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# ANALYZING THE EFFICACY OF TRANSITION OF CARE VISITS IN A PATIENT CENTERED MEDICAL HOME

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# Disclosure Statement

- I have no relevant financial relationships related to the content of this presentation to disclose.

# Objectives

- Understand the purpose of the transition of care management services (TCM).
- Understand the process of TCM.
- Observe the data presented from a residency-based patient centered medical home's (PCMH) analysis of the TCM components.
- Know that other patient specific factors may have greater relation to 30-day readmissions than the TCM.

# Background

- In 2012, the Centers for Medicare and Medicaid Services (CMS) implemented the Hospital Readmission Reduction Program (HRRP). [1,2]
- Transition of care management services (TCM) have been encouraged to reduce 30-day readmissions to the hospital. [1]
- TCM process: [3]
  - *One interactive contact within 2 business days of discharge*
  - *One non-face-to-face contact with various requirements*
  - *Medication reconciliation*
  - *One face-to-face visit within 7-14 calendar days of discharge*

# Background

Table: CPT code and corresponding wRVU. [4]

| CPT Code | Description | wRVU |
|---|---|---|
| 99495 | TCM with moderate complexity, within 14 days. | 2.11 |
| 99496 | TCM with high complexity, within 7 days | 3.05 |
| 99213 | Established visit | 0.97 |
| 99214 | Established visit | 1.50 |

# Introduction

- *What is the problem?*
  - Research has shown mixed success in preventing 30-day readmissions with various TCM services. [5-8]
- *What do most agree on?*
  - Multimodal interventions are more successful than singular interventions in prevention of 30-day readmissions. [5,6,8-10]
- *What is next?*
  - Some studies have attempted to provide a checklist of qualities to identify "high-risk" patients. [7,11-14]
  - Other studies have targeted their "high-risk" population of patients. [15,16]
- The first step in this project was self-analysis of the current TCM process in the PCMH and other patient specific factors which may contribute to 30-day readmission.

# Methods

## Phase 1 – Low risk

- 3 month (Jan. 1 2018-March 31, 2018) analysis of hospital discharges
- Admitting diagnoses, comorbid conditions, admitting team
- TCM components

## Phase 2 – High Risk

- 1 year (Jan 1, 2018-Dec 31, 2018) analysis of hospital readmissions
- Admitting diagnoses, comorbid conditions, admitting team
- TCM components

# Results – Low Risk

| Variable | P Value |
|---|---|
| MU Family Medicine Admitting team | 0.831 |
| TCM Call Made | 0.065 |
| TCM Call Answered | 0.361 |
| 0-7 Day Appointment | 0.037 |
| 0-14 Day Appointment | 1.00 |
| 8-14 Day Appointment | 0.407 |
| Patient Arrived at Appointment | 0.966 |

| Comorbid Condition | P Value |
|---|---|
| Chronic Kidney Disease | 0.659 |
| Cancer | 0.002 |
| Pulmonary | 0.371 |
| Psychiatric Diagnosis | 0.291 |
| Type 2 Diabetes | 0.152 |
| Coronary Artery Disease | 0.001 |
| Congestive Heart Failure | 0.176 |
| Hypertension | 0.927 |

# Results – Low Risk

| Admission Diagnosis System | P Value |
|---|---|
| Vascular | 0.040 |
| Dermatologic | 1.000 |
| Gynecologic | 0.376 |
| Nephrologic | 1.000 |
| Hematologic | 1..000 |
| Urologic | 0.715 |
| Infectious | 0.853 |
| Orthopedic | 1.000 |
| Neurologic | 0.365 |
| Gastrointestinal | 0.727 |
| Pulmonary | 0.0009 |
| Cardiovascular | 0.0326 |

11 total readmissions between six patients. 4 of these patients accounted for 9 readmissions.

| Admission Diagnosis | P Value |
|---|---|
| Surgical | 0.977 |
| TIA/CVA | 1.000 |
| Blood Loss | 1.000 |
| Arrhythmia | 1.000 |
| COPD Exacerbation | 0.026 |
| CHF Exacerbation | 1.000 |
| Sepsis | 0.634 |
| Chest Pain | 0.356 |
| Hypertensive Urgency/Emergency | 1.000 |

# Results – High Risk

| Variable | P Value |
|---|---|
| MU Family Medicine Admitting team | 0.242 |
| TCM Call Answered | 0.396 |
| 0-7 Day Appointment | 0.929 |
| 0-14 Day Appointment | 0.421 |
| 8-14 Day Appointment | 0.501 |
| Patient Arrived at Appointment | 0.713 |

| Comorbid Condition | P Value |
|---|---|
| Chronic Kidney Disease | 0.427 |
| Cancer | 0.014 |
| Pulmonary | 0.801 |
| Psychiatric Diagnosis | 0.691 |
| Type 2 Diabetes | 0.446 |
| Coronary Artery Disease | 0.171 |
| Congestive Heart Failure | 0.363 |
| Hypertension | 0.661 |

# Results – High Risk

| Admission Diagnosis System | P Value |
|---|---|
| Vascular | 0.796 |
| Dermatologic | 1.000 |
| Gynecologic | 0.732 |
| Nephrologic | 0.961 |
| Hematologic | 0.116 |
| Urologic | 0.583 |
| Infectious | 0.234 |
| Orthopedic | 0.937 |
| Neurologic | 0.296 |
| Gastrointestinal | 0.956 |
| Pulmonary | 0.986 |
| Cardiovascular | 0.419 |

68 readmissions between 34 patients. 4 patients accounted for 27 of the readmissions.

| Admission Diagnosis | P Value |
|---|---|
| Surgical | 0.053 |
| TIA/CVA | 0.284 |
| Blood Loss | 0.577 |
| CHF Exacerbation | 0.149 |
| Arrhythmia | 0.577 |
| Sepsis | 0.864 |
| Chest Pain | 0.624 |
| Hypertensive Urgency/Emergency | 0.306 |
| COPDe | 0.885 |

# Conclusions

- The components of the TCM process did not seem to be associated with decreased readmission rates.
- Patient-specific medical characteristics were sometimes associated with the readmission rates.
- Certain patients are more likely to be readmitted to the hospital, but why?
- Further research:
  - *What makes patients high risk for readmission?*
  - *What process will prove to be useful in preventing readmissions?*
  - *Focus on the high risk population with targeted care coordination.*

# Resources


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# Resources


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