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STROKE SYSTEM OF CARE EVOLUTION

SOAR WITH THE EAGLES
OR
CRASH AND BURN

Stroke System of Care GOAL

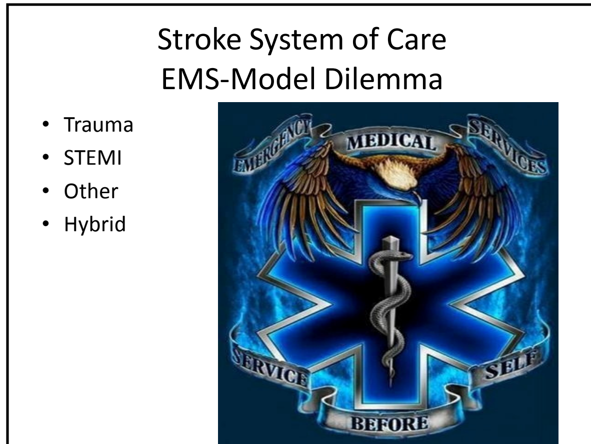
- Plan ,Implement , and Operate a stroke system of care which maintains the momentum and financial stability of the primary stroke center system concept while incorporating two additional stroke levels of care (ASH &CSC) .

GIVENS

- Perception is reality
- Always go to the “best hospital” – if possible
- EMS & PUBLIC “best hospital” is equated as highest ranked/recognized /marketed
- No hospital has infinite resources
- Lack of enough acute stroke care specialists
- Not enough willing Neurosurgeons or NICU service line resources

Stroke System of Care
EMS-Model Dilemma

- Trauma
- STEMI
- Other
- Hybrid



SYSTEMS DESIGN

TRAUMA	STROKE
• Exclusive hospital recognition for each trauma level • Three to four levels of trauma hospitals • Level one's receive over 70 % of system volume • Level one's admit 60% - 70 % of their volume	• Undetermined whether inclusive or exclusive if CSC & ASH added to recognition • Two or three levels of recognition possible • PSC experience is admit over 80 % of system volume

TRAUMA	STROKE
Patient hospital arrival 95% via EMS	Patient hospital arrival 50% by EMS
Payer mix negative incentive	Payer mix positive incentive
Halo effect neutral at best & likely negative	Halo effect positive – CVD & Neurology
Traumatologist only for trauma & emer. Surgery	Neurologist for many situations
< 30% to ICU	> 60% to ICU
EMTALA transfer availability limited to trauma	EMTALA transfer availability for all neurologic & NS patients

TRIAGE

TRAUMA

- Standards for patient entry and secondary triage via evidence based criteria governed by outcome research
- Patient entry and secondary triage via EMS usable patient presentations– physiologic ,MOI , anatomic , or discretion with a defined injury occurrence time

STROKE

- Standards for patient entry - but none present for secondary triage routing of stroke patients because :
- patient presentations occur at any point in the disease process
- many disease processes mimic stroke
- occurrence history , and time line are most often undefined or unreliable

STEMI STROKE

STEMI

- Single level hospital unless > ? Tx. time
- Defined definition for EMS --- positive 12 lead & chemical assessment
- Smaller patient volume

STROKE

- Can be up to three level hospitals
- Multiple medical problems mimic stroke signs &symptoms
- Patient volume x three

CRASH & BURN

- Incorporate the CSC and the ASH into an existing PSC system by just a recognition process and let the market, EMS,and the public decide the triage/routing of stroke patients !

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CRASH & BURN

- PSC will likely loose substantial volume needed to maintain acute stroke service line
- CSC will overload from field as well as transfer patients (EMTALA)
- Compliance with treatment standards WILL BE A MAJOR ISSUE with the ASH
- CSC will become the center of a stroke system while the services of a PSC will be able to serve (estimated) over eighty per-cent of acute stroke patients
- CSC --- cost & resources require an adequate patient volume/payer mix / for the extra intervention procedures

FLY LIKE AN EAGLE

- CSC functions as a PSC and a referral center for other hospitals
- CSC function recognized in the stroke system only as a referral hospital (no EMS triage or marketing)
- The PSC closest to an acute stroke patient scene will be the patient destination unless patient choice prevails or routed by OLMD at the PSC

FLY LIKE AN EAGLE

- PSC/CSC will accept only transfers which need CSC service line resources which a PSC cannot provide
- PSC/CSC must have the privilege of refusing a transfer if the patient condition is futile or only a PSC level care is needed for the patient
- PSC/CSC must have prearranged two-way transfer agreements with all PSC's in their service area
- No ASH will be recognized unless they have an agreement for transfer with a PSC who is also responsible for their compliance with treatment/intervention performance

SOAR WITH THE EAGLES

- The time is right now to make decisions !
- We can always upgrade but downgrading is next to impossible !
- Serve the patient not the ego ,institution , or marketers !