



Welcome!

Dudley Watts
Forsyth County Manager

Authority: 153A-250, Ambulance Services

A county may, by ordinance, franchise ambulance services provided in the county to the public at large, whether the service is based inside or outside the county. The ordinance may:

1. Grant franchises to ambulance operators on terms set by the board of commissioners
2. Make it unlawful to provide ambulance services or to operate an ambulance in the county without such a franchise
3. Limit the number of ambulances that may be operated within the county
4. Limit the number of ambulances that may be operated by each franchised operator

Authority: 153A-250, Ambulance Services

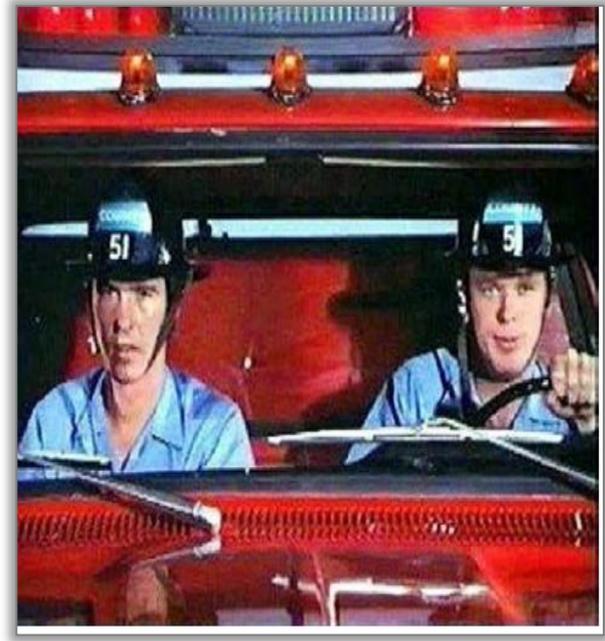
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5. Determine the areas of the county that may be served by each franchised operator
6. Establish and from time to time revise a schedule of rates, fees, and charges that may be charged by franchised operators
7. Set minimum limits of liability insurance for each franchised operator
8. Establish other necessary regulations consistent with and supplementary to any statute or any Department of Health and Human Services regulation relating to ambulance services

Historical Perspective

- Conundrum

- Misaligned Incentives
- Only Paid to Transport
- “EMS” is a Transportation Benefit...*Not a Medical Benefit*





EMS|MC

EMS MANAGEMENT & CONSULTANTS

RESULTS | SERVICE | COMMUNITY

**Mobile Integrated
Healthcare - MIH**

August 11, 2016

Regina Godette-Crawford
Advocacy Liaison

Panelists

- **Dr. Hosea Cabanas**, MD,MPH, Director and Medical Director, Wake County EMS
- **Rick O'Donnell**, NREMT-P, BS, CMTE, Director, New Hanover EMS
- **Daren Ziglar**, Assistant Chief - Compliance / PIO, Forsyth County Emergency Services
- **William J. Kehler IV** NRP, CCEMT-P, Director, Emergency Services - McDowell County
- **Justin Stewart**, EMT-P, EMD, AAS, Assistant Training Officer, Rockingham County EMS

Mobile Integrated Healthcare Defined

Community Paramedicine(CP)/Mobile Integrated Healthcare

- A new and evolving model of community-based health care in which paramedics function outside of their customary emergency response and transport roles in ways that facilitate more appropriate use of emergency care resources and/or enhance access to primary care for medically underserved populations.
- CP programs typically are designed to address specific local problems and to take advantage of locally developed linkages and collaborations between and among emergency medical services (EMS) and other health care and social service providers. Interest in community paramedicine has grown substantially in recent years based on the belief that it may improve access to and quality of care while also reducing costs.

Today's Health Care Problems



Decreased access
to primary care



High re-admission
rates



Increased ED visits/
emergency care



Growing number of
uninsured/underinsured



Lack of consistently
coordinated, high quality care

EMS Addressing Today's Health Care Problems with Community Paramedicine Programs

Wake County EMS

**McDowell
County EMS**



**New Hanover EMS
(Hospital-Based)**

**Rockingham
County EMS**

**Forsyth County
EMS**

What is Mobile Integrated Healthcare?



**What Role Does
EMS Play in
Mobile Integrated
Healthcare?**



Emergency Medical Services



Non-emergency Medical Services

The reality:

- 9-1-1 has become the safety net for non-emergent healthcare
- 29% of 9-1-1 requests are non-emergency (alpha or omega responses)
- Top 10 users of our 9-1-1 system accounted for 702 EMS responses
- Unnecessary over-utilization of 9-1-1 can lead to:



Community Paramedicine

So as pre-hospital providers, what role can we play in the way our community utilizes the healthcare system?

- **Assess and identify gaps between community needs and services**
- **Use our existing scope of practice and expand services**
- **Work in cooperation with other stakeholders/medical providers (Care Coordination)**



The Results

“Familiar Faces”

% Change 6 months Pre-Study vs. 6 months Post-Study

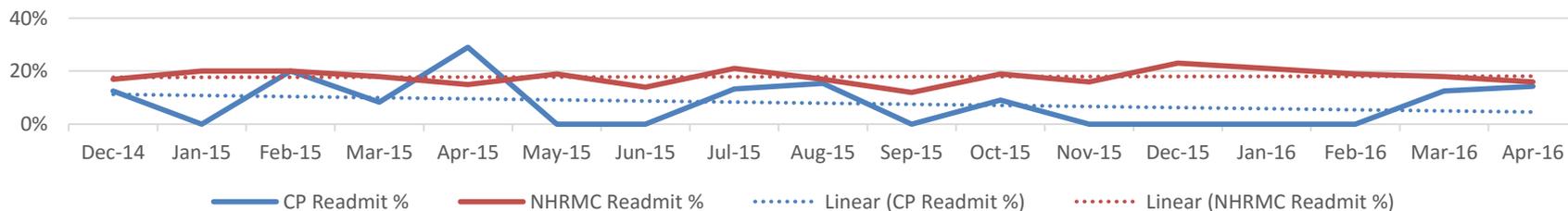
911 (EMS) Calls	Emergency Department Visits	Inpatient Visits (Hospital Admissions)	Median Charges per Patient
-41%	-47%	-40%	-52%

Reduced 30-Day Hospital Readmission Rates for High Risk Patients

Medicaid/Medicaid Pending/Self Pay Patients

NHRMC vs. Community Paramedicine Patients

December 2014 through April 2016



Forsyth County EMS

Initial efforts focused on Super Users, and decreasing 911 use

- noticed that >85% of these patients have a BH diagnosis that is either primary or secondary to cause

Collaboration with Behavioral Health launched pilot of BH diversion from Emergency Department.

Currently working directly with case managers on various patients that are both BH and Super Users.

Partnership with Forsyth County Infant Mortality Committee and Public Health has created our next focus - addressing high infant mortality rates. Forsyth County has one of the highest infant mortality in the statewide. Not sure of any funding, but we feel its the right thing to do.

Next steps, partnering with our two hospitals to address patients with high risk diagnosis.

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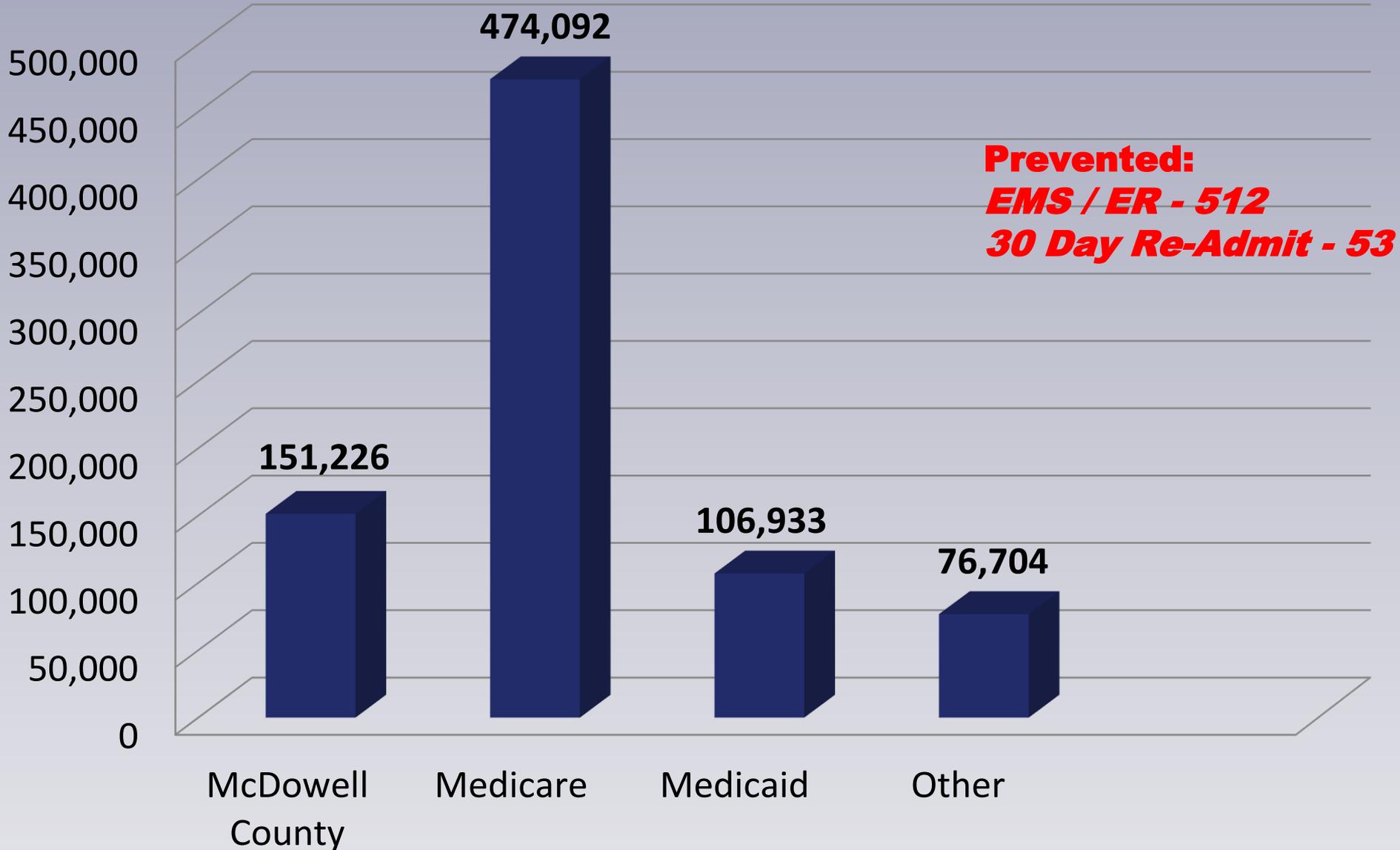


**How Did Your
County/Agency Fund
Mobile Integrated
Healthcare?**



McDowell EMS Community Care

2 Year Cost Savings \$808,995



**What Barriers,
If Any, Did You Incur
Implementing Your Mobile
Integrated Healthcare
Program?**

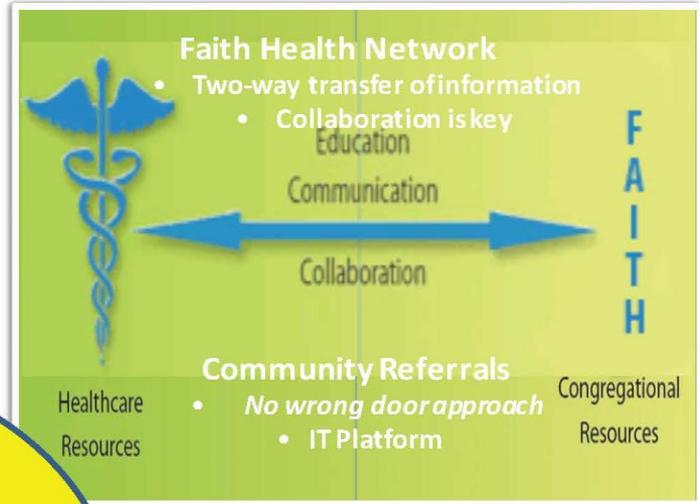


ROCKINGHAM COUNTY INTEGRATED HEALTH PROGRAM

Key Areas Addressed to Improve Pt. Care

- Medical Issues
- Behavioral Health Issues (MH & SA)
- Case Management/Care Transition
- Health Education re: their disease/issues

**Use existing agencies in the county already providing services under these areas*



Integrated Health Key Partners

- Health & Human Services
- DSS & Public Health
- EMS
- MCO
- CCNC Network

**These agencies exist in all counties*

Sustainability

- DSS: Maintain funding streams for Case Management
- EMS: Needs funding stream and protocols for behavioral health
- MCO: Build reimbursement relationship with EMS
- CCNC Network: maintain funding for Case Mgmt.
- Additional DHHS start-up grants

Replicability

- *Ability to replicate in other counties due to the existence of the core agencies*

Education

- CIT Training (beyond law enforcement)
- MHFA
- Disease specific education
- Nutrition education
- Peer Support
- HIPP (Health Integration Peer Program) Model
- Community Mental Health Stakeholders Group
- New Curriculum for Community Paramedics
- Triple Aim Addressed



Case Studies



Wake EMS



Case Study - 46 y/o patient with CHF

Admitted > 200 days during 2014-2015,
Enrolled in pilot program in April, 2015

- Health care expenses:
 - 3 months prior to intervention: **\$103,409**
 - 3 months after intervention: **\$557**

Initial Actions

- APPs first visit within 24 hours of discharge
- Discovered medication gap and worked with care manager to resolve
- Provided immediate red flag education and monitoring
- Joint home visit completed by APP/CCWJC within 4 days

Case Study

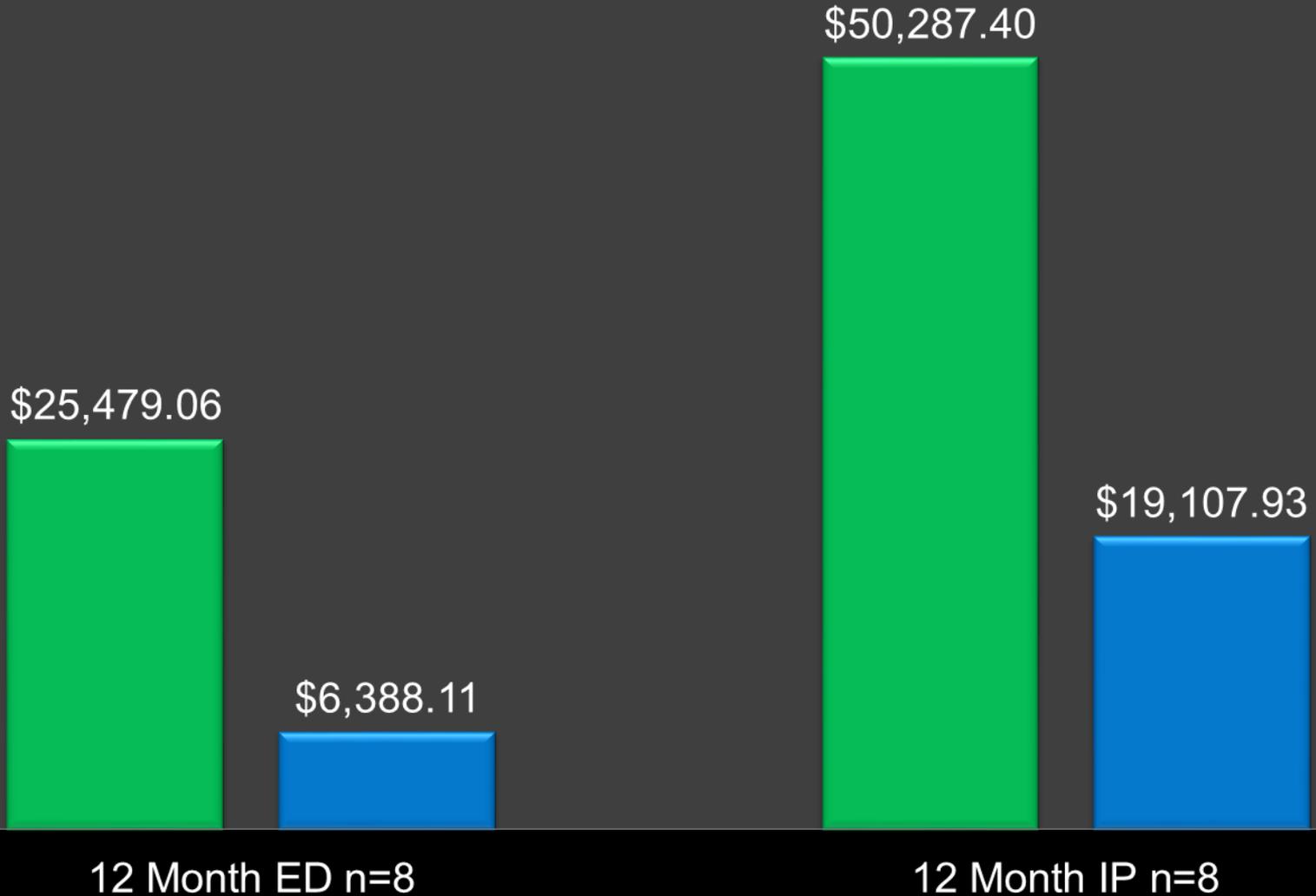
- Pt. linked with PCP and pain specialist
- Linked with a local Community Pharmacy Enhanced Services Network (CPESN) pharmacy for med synchronization and delivery services

Status Report

- No subsequent inpatient admissions for remainder of time in pilot program (through September 2015)

CCWJC / Wake EMS CHF Patient Hospitalizations Claims Data

■ Pre-Wake APP ■ Post - Wake APP



"All the News
That's Fit to Print"

The New York Times

Late Edition

Today, clouds and some sun, a flurry, not as cold, high 40. Tonight, clearing skies, low 30. Tomorrow, mostly sunny and chilly, high 38. Weather map appears on Page B8.

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Turkish protesters in Istanbul on Wednesday showed signs as they held signs.

E.R. Costs for Mentally Ill Soar, And Hospitals Seek Better Way

By JULIE CRESWELL
RALEIGH, N.C. — As darkness fell on a Friday evening over downtown Raleigh, N.C., Michael Lyons, a paramedic supervisor for Wake County Emergency Medical Services, slowly approached the tall, lanky man who was swaying back and forth in a gentle rhythm.

New Tests for Brain Trauma Offer Hope, and Skepticism

By JULIE CRESWELL
BOSTON — A new generation of tests that can detect brain trauma in minutes, rather than hours, is being developed by researchers at the Massachusetts General Hospital and Harvard Medical School.

INTERNATIONAL
Egypt's President Morsi
Japan's Prime Minister Shinzo Abe
A Harvard Club, Unhinged

Craft Scandal Is Approaching Turkey Premier

By JULIE CRESWELL
ANKARA, Turkey — The scandal over the alleged sale of a Turkish cruise ship to a Chinese company is approaching the Turkish prime minister, Recep Tayyip Erdogan.

Getting Out of Discount Game, Small Colleges Lower the Price

By JULIE CRESWELL
BOSTON — Small colleges are trying to get out of the "discount game" of offering large tuition reductions to students from low-income families.

In a Poor-Culture Clash, It's the Los Angeles Police vs. Pedestrians

By JULIE CRESWELL
LOS ANGELES — A clash between police and pedestrians in Los Angeles is being described as a "poor-culture clash."

INTERNATIONAL
A Harvard Club, Unhinged
A Singer's Joyful Moment

U.S. SENDS ARMS TO AID IRAQI FIGHT WITH EXTREMISTS

By JULIE CRESWELL
WASHINGTON — The United States is sending arms to Iraq to help the government fight against extremist groups.

75 BELIEVE MISSILES

By JULIE CRESWELL
WASHINGTON — A poll of 75 people shows that many believe in the existence of advanced missile technology.

REWARD & CONSPIRACY

By JULIE CRESWELL
WASHINGTON — A reward is being offered for information about a conspiracy involving government officials.

THURSDAY STORIES
The Golden State
From Table
A Singer's Joyful Moment

E.R. Costs for Mentally Ill Soar, And Hospitals Seek Better Way

By JULIE CRESWELL

RALEIGH, N.C. — As darkness fell on a Friday evening over downtown Raleigh, N.C., Michael Lyons, a paramedic supervisor for Wake County Emergency Medical Services, slowly approached the tall, lanky man who was swaying back and forth in a gentle rhythm.

In answer to Mr. Lyons's questions, the man, wearing a red shirt that dwarfed his thin frame, said he was bipolar, schizophrenic and homeless. He was looking for help because he did not think his prescribed medication was working.

In the past, paramedics would have taken the man to the closest hospital emergency room — most likely the nearby WakeMed Health and Hospitals, one of the largest centers in the region. But instead, under a pilot program, paramedics ushered him through the doors of Holly Hill Hospital, a commercial psychiatric facility.

"He doesn't have a medical

complaint, he's just a mental health patient living on the street who is looking for some help," said Mr. Lyons, pulling his van back into traffic. "The good news is that he's not going to an E.R. That's saving the hospital money and getting the patient to the most appropriate place for him," he added.

The experiment in Raleigh is being closely watched by other cities desperate to find a way to help mentally ill patients without admitting them to emergency rooms, where the cost of treatment is high — and unnecessary.

While there is evidence that other types of health care costs might be declining slightly, the cost of emergency room care for the mentally ill shows no sign of ebbing.

Nationally, more than 6.4 million visits to emergency rooms in 2010, or about 5 percent of total visits, involved patients whose

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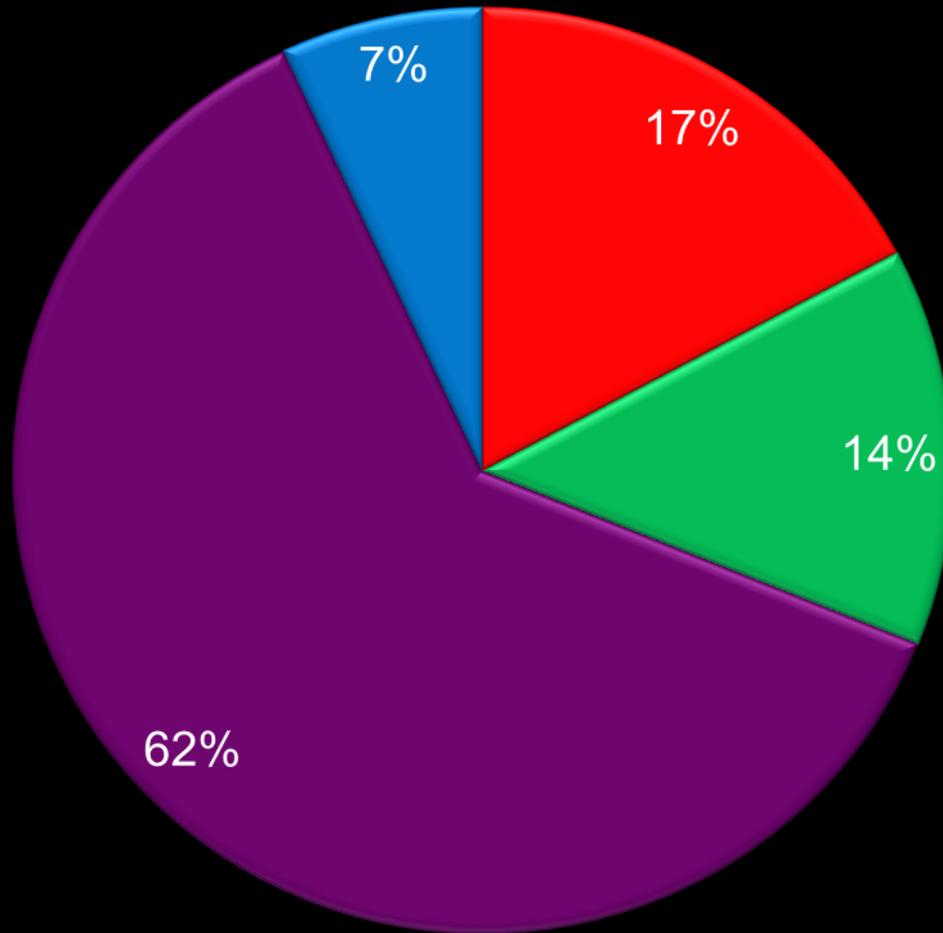


Alternative Destination

1,258 patients in a 44 month period were placed for acute mental health / substance use (Non-Emergency Department.)

Mental Health / Acute Substance Use Patients Evaluated for Transport to Alternate Location

- No Transport
- Transport to Alternative Location
- Transport to ED
- Transported to Psychiatric Hospital



Top 5 High Utilizers

Patient	Patient Pre-Destination Plan (EMS calls per month)	Post-Destination Plan (EMS calls per month)
A	7.61	1.88
B	3.47	1.83
C	2.65	2.50
D	2.33	0.12
E	2.33	1.33

A Familiar Face

High Volume Utilizer from Substance Use

Year	Number of 911 Calls
Last 6 months 2010	42
2011	63
2012	21
2013	5
2014	1
2015	2
2016	0



**New
Hanover
EMS**



20 y.o. Female Patient

Seen in the ED 12 times in 7 months with 11 of the visits resulting in hospital admission.

- Lives in small apartment with two younger siblings.
- Past Medical History includes – Insulin Dependent Diabetes, Diabetic Gastroparesis and Chronic Diarrhea.
- CP followed patient for 2 months. Provided education about her chronic diseases, completed medication review and worked with Pharm D to enroll patient in medication assistance program. Worked with PCP on two occasions to administer IV fluids and anti-emetic at home to avoid ED visit.

No ED or Hospital Admissions during or post CP involvement (9 months).

McDowell County EMS



McDowell Case Study #1

- COPD High Utilizer
- 77 EMS transports to local ER in 19 months
- EMS - Net loss of \$373 per transport (\$28,721)
- Community Paramedic Intervention
 - Primary Care Home
 - Social Support / Activities
 - Transportation Coordination
 - Patient Graduated from the Program
 - 12 month savings to EMS \$17,904 (single patient)

McDowell EMS Case Study #2

Diabetic / No Primary Care Physician / Uninsured

Net Loss \$473 per Transport

Direct Cost Savings Since Enrollment \$24,123



Rockingham County EMS





Rockingham County

CURRENT CASE EXAMPLES

- Case # 2-SE-Chest Pain/Psych Disorder/Various Other Medical Complaints
 - Number of EMS Calls for Transport Between January and June of 2014
 - 18 Transports/Medicaid
 - \$ 7483.00 Gross Charges
 - \$ 1556.63 Net Charges
 - \$ **5926.37** Contractual Allowance

The Future of EMS

Next Steps



New EMS Agenda for the Future

- Emergency Medical Services (EMS) of the future will be community based health management that is fully integrated with the overall health care system. It will have the ability to identify and modify illness and injury risks, provide acute illness and injury care and follow-up, and contribute to treatment of chronic conditions and community health monitoring.
- Don't miss this opportunity to learn how associations, agencies and individuals can provide input in the planning process for the 2017 anticipated revision of the Agenda for the Future. Visit the ems.gov website for more information.

Next Steps

- Continue on-going dialog with DHHS & DMA regarding changing the modifiers
- Short time period remaining to make changes to the current State Medicaid Plan
- Planning for the 2017 Legislative Session



Questions?

