

New York State



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New York State Stroke Center Designation Process & Outcomes

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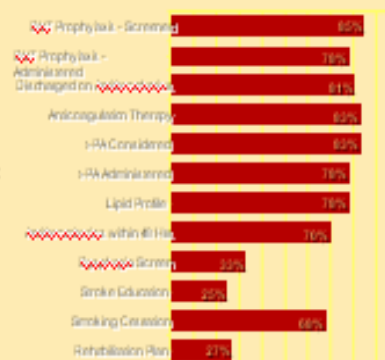
BACKGROUND: The New York State Stroke Center Demonstration Project, conducted in 2003 in Brooklyn and Queens, demonstrated a significant improvement both in assessment and response times for acute stroke patients. The success of this pilot set the stage for the development and implementation of a statewide designation process. Criteria for stroke center designation was developed from the Brain Attack Coalition Guidelines and is consistent with ASA practice standards for the treatment of acute stroke patients. To date, 125 hospitals have applied and 112 hospitals have been designated Stroke Centers.

EVALUATION: In 2006, NYSDOH audited designated stroke centers using an Audit Tool. The tool required documentation of:



- RESULTS:** Progress reports documented quality improvement goals for stroke were incorporated into the hospitals quality improvement process.
- All hospitals had qualified Med. Directors & QI Committees who meet regularly
 - 10% of hospitals reported length of stay
 - 3% reported mortality in hospitals
 - 18% NIHSS Scale
 - 20% Public Education
 - 3% of hospitals using time studies only (Door to Treatment)
 - 75% Time studies (Door to Rx) in addition to perf. measure
 - 67% of hospitals used 7 performance measures (GWTG)
 - 10% of hospitals used 11 performance measures (JCAHO)

Percent Application of Performance Measures in 60 Reporting Hospitals



Stroke Center	Yes	No	Documentation Required
1. Acute stroke team			
2. Medical Director's training & CME's obtained			
3. Identified outcome objectives			
4. Annual comparison studies			
5. Identified stroke related issues			
6. How issues were addressed			
7. Process improvements			
8. Specific outcomes evaluated			

- Acute stroke team
- Medical Director's training & CME's obtained
- Identified outcome objectives
- Annual comparison studies
- Identified stroke related issues
- How issues were addressed
- Process improvements
- Specific outcomes evaluated

Hospital Self Reported Issues:

- Emergency physicians buy-in
- Need for urgent CT head scan
- Patients arriving in ED 3+ hours beyond onset of symptoms
- Identification and education of smoking patients
- t-PA patients exceed time frames for acute t-PA
- Cholesterol reducing Rx recommended by neuro consultant not given
- Dysphagia screening not always considered
- High A1c for all patients with history of Diabetes & discharge glucose levels
- Also identify absolute contraindications for use of t-PA

Indicators that Need to be Added to Reporting

- | | |
|--------------------------------------|---|
| • Length of stay | • % of patients treated with t-PA who had hemorrhagic complications |
| • Morbidity & mortality data | • Hospital mortality for confirmed stroke |
| • Complications | • 30 day readmission rate for confirmed stroke diagnosis |
| • NIHSS scale on admit and discharge | |
| • Discharge disposition | |

Prevention and Treatment of Risk Factors

Focus – increase opportunities for physical activity, healthy eating, tobacco control, evidence based medical care.

■ Adults

- Worksites – new state funding for NY Wellness Works
- Community Health Centers – improve blood pressure control
- Tobacco – media campaign on 2nd hand smoke and children
- NYC DOHMH - Public Health Detailing on hypertension

■ Children

- Healthy Schools Act
- BMI Screening
- Local funded projects working with schools



Community Education

Pilot Capital Region Stroke Awareness Campaign

- **4 focus groups with diverse participants**
 - Participants aware of (some) stroke symptoms
 - Unaware of time frame for effective treatment
- **Pilot Campaign – paid TV, radio, transit, print;**
 - all Stroke Centers in Capital Region participated
 - Used FAST mnemonic
 - New treatment available but need to get to hospital within 1 hour
 - Symptoms not always painful
 - Advantage of EMS arrival (in development)
- **Evaluation**
 - *Pre/post phone survey:*
 - High visibility of campaign
 - Aware of message to call 911
 - Significant increase in “intent to call 911” for symptoms
 - *Collecting GWTG data*
 - time from onset of symptoms to ED arrival
 - mode of arrival
- **Next steps - Make materials available to Stroke Centers in state.**

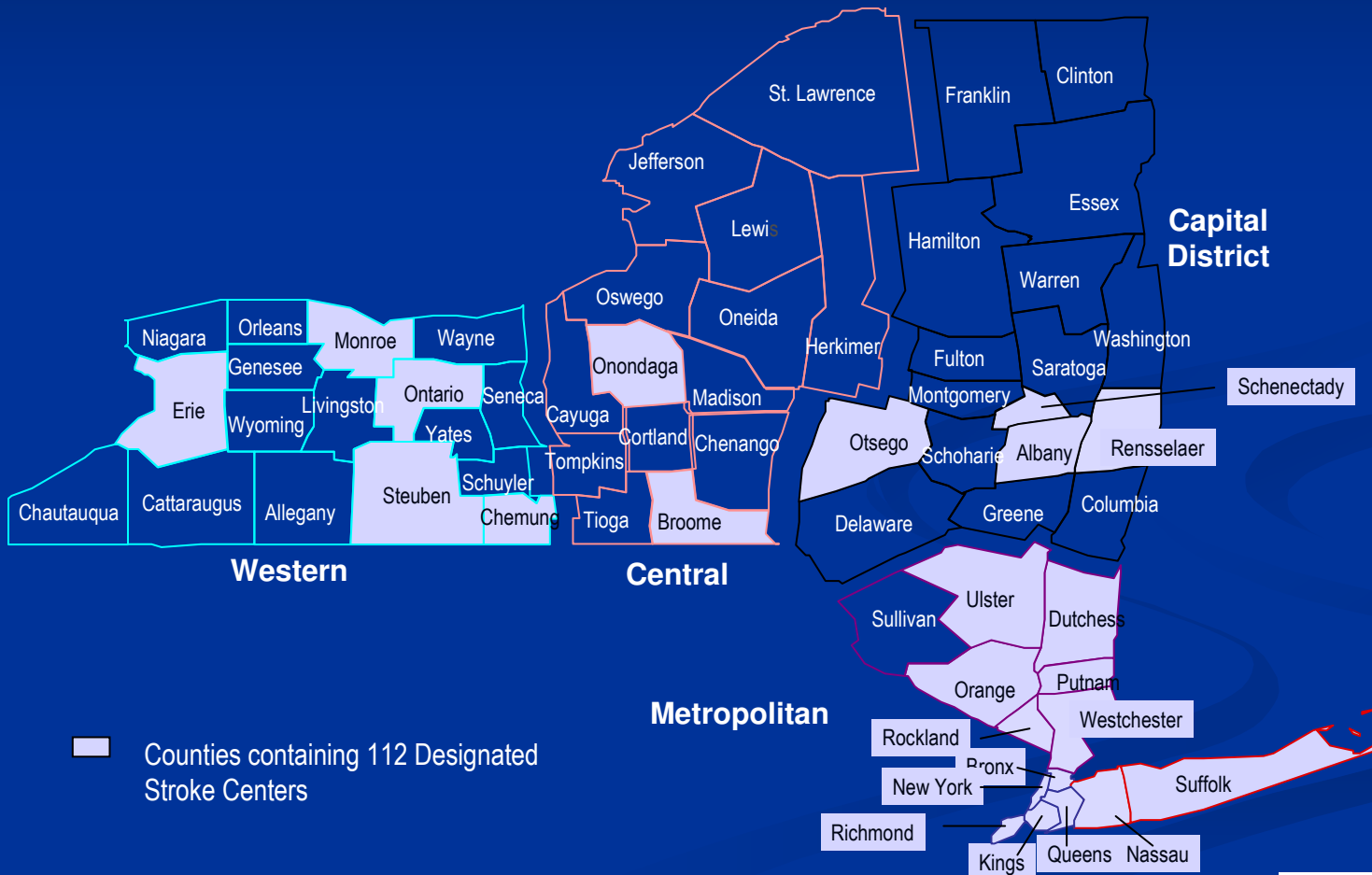


Notification & Response of EMS for Stroke

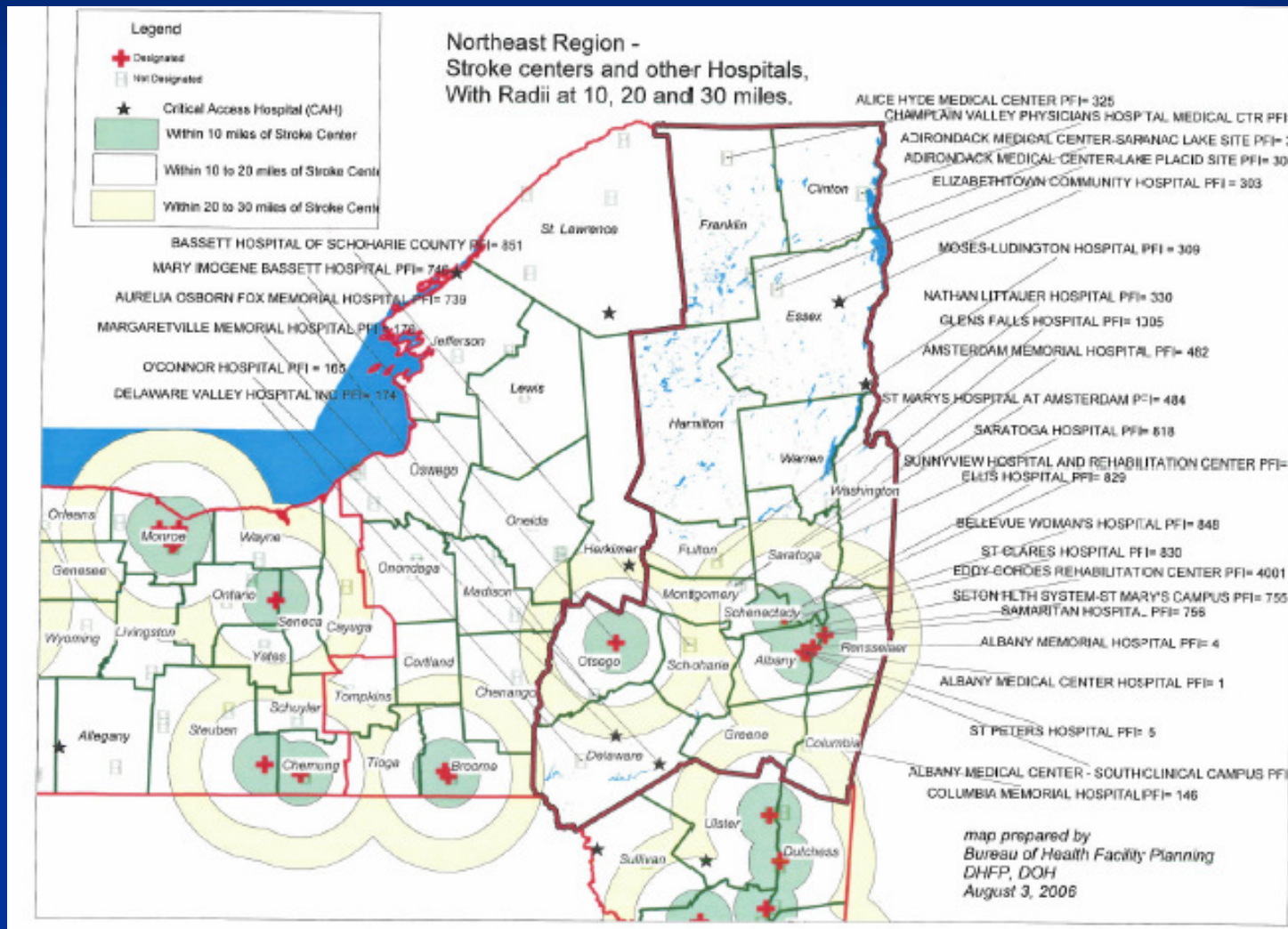
- Statewide EMS protocols for Stroke
- DOH Notification of Stroke Designated Centers



Acute Treatment for Stroke Designated Centers



Telemedicine for Acute Ischemic Stroke Care: New York State Rural Hospitals



Stroke Center Designation Status

- 125 Applications received
- 112 Designated as Stroke Center
(include 19 demonstration hospitals)



Annual Review for Designated Stroke Centers

- Progress reports document that the quality improvement goals for stroke have been incorporated into the hospitals quality improvement process

- **Documentation Requests:**
 - Acute stroke team
 - Medical Director's training & CME's obtained
 - Identified outcome objectives
 - Annual comparison studies
 - All identified stroke related issues
 - How issues were addressed
 - Process improvements
 - Specific outcomes evaluated



Overview Of Reported Data

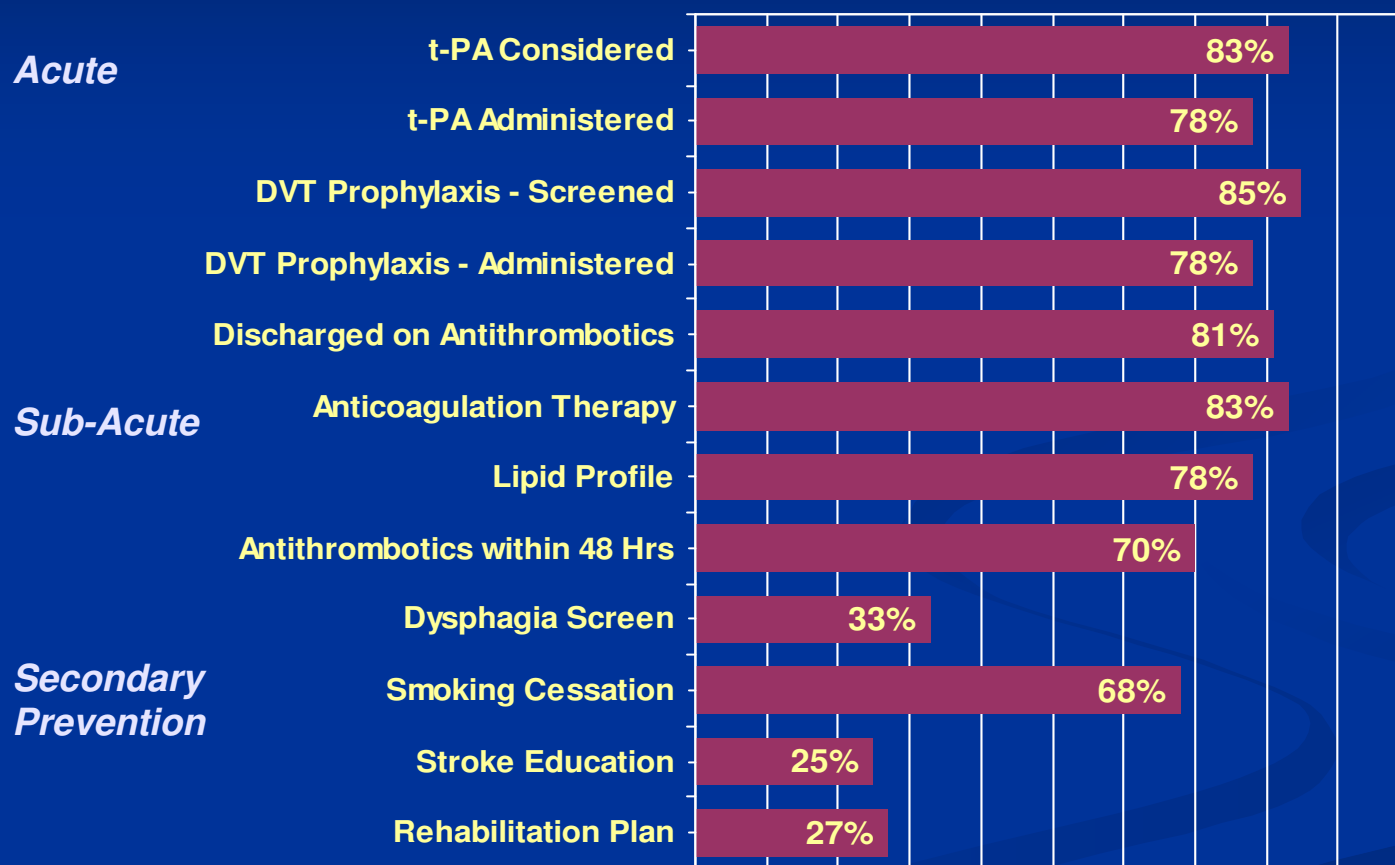
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Subacute & Secondary Prevention



Percent Application of Performance Measures in 60 Reporting Hospitals



Hospital Reported Areas for Improvement--*Acute*

- Emergency physicians buy-in
- Need for urgent CT head scan
- Performing CT head scan
- Patients arriving in ED 3+ hours beyond onset of symptoms
- t-PA patients exceed time frames for acute lytics
- Also identify absolute contraindications for use of t-PA



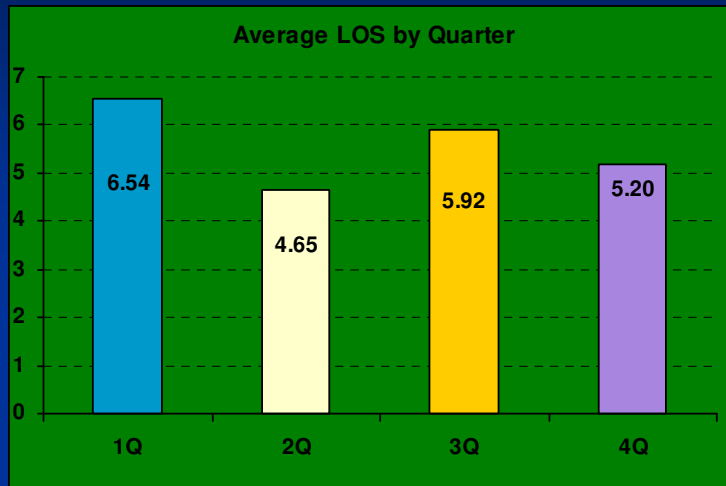
Hospital Reported Areas for Improvement-*Sub-acute & Sec Prev.*

- Prescription of cholesterol reducing medicine recommended by neurology consultant not acted upon
- Dysphagia screen not always considered
- Obtaining HgbA1c for all stroke patients with history of Diabetes Mellitus and glucose levels on discharge
- Neurology data collection sheet to capture pre-stroke Modified Rankin Score
- Smoking education not given to patients
- Staff unaware to include question, “When did you stop smoking?”

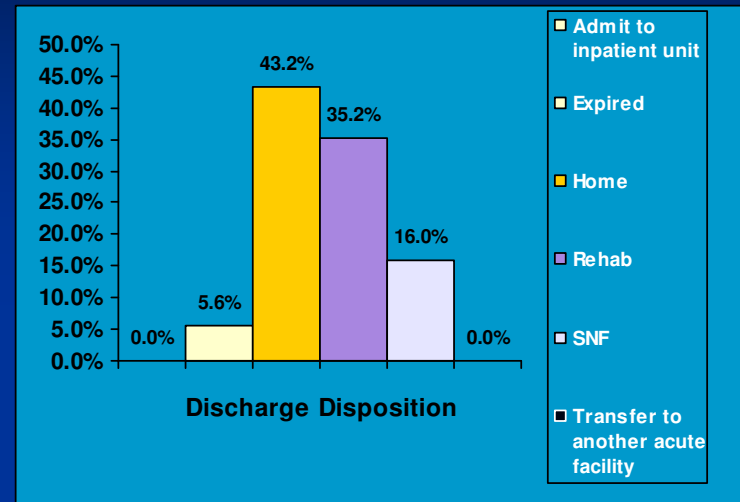


Sample Board of Director Report

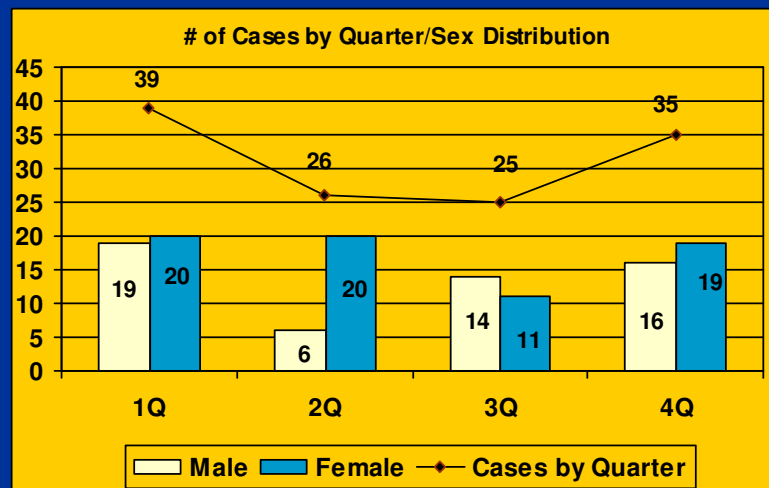
YTD AVERAGE LOS = 5.60 DAYS



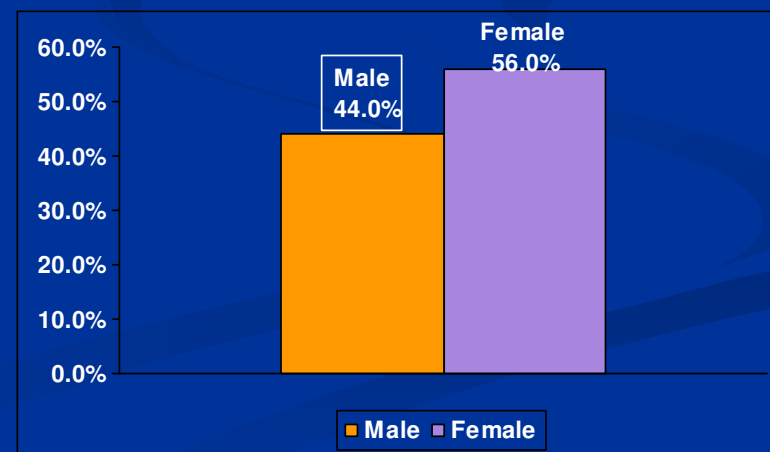
DISCHARGE DISPOSITION



DEMOGRAPHICS



MALE-FEMALE RATIO



Rehabilitation of Stroke Patients

- 80 NYS hospitals with rehab beds
- 5 Rehab Hospitals in NYS
- Rehab needs to have a higher priority & focus in the NYS Stroke System of Care



Continuous Quality Improvement

What Indicators Should Be Added To Reporting?

- Length of stay
- Morbidity & mortality data
- Complications
- NIHSS scale on admission and discharge
- Discharge disposition
 - Home, rehab, SNF, transfer to another acute facility
- Proportion of patients treated with t-PA who had hemorrhagic complications
- Proportion of confirmed stroke patients with specific discharge disposition
- Hospital mortality rate for confirmed stroke
- 30 day readmission rate for confirmed stroke diagnosis

Continuous Quality Improvement

Recommendations for Consideration By Workgroup

- For 2008 Reporting
 - All hospitals will use ten stroke consensus measures
- ? For 2010 Reporting ?
 - Report cards will be placed on the NYS DOH website



Summary and Future Direction

- Stroke and Designated Stroke Centers are a major focus for DOH
- DOH will monitor the Stroke Designated Center for Performance Measures and Outcomes
- Telemedicine is one of the DOH's global strategies for NYS in electronic health, electronic prescribing, & electronic image transmission (x-rays, CAT-scans, MRIs, & electronic health records)



Thank You