Central Middlesex Emergency Rescue Authority (CMERA)

Regional ALS System

Draft Proposal

Communities working together to provide an economical and high quality level of EMS Care for their citizens

Fall 2009

CMERA Fire Chief and Town Manager/Administrator Subgroup

- Chief Arthur Cotoni, Lincoln Fire
- Chief Steve Carter, Littleton Fire
- Chief Ken MacLean, Sudbury Fire
- Chief Mark Cotreau, Concord Fire
- Tim Higgins, Lincoln Town Administrator
- Fred Turkington, Wayland Town Administrator
- Maureen Valente, Sudbury Town Manager
- Chris Whelan, Concord Town Manager

Mission

- *To provide high quality, cost-effective, paramedic-level ALS care to the citizens of all participating Central Middlesex EMS Rescue Authority communities/Emerson Hospital primary service area*

Sub-Group Objectives

- Determine and recommend key ALS system characteristics
- Review and research various ALS system models and determine pros and cons of each
- Recommend desired ALS system model to CMERA Chiefs and Town Managers
- Determine sustainable revenue stream for desired ALS system model
- Determine timeline for development and implementation of new ALS system

Differences between EMT-Basic and Paramedic

Skills	EMT-Basic	Paramedic
Hours of training	140	1600+
Assessments	basic	advanced
ECG Monitoring	No	Yes + 12 lead acquisition
IV fluid replacement	No	Yes
Medication administration	Epi-pen, Aspirin, Albuterol (only some BLS units are doing)	44 covering most pre-hospital scenarios
Airways	basic	advanced: (endotracheal intubation -> surgical airway

Current EMS System: "Two Tier"

local FD BLS and ALS from Emerson

- Local FD provides BLS ambulance
- Emerson Hospital and several other ALS services on periphery support w/ ALS intercept
  - Emerson provides only 1 truck for 11 communities over 230 sq. miles
  - "back-up" mutual aid ALS services not positioned as permanent solution
- Dispatch "archaic": communities call the emergency room and their staff attempt to locate and dispatch ALS often incurring delays
- Split billing: Emerson bills on own for all but Medicare, Medicare patients billed by FD and Emerson receives $250

Key ALS System Characteristics

- Regional ALS system structure
- Minimum of Two ALS teams
- Strive to meet NFPA 1710 Service Standards
- Quality Improvement Program for BLS and ALS
- Fully automated centralized ALS dispatch
- Sustainable revenue stream to support the regional system

Central Middlesex Emergency Rescue Authority (CMERA)

- Governing body of regional ALS service
- Centralized dispatch for "all-in" communities
- Vendor-provided regional ALS service
- Centralized billing
- Development of local fire-based ALS service buttressed by regional backup

Withdrawn from Consideration: supplementing the current system

- Regional ALS Provider remains owned and operated by Emerson and CMERA as a joint venture
  - Separate organizational and leadership structure
  - Operations, revenue, expenses and decision making shared by all CMERA members and Emerson Hospital jointly
  - ***Pros:*** Regional System, ownership and decision making by all participating constituents (CMERA and Emerson), improved billing structure, standardized dispatch, ability to meet response times
  - ***Cons:*** Requires start up expenses for additional trucks including salary, equipment and developing central dispatch. Potential revenue shortfall exists with current providers' expenses. Emerson unable to continue absorbing losses.

** **Due to rising costs and unstable revenue projections Emerson has withdrawn consideration as a continued ALS vendor**

Primary Ownership Model Considered

- Regional ALS system is owned and operated by CMERA participating communities
  - All operations, revenue, expenses and decision making by CMERA participating communities
  - Medical Control & Continued Quality Improvement / Education coordinated by Emerson
  - ***Pros:*** Regional System, ownership and decision making by CMERA participating communities, improved billing structure, standardized dispatch, Emerson funds Medical Control and CQI responsibilities
  - ***Cons:*** Requires start up expenses including all salaries (including management staff), vehicle and leased office/garage space, central dispatch development and potential revenue shortfall

Board Recommended Hybrid Model

- Regional ALS system governed by CMERA participating communities and sub-contracted to third party for management and ALS provider
  - Two paramedic teams based on call volume, likely 24/7 & 16/7
  - Teams dynamically deployed throughout area
    - Continuously Improve response times
    - Automated dispatch and strategic positioning
  - Centralized billing for both BLS and ALS
  - Electronic Medical Records
  - EMS training for all BLS providers
  - Start-up costs essentially eliminated
  - Highest level of clinical sophistication and quality of patient care

Board Recommended Hybrid Model Summary

A Regional ALS system governed by CMERA participating communities and sub-contracted to third party management and ALS provider. There are a very limited number of companies that provide the quality of management and ALS service needed for our district. Pro-EMS Solutions from Cambridge currently operates an urban model of a "Hybrid EMS System" . Its' suburban model can preserve the oversight of the municipalities and provide increased ALS coverage with 2 trucks and also essentially eliminate any start-up costs through increasing user fees. These increased fees simply move the burden away from the municipalities. EMS fees make up < 2% of insurance payouts therefore minimizing the risk of insurers balking at increased payments. This new payment structure is justified through a "cost for service" model.

The benefit is no start-up costs, centralized dispatch resolved by vendor and billing based on cost for service. There are several vendors out there that may compete for this program which should insure a high quality system based on the RFP.

Board Recommended Hybrid Model:

The Need for "All-In"

- Everyone must work cooperatively to build a sustainable system using data and best practices
- CMERA structure holds everyone together to make decisions.
- Towns should be "All-in" or out. "Splitting Towns" for ALS response is not best practice for any EMS system.
  - Utilizing closest regional or mutual aid ALS truck to optimize care

What if we decide to do nothing at all?

- If no ALS provider is contracted quality of care will be impacted
  - Delayed responses 2’ non-dedicated ALS trucks
  - Providers at will have no responsibility to the town
- Having No ALS provider makes the EMS service zone plan out of compliance
- Patients potentially transported without benefit of quality ALS level care: increased suffering, damage and potential loss of life exist is this case
- Individual providers will make mutual aid and mass casualty responses very difficult to manage
- System becomes even more fragmented

Discussion Topics

- Increased ambulance fees: political impact on communities?
- If increases are balked at by insurers what next?
- Who owns the equipment if this project develops problems?
- Getting Towns to ALS Level?

Selectmen Actions

- Endorse immediate increase billing rate to Medicare + 200% (previously voted)
  - Provides funding for future service development
    - Increase revenue
  - Offsets decrease in January 2010 Medicare rates
- Endorsement promotes the regional concept and may lead to other entities when established giving local BOS the ability to be proactive in regional concepts
- Vote to be “All-in”