MIH Utilization For Re-admission Reduction

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COMMUNITY PARAMEDIC, HARRIS COUNTY ESD #48

Objectives

- Program Goals
- Personnel Selection/Development
- Developing the program
- Partnerships
- Roadblocks
- A Few Cases and Outcomes

Program Goals

Program Goals

- Triple Aim – Experience of Care, Improved Health and Cost
- Reduce 30 day re-admission rate for STEMI and NSTEMI
- Re-admission rate 16%
- Average cost per re-admission $10K
- Average 36 hour length of stay with d/c home on 5 new medications

Why Re-admissions?

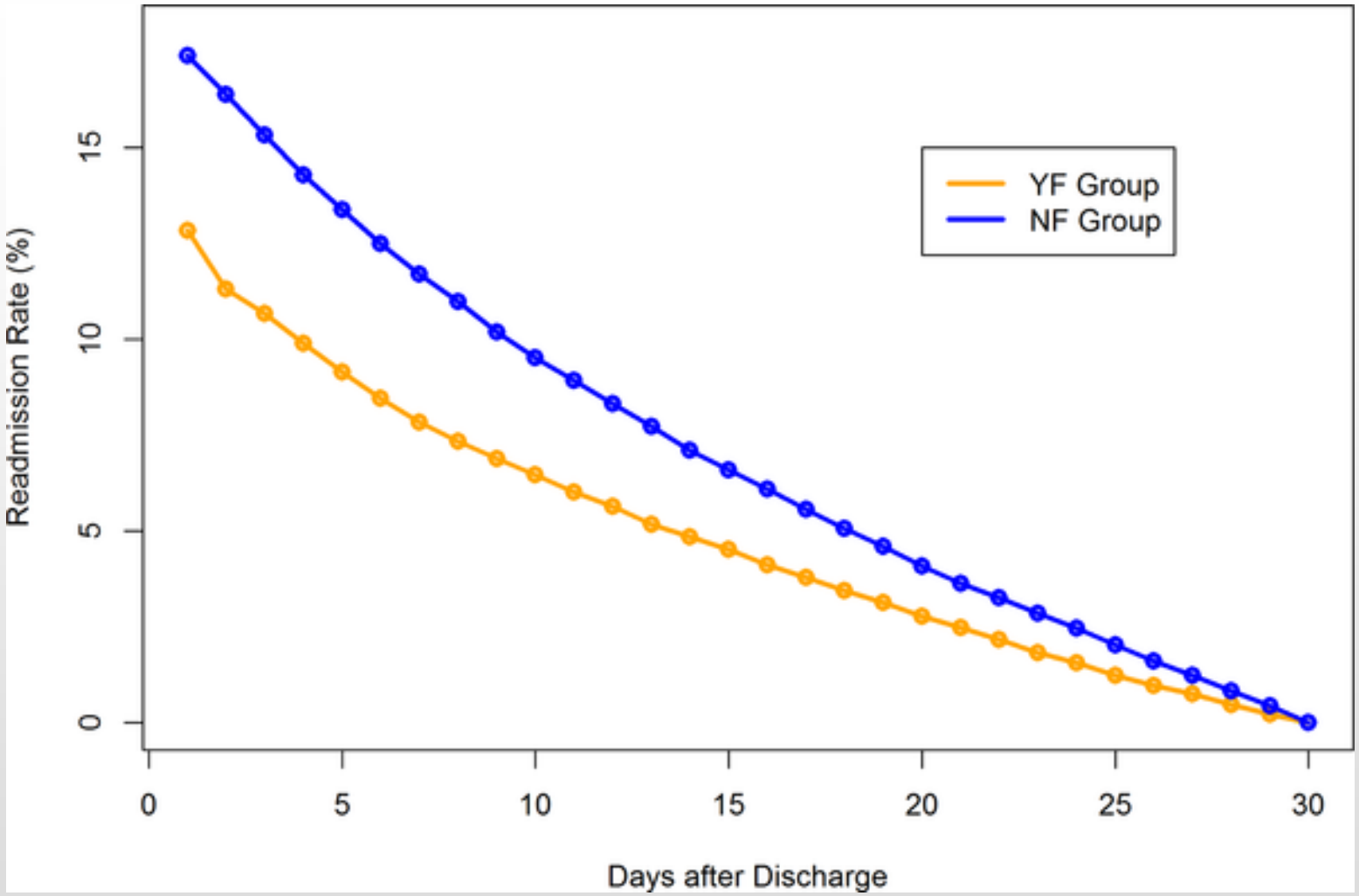
Re-admission Factors

- Premature Discharge
- Inadequate Post-discharge support
- Insufficient follow-up
- Therapeutic errors
- Adverse drug events/other med issues
- Failed handoffs
- Procedure complications
- Nosocomial infections, pressure ulcers, patient falls

Evidence Based Research

- Timing of follow up visit
- Barriers for patients
  - Medication understanding
  - Medication affordability
  - Understanding of d/c instructions
  - Compliance
  - Dietary
  - Follow up appointments

Fig 2. Comparison of Readmission Rate (RR) for Patients with (YF) and without (NF) follow-up visits on or before various days.



Tong L, Arnold T, Yang J, Tian X, Erdmann C, et al. (2018) The association between outpatient follow-up visits and all-cause non-elective 30-day readmissions: A retrospective observational cohort study. PLOS ONE 13(7): e0200691. https://doi.org/10.1371/journal.pone.0200691
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200691

Personnel Selection/Development

Nurse vs Paramedic...Which is Better?

Personnel Selection/Development

Traits and Skills needed to perform as a Community Paramedic/MIH…

Developing The Program

Developing The Program

- Community Needs Assessment
- Program Goals
- Resources
- Identify Stakeholders

Our Program

- Met with ER Director, ICU Director and Case Management Director
- Presented concept to Houston Methodist West Chest Pain Committee
- Presented to Cardiology/Internal Medicine group
- Presented to Hospital Executive Board
  - MOU signed and approved through Medical/Legal
  - Verbal commitment to assist in funding for 2020
  - Program given access to Epic

Our Program

- Case manager identifies patient and presents program
- Call to CP/MIH with secure email follow-up
- Pt seen in hospital prior to discharge when able
- Follow-up visits
  - 24-48 hour post discharge
  - 7 day post discharge
  - 30 day post discharge
  - Why these specific days?

Our Program

- Typical Visit
  - Health History, medications and allergies
  - Medication review
  - Discharge instruction and dietary review
  - Confirm follow-up appointments are made
  - Assess vitals, EKG and labs as appropriate
  - Time per patient about 1-2 hours

Partnerships

Partnerships

- Home Health
- In-patient rehab
- SNF
- Acute Care Facilities
- Clinics for non-resource
- Social Work/Case Management

Home Health

- Increase in uses of home health
- More efficient staff utilization (know if patient is hospitalized)
- Enhanced referrals
- Hospice backup

In-patient Rehab

- Enhanced referrals
- Admission of patient direct to rehab

Clinics for non-resource

- Most non-resource have no PCP
- High ER utilization for basic medical care
- Clinics have difficulty keeping track of patient after visit
- Two way street for pre-hospital and clinic

Social Work/Case Management

- Social issues effecting care
  - Financial
  - Education
  - Language
  - Mobility
  - Embarrassment of situation

Roadblocks

Roadblocks

- Provider education
- No program standardization
- Willingness of participants
- Social Worker issues
- Health Network participation
- EMS/Fire coverage areas/districts

Patient Interactions and Outcomes

Patient #1

- 76 y/o female, STEMI with 100% LAD, 4 stents and IABP placement post cath
- EF 30%, previously on no medications
- Discharged home with the following medications:
  - Lisinopril
  - Metoprolol
  - Brilinta
  - Furosemide
  - Atorvastatin
  - Pantoprazole
  - Aspirin

Patient #1

- Returned to ER and admitted to OBS less than 24 hour post discharge due to syncopal episode
- What happened?
  - Patient's medication directions were "take once daily"…so she did…all at the same time.
  - Pt was walking up and down steps
  - Pt figured it was from medications…so she randomly split her meds daily and took at different time, but had no idea what each one was for

Patient #1

- Interventions
  - Medication review
  - Dietary review
  - Discharge instruction education
  - Cardiac Rehab

Patient #2

- 73 y/o female, acute on chronic CHF, NSTEMI
- Spanish speaking only
- Discharged home with the following medications
  - Amlodipine
  - Eliquis
  - Atorvastatin
  - Lantus
  - Atrovent
  - Lopressor
  - Singulair
  - Protonix
  - Potassium Chloride
  - Aspirin
  - Furosemide
  - Metformin
  - Januvia
  - Trazodone

Patient #2

- Co-worker who speaks Spanish was taken for translation. Why not use a family member?
- Medication review was completed and pt was missing half her medications! (including all her BP meds)
- Pt's BP was 180/97 (2 days with no BP meds)
- She was also instructed to discontinue Tramadol and Nicardipine which she continue to take.

Patient # 2

- Interventions
  - We drove to the pharmacy and picked up her missing meds
  - Reviewed each medication and wrote down time of day she should take medication.
  - 12 Lead EKG and vitals completed
  - Next visit will focus on dietary and discharge instructions

Data so far....

- May 2019 – 14 patients referred, 1 readmitted
  - 7.4% 30 day readmission rate
  - All patients in other department's districts.
  - 60% of interventions were educational interventions

So far as of June 21st, 8 patients referred with none readmitted.

Hospital has expressed interest in enrolling other patient populations, Sepsis, Stroke, Ortho etc....

COST OF HOSPITAL READMISSIONS

Preventable hospital readmissions are a major concern in the effort to lower the cost of healthcare. Here is some of the impact:

Preventable readmissions cost Medicare $17 billion

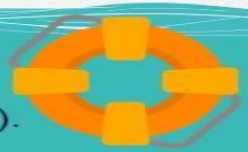
Patient care costs double due to just one readmissions. According to a 2012 study, Medicare pays $15,000 for patients admitted once, $33,000 for patients who were readmitted once.

In a study published in the Feb. 3, 2015 edition of JAMA, the most common reason for unplanned readmission was surgical site infection.

About 1 in 5 Medicare patients are readmitted within 30 days.

Medicare is projected to be insolvent in 2030

In 2012, CMS launched the Hospital Readmissions Reduction Program (HRRP).



For fiscal year 2013, Medicare levied the maximum readmission penalty of one percent against 276 hospitals.

What You Can Do...

1. Follow up with patients
2. Use automated phone calls
3. Offer patients access to technology to help manage their health
4. Use prediction software

MBA MEDICAL
BUSINESS ASSOCIATES


THIS IS THE END OF THE
PRESENTATION
ANY QUESTIONS?
IF NOT, JUST CLAP!