN, BSN – Manager, Clinical Outreach & Telestroke, Providence Stroke Center, Portland, OR

Result

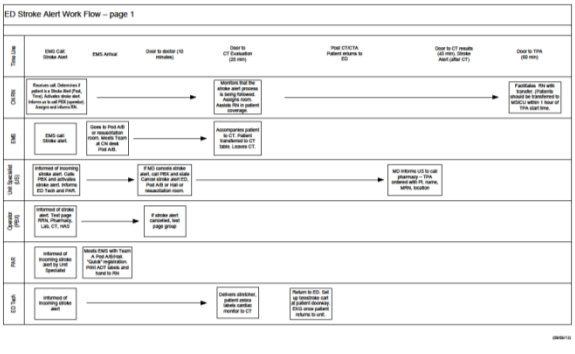
- LNW to Door: 30 min
- Door to CT: 9 min
- Door to Stroke Call 42 min
- Door to needle 73 min

- Transfer to Portland, home 48 hrs, no deficits

Scenario #2 – Treat and Keep

- 52 y/o male with history of A. fib and diabetes on warfarin brought to ED by EMS collapse while referee @ daughter's lacrosse game; unable to speak or severe weakness right side (14:00) Meds also include Insulin, ASA. LNW to arrival 25 min (14:25). Expressive aphasia, follows some commands, flaccid R arm, minimal antigravity R leg. NIHSS 14. Glucose 160, INR 1.2, CT shows no hemorrhage.
- EMS – protocols for response? Documentation?
- Urban – what resources needed to keep tPA patients?
- Rural – any rural facilities keeping tPA patients?

Expediting care with workflows



Result

- Improved slightly
- Extensive rehab: inpatient and outpatient
- No longer able to work – impact on family

Scenario #3 Too late.. Now what?

- 66 y/o retired male, fell from bed @ 06:10, witnessed by spouse. No known prior medical problems , spouse called EMS @ 06:15 (had recently seen a PSA on TV about stroke by ASA). EMS arrival @ 06:25 with rapid transport to local hospital. On arrival @ 6:35 EMS states last known well @ 06:10 (witnessed time); nurse asked when patient last seen normal, spouse stated 23:30 when they went to bed. (LNW to arrival = 7 hr 5 min). Exam shows right arm/leg weakness, decreased sensation on right arm/leg, speech slightly slurred with mild facial droop. NIHSS 7. Labs and CT head normal.
- Rural – out of time window, do you call for stroke expertise? / keep or transfer?
- EMS – protocols for time of onset and communication to hospitals? (pre-alert)
- Urban - page stroke expert or admit to hospitalist?
- What about swallow screen, etc? Who /where is this done?