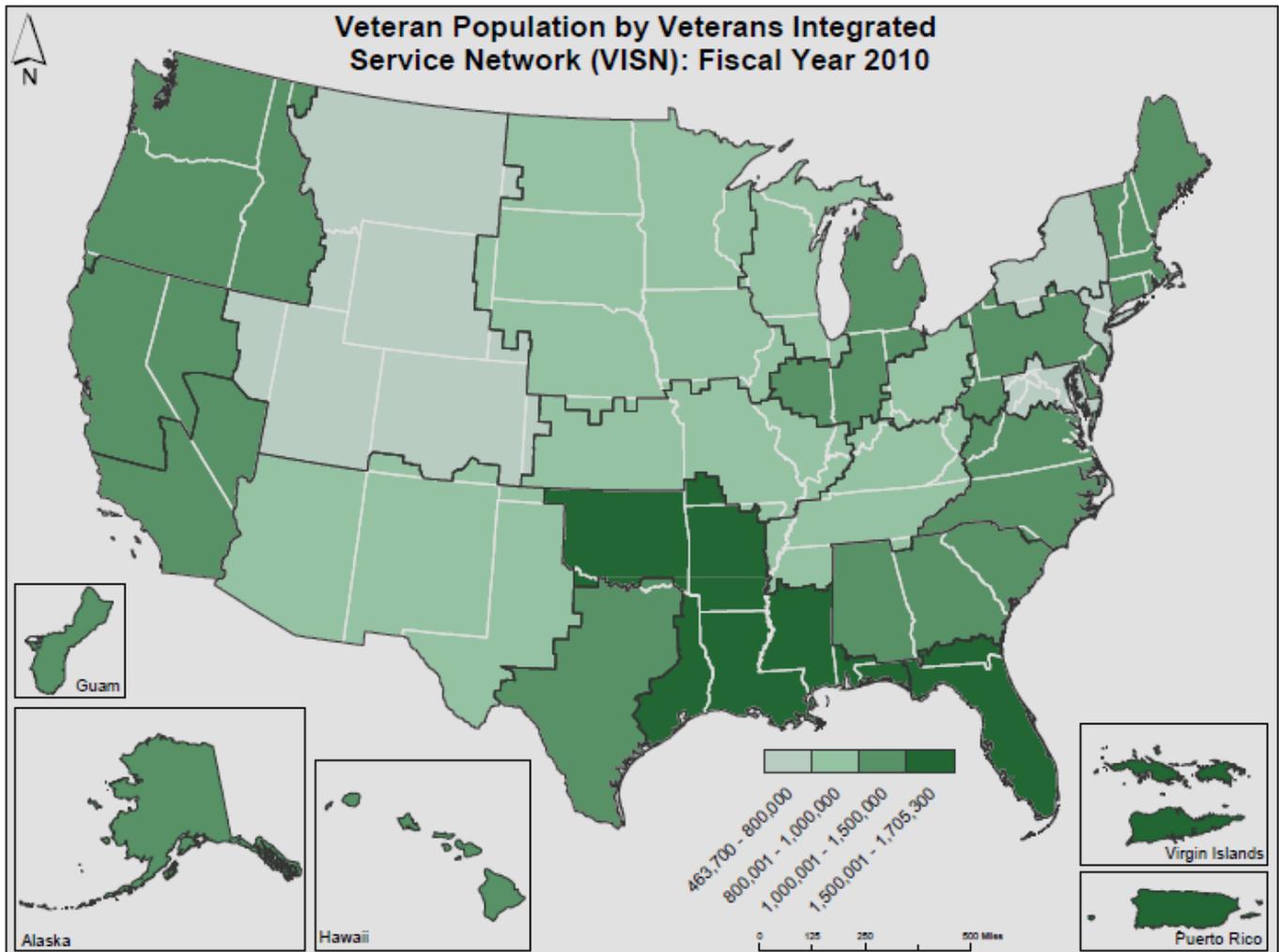
A scenic view of a city, likely Salt Lake City, with snow-capped mountains in the background. The foreground shows residential buildings and trees, while the middle ground features a dense urban area. The background is dominated by large, rugged mountains with patches of snow under a cloudy sky.

Addressing the VHA Acute Stroke Directive in Salt Lake City

SQUINT Monthly Conference Call
March 6, 2012



- Tertiary care facility, 121 active beds
- Affiliated with University of Utah School of Medicine. Over 500 residents, interns, and students train here each year.
- 10 CBOCs in Utah, Idaho, and Nevada
- Referral area includes 6 surrounding states



Our Starting Point

- Neurology inpatient service, consults, and outpatient clinics
 - including cerebrovascular specialty clinic
- Approximately 60-80 stroke patients per year
 - Vast majority arrive outside the 3-hr window
- Some (unknown number) stroke/TIA patients evaluated in ER and not admitted

Primary Stroke Center vs. Limited Hours Stroke Facility

- Currently we are a LHSF
- Barriers to becoming a Primary Stroke Center:
 1. Lack of 24/7 CT availability
 2. Uncertain availability of CT interpretation within 45 min by qualified personnel
 3. Lack of neurosurgery coverage in-house
 4. Lack of neurology coverage in-house
 5. Very few stroke patients come in within 3 hours
 6. Staff training and expertise in AIS is variable

Overcoming the Barriers (1)



1. Lack of 24/7 CT



Radiology approves cross-training of X-ray techs

2. Need to confirm ability to interpret by qualified personnel within 45 min.

Neurology attendings have varying comfort levels



Emergency reads may be done remotely at U. of Utah

Overcoming the Barriers (2)

3. Lack of Neurosurgery in house

- Emergency transfer policy to be implemented for consultation with neurosurgeons at U. of Utah



Overcoming the Barriers (3)

4. Lack of Neurology coverage in house

- ☑ MICU chief of staff agrees to admit and monitor patients post-rt-PA with neurology consulting



- 🔍 Neurology residents and attendings are not in house – and may be >30 minutes away

Why Not Use Telestroke?

- Telestroke program is well established at U. of Utah
- Advantages:
 - Access to trained stroke specialists 24/7
 - Evaluation for interventional procedures
 - Access to rapid imaging interpretation
 - Patients could stay at VA instead of transferring out
 - U. of U. Brain Attack Team would not bill for services

Telestroke Issues

- Would need to install and maintain telehealth technology and train staff to use it
 - How much would it cost and who would pay?
 - Cost effectiveness/ROI?
- All Brain Attack Team members required to obtain VA credentials
 - Requirement perceived as too burdensome
 - Credentialing requirement is waived for all other facilities in state
 - Salt Lake VA Chief of Staff: requirement must be followed/cannot be waived

Way Forward

- 24/7 telephone consultation available with U. of U. Brain Attack team (no change)
- New: goal for remote imaging interpretation by radiology attending, neurology attending or U. of U. brain attack team within 45 min. of patient arrival in VA ER
- Designation now as LHSF; goal is to become a VHA Primary Stroke Center

Bringing VA Stroke Patients to VA

- EMS had been bypassing VA in acute stroke – now will bring patients to VA ER
- Our facility is currently applying for Stroke Receiving Facility status with state of Utah

Our Facility Plan: Meeting the AIS Directive (1)

- Development of AIS algorithm with pathways for t-PA eligible and non-eligible patients
- Designation of a stroke team
 - ER attending and nursing staff providing the initial assessment
 - Neurology attending and senior resident
 - Neurology junior resident/off-service resident
 - CT technician
 - Responsible radiologist

Meeting the Directive (2)

- Rt-PA availability
 - Need to confirm pharmacy ability to deliver within 15 minutes of request
 - Revised R-tPA order set for CPRS to be submitted for approval by pharmacy committee
 - Additional pharmacy instructions regarding preparation of rt-PA provided by U. of U. stroke center
- NIHSS documentation
 - New ER staff training planned
 - Need to incorporate in CPRS for improved documentation and tracking

Meeting the Directive (3)

- Documentation of Consent
 - Training in iMed Consent may be needed
 - Reason for declining if consent not given
 - CPRS inclusion for improved documentation and reporting
- Dysphagia Screening
 - New training for ER staff
 - Ongoing training & pocket cards for housestaff
 - Documentation in CPRS

Stroke Education

- New web-based training for providers (EES)
- New print resources for patients
- Posters to be placed in ER, ICU, wards

Questions?

