Flex Monitoring Team and Health System Development Resources

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Flex Program Workshop

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A Performance Monitoring Resource for
Critical Access Hospitals, States, and Communities

Flex Monitoring Team

University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Overview

- Health system development performance expectations
- State role in supporting regional systems of care
- Examples of regional STEMI systems of care:
  - Regional models of STEMI care
  - Role of EMS
  - Role of CAHs
  - State Flex support for development of these systems of care
- Needs assessment and community benefit opportunities
- FMT Resources

Health System Development & Community Engagement (HSD/CE)

- 3rd core area of Flex activity - limited to 1/3rd of award
- Flex Programs are required to support CAHs in:
  - Developing collaborative regional or local systems of care across the continuum of care;
  - Addressing community needs; and/or
  - Integrating EMS in those regional and local systems of care.
- Logic:
  - CAHs cannot be viable without community support
  - CAHs are hubs of local service systems
  - Maximize and rationalize use of scarce local resources
  - Improve functioning of local system of care

HSD/CE Objectives

- Work plan must include at least one of the following:
  1. Support CAHs, communities, other hospitals, EMS, community providers in developing local/regional systems of care
  2. Support inclusion of EMS into local/regional systems of care and/or regional/state trauma systems.
  3. Support CAH/community collaboration on assessments to identify unmet community health needs
  4. Support CAH/community collaboration on projects/initiatives addressing unmet health needs
  5. Support sustainability/viability of EMS within the community (optional)

HSD/CE Evaluative Measures

- Create a baseline to determine impact of activities that lead to the development of appropriate interventions
- Utilize one of identified activities and related activities to assist ORHP in the creation of a comparative data set
- Monitor short term processes leading to medium/long term outcomes
- Monitor and support change at the community/systems level

Evaluative Measures: 1 & 2

- Support for CAH/EMS involvement in regional systems of care
  - # of CAHs engaged in regional STEMI, stroke, or trauma systems
    - # of STEMI patients
    - # of STEMI patients receiving aspirin within 24 hours
    - # of STEMI patients with D2B times of 90 minutes or less
    - # of regional systems of care involving rural providers
    - # of CAHs receiving trauma designation (# rated Levels III, IV, V)
    - # of CAHs that enhanced their trauma designation

Evaluative Measures: 1 & 5

- EMS operational and financial performance improvement
  - # of EMS units participating in activities to improve EMS
    - # of units engaged in group purchasing arrangement
    - # of personnel participating in billing/coding programs
  - # of EMS units showing a positive change in revenue
    - # of personnel participating in leadership development
    - # of units participating in recruitment/retention activities
  - # of EMS vacancies filled
    - # of personnel reporting participation in recruitment activities was valuable
    - # of units that changed procedures based on recruitment activities

Evaluative Measures: 3 & 4

- Support CAHs in conducting/implementing CHNAs
  - # of CAHs receiving support/TA to conduct CHNA
  - # of CAHs completing CHNA and strategies to address identified needs
  - # of community providers/agencies collaborating on CHNA
  - # of interventions developed in response to results of CHNA
    - # of intervention to address new/ongoing community needs
    - # of individuals in target population served by these interventions
  - # of CAHs reporting improvement in conditions in subsequent CHNA
  - # of community paramedicine programs identified as a potential intervention based on CHNA
    - # of communities piloting community paramedicine programs

Scope of Problem: STEMI

- ST-elevation myocardial infarction (STEMI)
- US - 400,000-500,000 STEMI events annually
- 30% of all patients with acute coronary syndrome
- Characterized by blocked artery/high risk of death or disability
- Critical need for rapid reperfusion
  - Percutaneous coronary intervention (balloon angioplasty)
  - Fibrinolytics (clot busting drugs)

System Failure

- STEMI treatment is “primarily a systems problem of local communities”
- **Time is muscle!**
- 30% of patients do not receive PCI or fibrinolysis in the absence of contraindications to their use
- Fewer than 50% of fibrinolysis patients and 40% of PCI patients are treated within guidelines
- 70% of patients ineligible for fibrinolytics do not receive PCI

AHA Mission: Lifeline Guidelines

- Improve STEMI care by defining components of the system and how they should work together
- Defines capacities of “ideal” EMS, STEMI referral, and STEMI receiving hospitals
- Maintains a role for non-PCI hospitals - **key in rural areas**
- Key aspects of system functioning:
  - Multi-disciplinary team meetings to evaluate outcomes and QI data
  - Process for prehospital identification and activation (EMS)
  - Destination protocols for STEMI receiving hospitals
  - Referral hospital transfer protocols

Barriers to Timely Reperfusion

- Patients fail to recognize symptoms or seek medical attention
- EMS system limitations
- Long travel distances
- Delays at STEMI referral (non-PCI) hospitals related to diagnosis, transport and/or treatment
- Delays at PCI hospitals in processing and treating patients

STAT Heart Program

- Rural Illinois
  - 6 referring hospitals, 2 receiving hospitals, large CV specialty group
  - Identified time delays in process of care:
    - 32-65 minute time in STEMI referral hospital
    - Door 1 – Door 2 travel time ranged between 61-95 minutes
    - Door 2 to balloon 31-39 minutes
  - Median door 1 to balloon was 117 minutes
  - Greatest source of delay–waiting for transport at STEMI referral hospital
  - Demonstrates feasibility of initiating various reperfusion strategies on basis of standardized POE algorithm

Spectrum Health Reed City Hospital

- STEMI performance improvement project
  - CAH in the rural lower peninsula of Michigan
  - Part of Spectrum Health in Grand Rapids and the Meijer Heart Center
  - Travel time 70 minutes by ground, 25 minutes by air (70 miles)
  - Team - Reed City, 2 EMS agencies, Meijer, Aeromed, Spectrum Health
  - D2B time averaged 120 minutes
  - Barriers to achieving 90 minute D2B times
    - Lack of 12 lead ECG capability in one EMS agency
    - Long travel distance with delays caused by weather conditions
    - Delays in mobilizing Aeromed services
  - Results: D2B times within 90 minutes with some as low as 56-60 minutes

SH Reed City (continued)

- Team developed/implemented the following:
  - AMI bag containing drugs, IV fluids, and supplies was created
  - ED staff trained to perform 12 lead ECGs
  - Standardized order set to evaluate and treat AMI/STEMI patients
  - County equipped all ambulances with 12 lead ECGs
  - Reed City provided 12 lead ECG interpretation classes for paramedics
  - Aeromed and cath lab activation based on prehospital ECGs
  - Nurse/physician meet EMS at hospital prior to Aeromed rendezvous
  - Nurse brings AMI bag to landing pad and administers meds under orders
  - All hospital and EMS staff educated on new STEMI protocols

Washington's AMI/STEMI Initiative

- Project of Rural Healthcare Quality Network (funded by Flex)
  - Ongoing initiative for Washington's 34 CAHs
    - Standardized protocols, standing orders, data tools, and education materials
    - TA and support, assistance with data collection/analysis
    - Disseminated information on best practices for AMI/STEMI care
    - Worked with DOH, ECS Work Group, and ACC to develop protocols and standards for two levels of cardiac centers
    - Works with CAHs, PCI hospitals, and EMS to implement Level 1 protocols
    - Convenes regional and state meetings with key stakeholders
    - Publishes quality newsletters for CAHs
  - Door to transport times dropped from 197 to 100 minutes
  - Door to ECG goal of 2 minutes improved from 62% to 81% of patients

Illinois Rural STEMI Activities

- Illinois Critical Access Hospital Network (ICAHN)
  - Supports CAH and rural EMS participation in regional STEMI systems
    - Assist CAHs/EMS to develop/implement standardized TX protocols and algorithms, standing orders, clinical/reperfusion pathways, transport protocols
    - Encourage development of data collection and QI systems to support multidisciplinary STEMI teams
    - Implement processes to monitor STEMI care provided by EMS
    - Conduct needs assessment to assess gaps and needs
    - Support collaboration by attending meetings and developing relationships
    - Organize professional education resources
    - Develop community awareness program

State Flex Activities Supporting STEMI Systems

- Engage policymakers/statewide coalitions of STEMI providers
- Facilitate development of local and regional coalitions
- Support EMS and hospital training
- Support STEMI Systems of Care involving CAHs
- Support development of hospital and EMS standardized tools, treatment and transport protocols, data collection, etc.
- Disseminate information on best practices and successful STEMI initiatives

Other Opportunities to Support Regional Systems of Care

- Support participation in regional or national stroke programs
- Support CAHs in participating in regional or statewide trauma care systems and obtain appropriate trauma designation
- Support development of regional EMS provider systems including those for the provision of medical direction, financial and business services, quality/patient safety management, or recruitment and retention
- Support the development of regional systems of care to serve uninsured and other vulnerable populations

CHNA Opportunities

- Support development of collaborative CHNAs
- CHNA needs of different providers:
  - 501(c)3 hospitals required to conduct CHNAs every three years
  - Public health departments/agencies seeking voluntary accreditation are required to conduct periodic CHNAs
  - FQHCs conduct CHNAs to support their activities
  - Many other local providers conduct needs assessments
- Support collaborative development of initiatives/interventions to address needs identified in the assessment process

Collaborative CHNA Activities

- Collaborative CHNA Activities
  - Developing CHNA framework
  - Collaborating on collecting and analyzing data
  - Engaging key stakeholders
  - Identifying and prioritizing needs
  - Developing strategies to address needs
- Develop interventions to address identified community needs
  - Child obesity prevention and fitness programs
  - Diabetes programs
  - System to provide primary care access to uninsured residents
  - Development of mental health and substance abuse services

FMT Resources

- FMT Website: http://flexmonitoring.org
- Policy briefs, papers, and presentations on core area issues
- National and state data on CAH quality, finances, community engagement and benefits, HIT implementation
- Tools to support program evaluation (logic models, state performance) and program planning
  - Toolkit: http://www.flexmonitoring.org/documents/PLMToolkit.pdf
- Overview of state activities across the 45 participating states
- Speakers, TA, contacts and connections across core areas

HSD/CE Resources

- CAH Community Benefit Reporting Toolkit

  http://flexmonitoring.org/documents/Community-Benefit-Reporting-Toollkit.pdf

- Presentation on IRS CHNA requirements

  http://flexmonitoroing.org/documents/Complying-with-IRS-Requirements-Comm-Health-Needs-Assessment-CAHs_Gale091728.pdf

- Presentation: Connecting CHNAs & Implementation Strategies

  http://flexmonitoring.org/documents/After-the-Needs-Assessment-CommunityBenefit-Strategies_Gale092812.pdf

- Exploring the Community Impact of CAHs

  Policy Brief: http://flexmonitoring.org/documents/PolicyBrief2.pdf

  Briefing Paper: http://flexmonitoring.org/documents/BriefingPaper14_CommunityImpact.pdf

Systems of Care Resources

- Developing Regional STEMI Systems of Care
  - Policy Brief: http://flexmonitoring.org/documents/PolicyBrief23_STEMI.pdf
  - Briefing Paper: http://flexmonitoring.org/documents/STEMI-BriefingPaper29.pdf
- State Flex Program EMS/Trauma Activities
  - Policy Brief: http://flexmonitoring.org/documents/PolicyBrief17-EMS-Trauma-systems-CAHs.pdf
  - Briefing paper: http://flexmonitoring.org/documents/BriefingPaper27-EMS-Trauma-systems-CAHs.pdf

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