# **Acute Care Delivery for Complex Patients**





### **Outline:**

- Overview of Patient Populations: Scope of Problem
- Gap Analysis
- Patient Scenario: Ms. "O"
- Program Outline
- Outcomes Data
- Replication of System: PCORI
- Patient Survey Results



# **Scope of Problem:**

- Our patients are "Duel Eligible"
  - Nationally: 25% Medicare & 46% Medicaid (\$250 Billion)
  - High acuity patients with multiple comorbid factors
    - Behavioral health, Quadriplegia, Muscular Dystrophy
  - State and Federal funding for Managed Care
    - 10% of population uses 40% of Healthcare dollars
- CCA's has 17,000 patient (2,200 in our program)
  - \$750,000,000 annual bundled payment

## **Scope of Problem:**

- Patient and Provider concerns with using ED
  - Disruption of care plan
  - 60% of Complex Patients are admitted to hospital
    - 40% of these are reported to be unneccessary
  - Risk of exposure to pathogens
  - Depersonalization of Hospital
  - Cost to system
  - Cost to care givers (family or Personal Care Attendants)

# **Gap Analysis:**

- CCA's system provides the following:
  - Managed care in the home (MD, NP, PA)
    - Seven days a week 8 a.m. to 5 p.m.
  - On call NP 24/7
  - Tightly wrapped patients
    - · All providers play a role in care delivery
    - Weekly team meetings
  - Hospitalist programs for in patient care delivery
  - Palliative Care Team for End of Life care

# **Gap Analysis:**

- CCA's gap in care delivery:
  - No in house coverage for evenings & weekends
  - Urgent care needs take away from scheduled appointments
  - Patient's unwilling to go to Emergency Department
    - High acuity patients with multiple co morbid factors
  - High utilizer population group
  - Significant cost to care for patient population

# **Critical Components:**

- Partnership Building
  - Develop trust between Primary Care team and CP
  - Medical Oversight
    - Primary Care team oversight
    - · CP Medical Director with EMS background
  - Extensive CQI System
    - · Every call reviewed
  - Access to Patient Electronic Medical Records (EMR)

#### **Patient Scenario:**

- Ms. "O"
  - Significant cardiac disease with CHF; DM; HTN....
  - Many hospitalizations over one year period
  - Dislikes being in the Hospital
    - Does not seek assistance at beginning of crisis
    - Signs out Against Medical Advice from ED & Inpatient
  - 5 Hospital & 1 NH Admission in previous 6 months
- How do you manage her care?

# **System Review:**

- Patient access to NP on call after hours
- NP Triages patient into 3 categories
  - Emergent: access EMS (911) system
  - Non-Emergent: Set up follow up care the next day with staff
  - Urgent Care: Send CP to treat on scene
- NP dispatches CP to render care
  - Initial discussion of scenario
  - CP access the patient's EMR
    - Review history and care plans

## **System Review:**

- CP arrives at patient's home
  - Initial assessment of patient: Care on Scene or EMS
  - Conference call with NP, MD and CP
    - Develop specific care plan and goals of care for visit
    - · Implement care plan
    - · Follow up phone conference as necessary
    - · Document interaction and care delivery in Pt's EMR



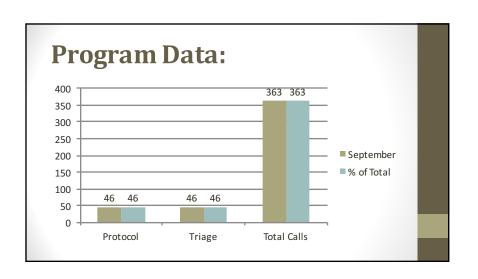
# **Examples of Patient Care:**

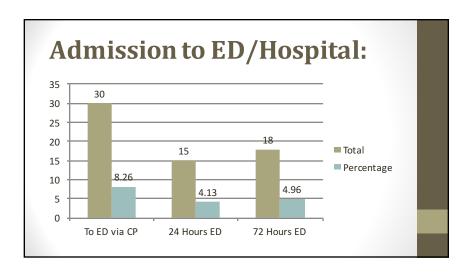
- Point of care testing: iStat Chem 8 Panel
- Ultrasound Guided IV Insertion
- Culture & Lab aquisitions
- Antibiotic therapy & Medication Administration
- Behavioral Health Intervention (Direct Admit)
- End Of Life Care with Palliative Care team
- VNA & Hospice support



### **Patient Scenario:**

- Ms. "O" care management:
  - Multiple in home visits
    - Primary Care Team by day and CP in the evenings
  - Assistance with CHF management
    - Lasix, labs, weight
- Outcome:
  - Patient condition is stabilized
  - · Patient was reeducated in real time
    - Better monitoring, diet and compliance
    - Coached to call for help prior to reaching crisis point
- 3 Hospital & 0 NH Admissions in post 6 months
  - · Cost Reduction: 20% in post six months





# **Savings to the System:**

- National Average ED visit Cost = \$2000
- National Average Hospital Admit is 4.8 days at \$2000
- Projected Cost Savings in less than 11 months:

• Emergency Admission (172 x \$2000)= \$344,000.00

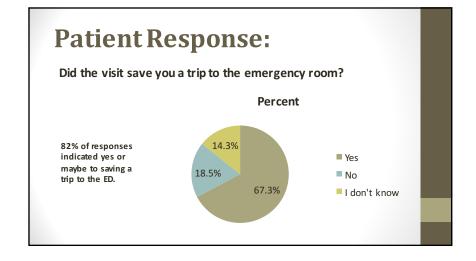
Hospital Admission (47 x \$9600) =\$451,200.00

• Ambulance (172 x \$350)= \$ 60,200.00

• Return Ambulance (172 x \$350)=\$ 60,200.00

# Savings to the System:

- Projected Savings to System = \$915,600.00
  \$2,522.31 per patient interaction
- Validity of the data??
  - Difficult data analysis
  - Needs to be validated to justify assumptions

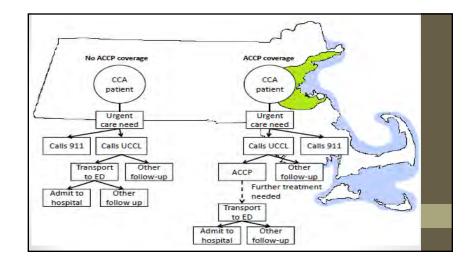


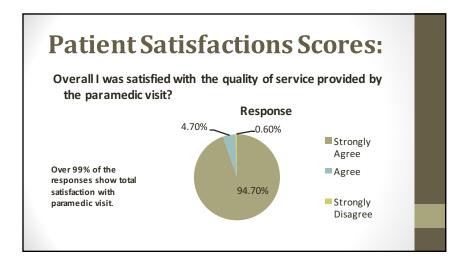
#### **PCORI Grant:**

- Patient Centered Outcomes Research Institute
  - Massachusetts General Hospital (MGH) Mongan Institute of Health Policy
    - EasCare Ambulance Service & Commonwealth Care Alliance
    - · Boston University and University of Massachusetts
    - · Disability Policy Consortium
  - Three Year funded study of data
    - Determine outcomes
    - · Financial impact

#### **PCORI Grant:**

- Goals:
  - Determine true cost savings for this vulnerable population
  - Create a scalable model for implementation nationally
  - Internationally?





## Patient Satisfaction Survey:

"This is an excellent program! The last time I called 911 they brought me to the hospital and I got an infection while I was hospitalized. I am much more comfortable being treated in my home. Keep up the great work!"

## Patient Satisfaction Survey:

"Another great visit. Joe gave me some fluids and antibiotics and I felt much better. Thank you!"

"Good visit and Alex was able to schedule an appointment with my orthopedic surgeon the next day. Definitely saved me a visit to the Emergency Room."

