



# Community Paramedic Program Northwest Wisconsin

## Gold Cross Ambulance

Mayo Clinic Medical Transport  
June 2017

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**Barron County, Wisconsin**  
**Population: 45,676**  
**Square Miles: 890**

# Setting



## Gold Cross Ambulance – Barron, WI

- Employs nine full-time Advanced Care Paramedics
- Receives approximately 1,500 combined emergent and nonemergent requests annually



## Mayo Clinic Health System Northland

- 25-bed critical access hospital with a primary care clinic

# How Patients are Enrolled

- Initially
  - Six primary care physicians offered Community Paramedic referrals to patients they believed would benefit
- Referral's now coming from
  - Emergency department patients
  - Hospitalist's
  - Fall prevention program

# Community Paramedic Visits

- Using a defined care plan developed by the primary care provider, Community Paramedics visit the patient home to review
  - Current history and physical exam
  - Medication compliance
  - Home safety
  - Social inhibitors
  - Engagement of family members in care plan
  - Opportunities to engage with other resources

# Documentation and Physician Communication

- Community Paramedics communicate with the primary care provider by
  - Use of the clinical note for visits in the medical record
  - Note to Medical Director and primary care provider for quality review and signature
  - Use of on-call physicians for adjustment to medications or care plan

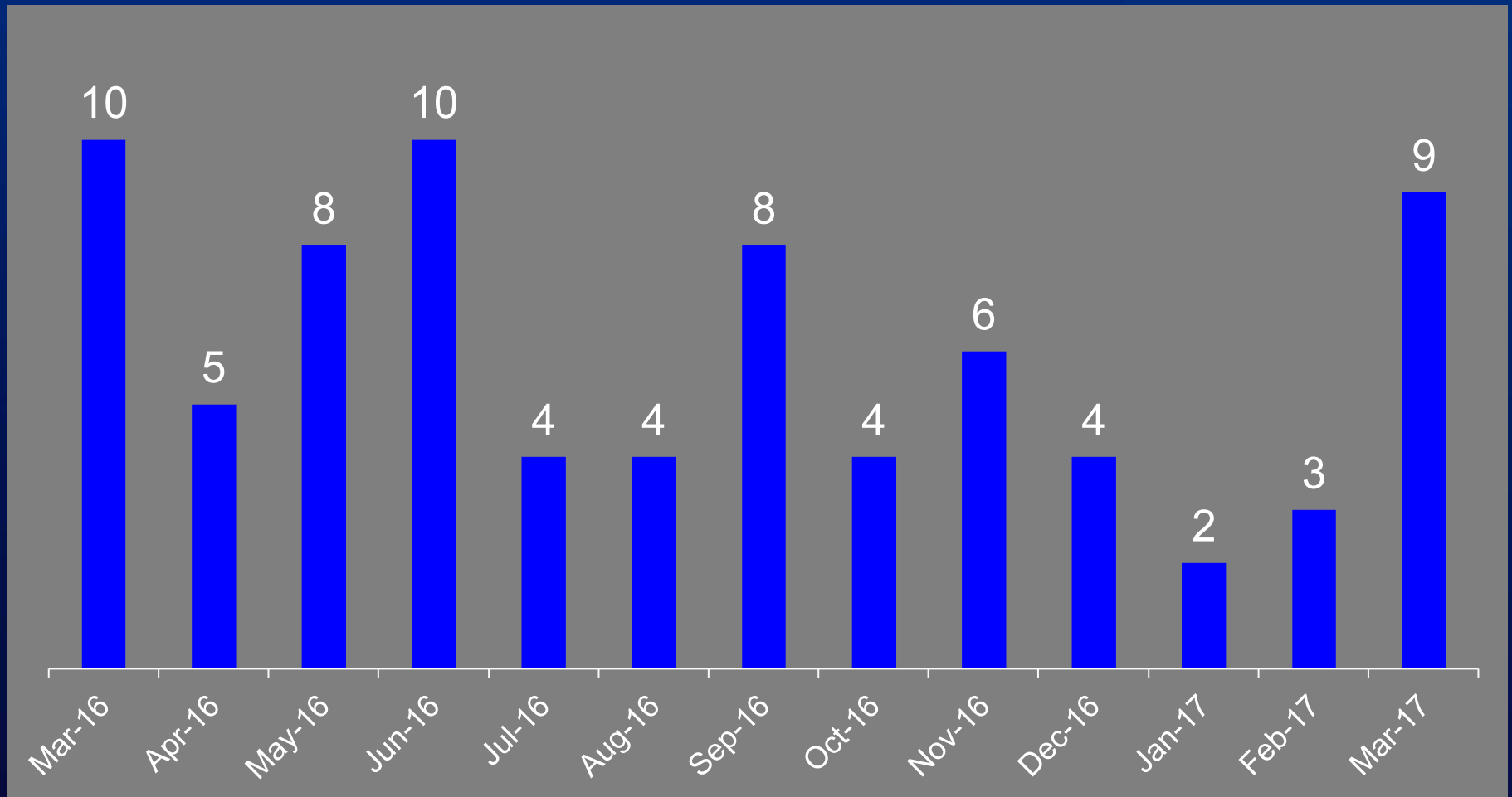
# Patient Scheduling

- Community Paramedic reviews order in medical record
- Visit is scheduled during normal business hours Monday through Friday

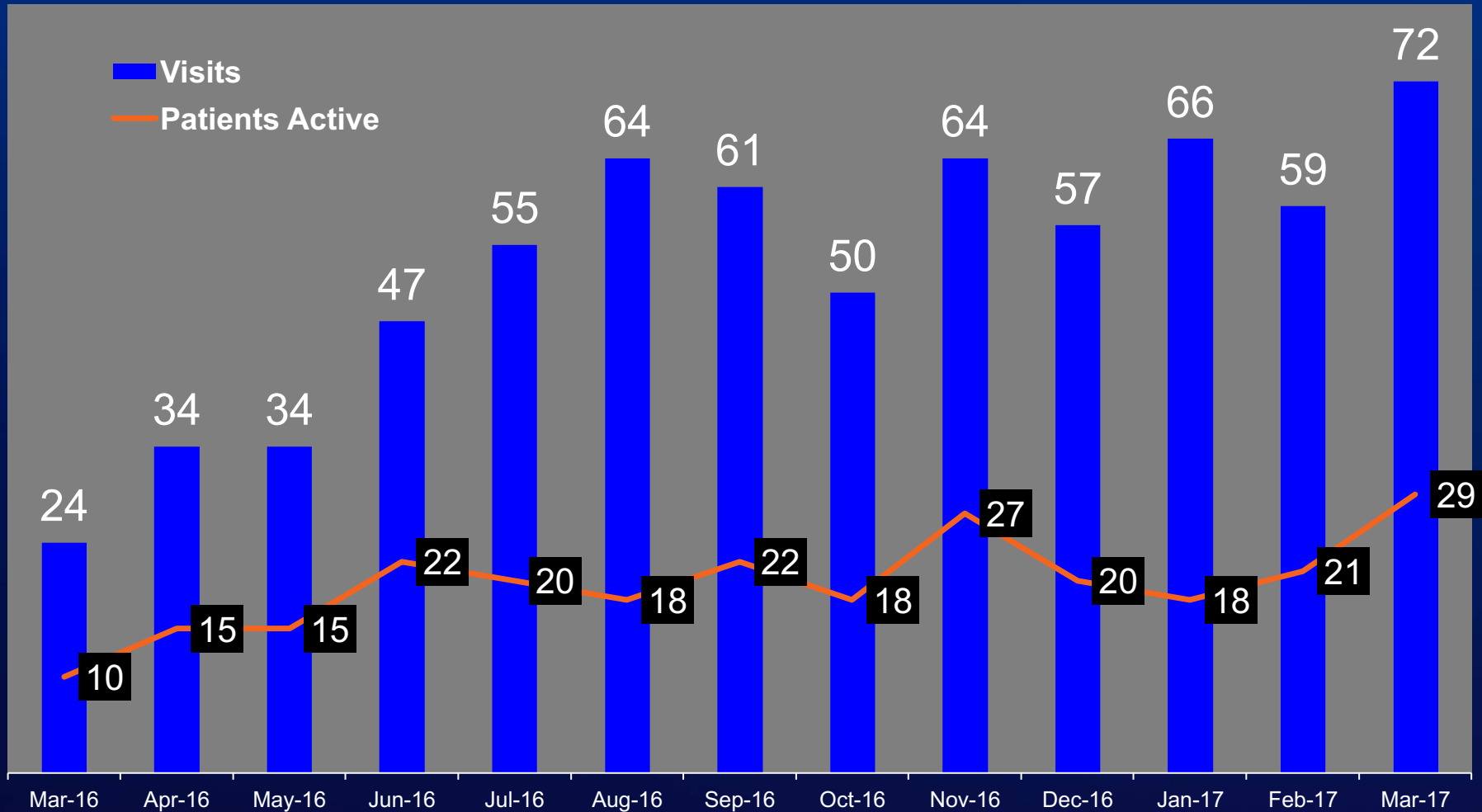
# Program Analysis



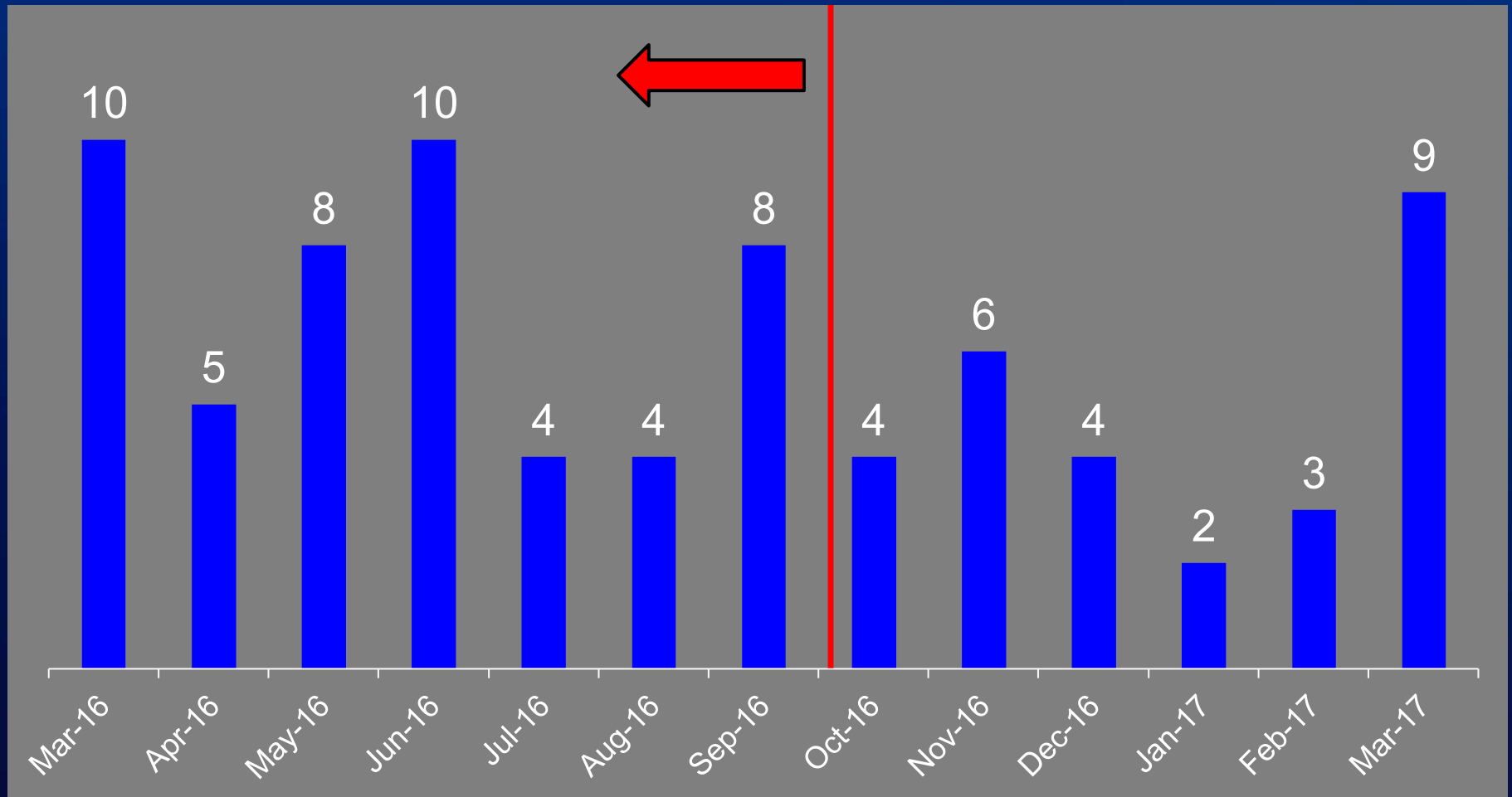
# New Patient Referrals by Month



# Monthly Visits and Active Patients



# New Patient Referrals by Month



# Methodology

- Grouped patients into one of two categories
  - Frequent healthcare utilizers
  - High risk for readmission and discharge follow-up

# Frequent Healthcare Utilizers

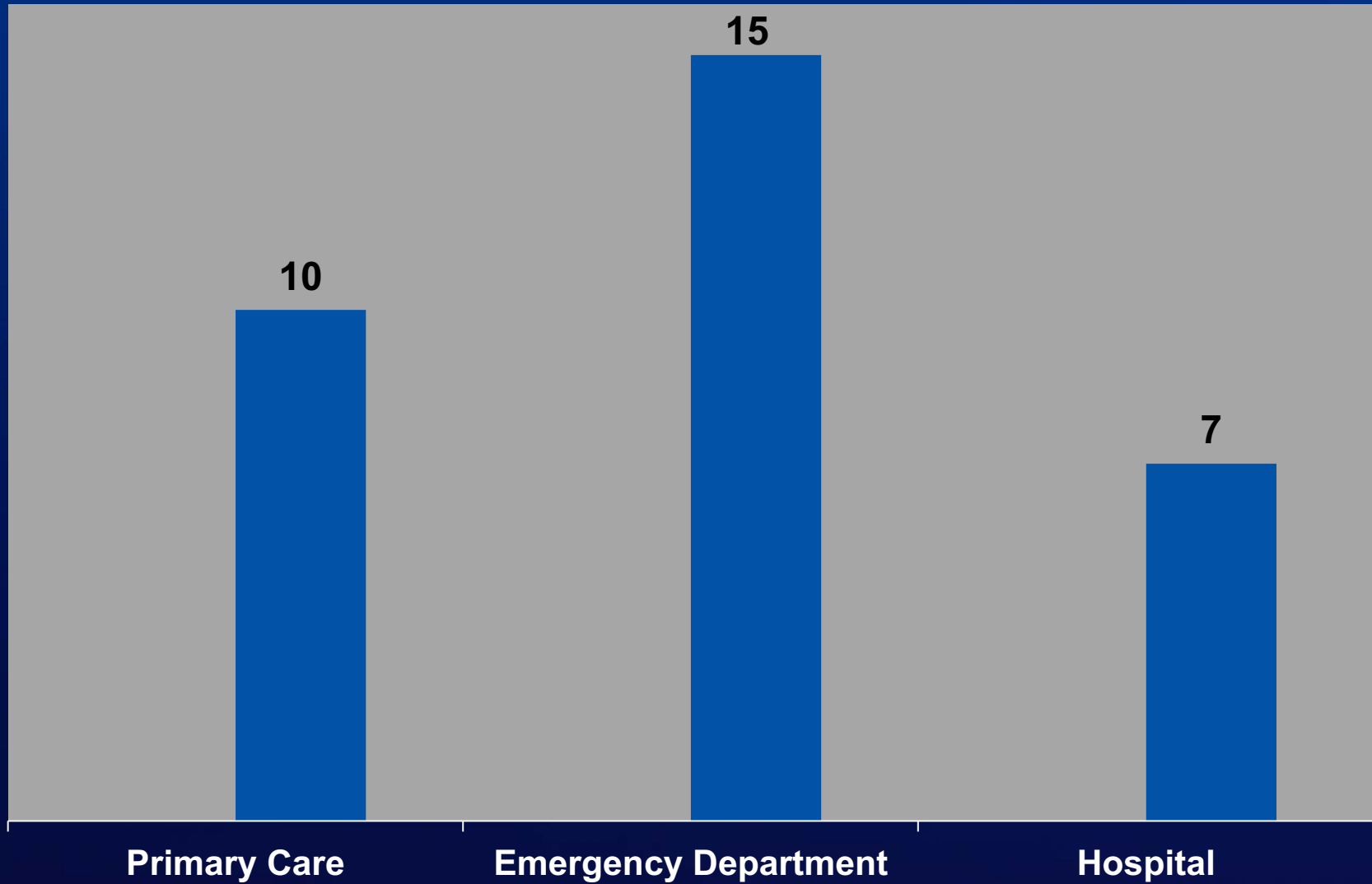
# Methods

- Measured the frequency of healthcare utilization based on the primary referral reason for;
  - Primary care charges
  - Emergency department visits
  - Hospitalizations
- Timeframe
  - Six months before referral date
  - Six months after referral date

# Demographics

- Patients referred = 32
- Median age = 76 years
  - Range 45 to 94 years
- Gender = 68.8% female (22/32)
- Number of visits = 412
  - Range: 1 to 47

# Referrals by Area





# Referral Reason

<u>Primary Reason for Referral</u>	<u>Number of Patients</u>
Falls	34% (11)
Chronic Pain	19% (6)
Hypertension	13% (4)
Diabetes	9% (3)
Respiratory	9% (3)
Mental Health	6% (2)
Multiple Comorbidities	6% (2)
Congestive Heart Failure	3% (1)

# Individual Patient Use of Service Before and After Referral

N = 32	<u>Primary Care Charge</u>	<u>Emergency Department Visit</u>	<u>Hospitalizations</u>
Six Months Before Referral	30 patients	27 patients	10 patients
Six Months After Referral	14 patients	11 patients	4 patients
Difference	-16 patients p<0.0001	-16 patients p<0.0001	-6 patients p=0.0108
Percentage Change	<b>53% Decrease</b>	<b>59% Decrease</b>	<b>60% Decrease</b>

# Total Number Before and After Referral

	<u>Primary Care Charges</u>	<u>Emergency Department Visits</u>	<u>Hospitalizations</u>
Six Months Before Referral	547	60	16
Six Months After Referral	326	45	7
Difference	-221 p<0.0001	-15 p<0.0001	-9 p=0.0008
Percentage Change	<b>40% Decrease</b>	<b>25% Decrease</b>	<b>56% Decrease</b>

# Payer Mix

<u>Insurance</u>	<u>Patients</u>
Medicare	91% (29)
Private Insurance	6% (2)
Medicaid	3% (1)

# 911 Requests

	<b>Patients Requesting 911</b>	<b>Total Number of Requests</b>
Six Months Before Referral	<b>10</b>	<b>14</b>
Six Months After Referral	<b>10</b>	<b>16</b>

# High Risk for Readmission & Discharge Follow-up

# High Risk for Readmission

	<b>Emergency Department within 72 Hours</b>	<b>Hospitalized within 72 Hours</b>	<b>Emergency Department within 30 days</b>	<b>Hospitalized within 30 days</b>
<b>High Risk for Discharge (n=7)</b>	<b>0%</b>	<b>0%</b>	<b>14% (1)</b>	<b>14% (1)</b>
<b>Post Discharge Follow-up (n=4)</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>25%(1)</b>

# Referral Physician Survey

Question	Agree %
My expectations of the CP visits are met	100%
Following a CP visit, I see improvements in the patients' health/wellness	80%
Patients are satisfied with the care from CP's	87%
I am satisfied with the ability to communicate with the CP	80%
The CP is responsive to changes to the care plan	93%
The CP provides quality care to the patient	100%
I would recommend this process to other clinicians	100%
The CP program should be expanded in my region	80%



# Observed Benefits

- Effective means to reduce the frequency of health services utilization among a variety of primary medical conditions

# Continuous Quality Improvement

- Introducing a care planning process to better define patients' health care goals and expedite successful completion of the program
- Analyze and streamline pre-visit stage including a checklist for patient history review
- Introduce 3<sup>rd</sup> party patient survey tool to gauge patient experience



## Questions & Discussion