# Transitional Care follow-up


- Presenter: Abhishek Malkan, DO
- Mentor: Dr. Mathew Nodelman, MD
- Resident Team: Kylie Whittle, MD and Jarvis Johnson, MD

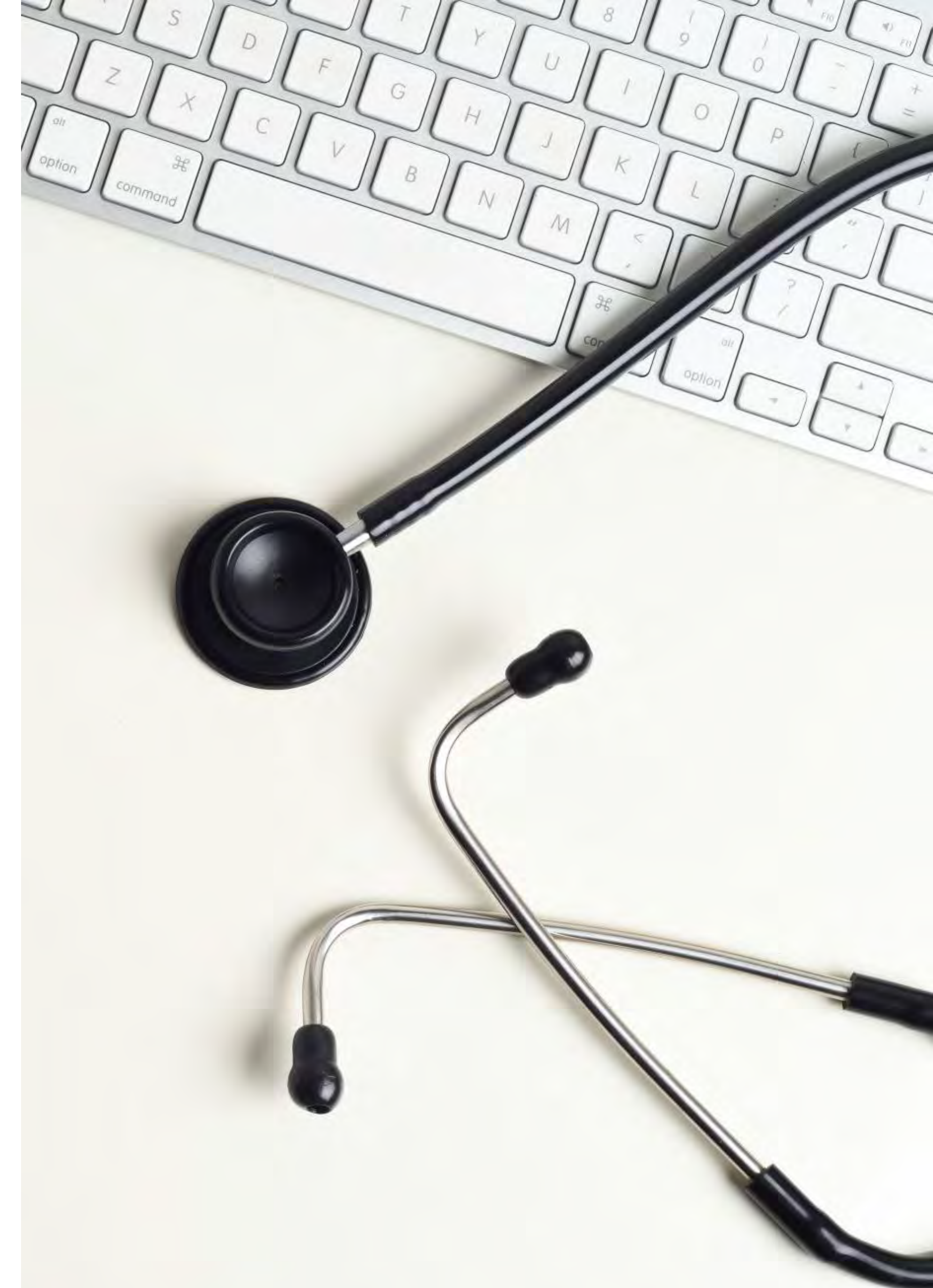
Prisma Health-Columbia Family Medicine Residency

# INTRODUCTION

**Transitional care management (TCM)** appointments are hospital follow up visits designed to reduce readmission, complications, and review prior hospitalization course.

**Criteria for TCM appointments:**

- All insurances cover TCM visits except Medicaid and managed Medicaid. BCBS **DO NOT** cover virtual TCM.
- TCM call within 2 business days of discharge (at least attempt)
- Must have a medical/psychiatric diagnosis as reason for admission/treatment
- No TCM visits within last 30 days
- Visit must be completed within 14 calendar days of discharge.
- Appropriate coding as 99495 or 99496



# OBJECTIVE

Design and implement a standardized discharge process within the Family Medicine Inpatient Service at Prisma Health-Richland to increase Transitional Care Management (TCM) follow up rates in clinic and evaluate resident confidence with the discharge process.

# GOAL

To improve average TCM follow-up rates from Richland Hospital Family Medicine Inpatient Service (RHFMIS) by 10% compared to pre-intervention rates in the last 3 months (July 2022 – September 2022).

*Post-Intervention Dates: November 2022 – January 2023

# PDSA CYCLE

## Act

- Determine areas of the intervention that was effective in the discharge process.
- Consider implementing solutions to the patient barriers

## Plan

- Plan is to improve Avg. TCM follow-up rates from RHFMIS by 10%
- Pre-Interv: July 2022 – Sept 2022
- Post-Interv: Nov 2022 – January 2023

## Study

- Track monthly TCM f/u rates during the intervention months compared to pre-intervention.
- Survey residents on the standardized d/c process

## Do

**-Standardize TCM f/u process**

+Mandate appt. date on discharge summary

+Use LACE score to determine early appt. needs.

+Same discharge summary note & tab

# METHODS

**Standardized Process**:

- Discuss potential discharges daily during rounds and attempt to set up TCM appointment prior to leaving.
  - Message "ML FM Colonial TCM Pool" to set up appt.

# METHODS CONT…

**Standardized Process Cont…:**

- Consistently use discharge tab on Epic for the entire discharge process.
  - Consists of verifying problem list, med rec, d/c summary note, f/u appt info, etc
- FMC Discharge Summary Note (includes LACE+ Score)
- Discuss the plan and follow up appointment with the patient prior to discharge
- After discharge, the patient should receive a TCM call within 24-48 hours after discharge.

# LACE+ SCORE

LACE vs HOSPITAL score

LACE

- Length of stay
- Acuity of admission
- Comorbidity
- Emergency department use w/i 6m of admission.
- LACE+ adds other variables

LACE rule predicts 30-day early death or unplanned readmission after discharge from hospital to community.

Point-of-Care Guides

## Predicting Hospital Readmission

SETH JELINEK, MD, and PETE YUNYONGYING, MD, *St Mary's Hospital, Athens, Georgia*

This guide is one in a series that offers evidence-based tools to assist family physicians in improving their decision-making at the point of care.

This series is coordinated by Mark H. Ebell, MD, MS, Deputy Editor.

A collection of Point-of-Care Guides published in *AFP* is available at http://www.aafp.org/afp/poc.

CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz Questions on page 270.

Author disclosure: No relevant financial affiliations.

### Clinical Question

What is the best way to predict unplanned readmissions or early death following a hospitalization?

### Evidence Summary

In 2007, the Medicare Payment Advisory Committee reported that 18% of hospital admissions resulted in a readmission, of which 76% were potentially avoidable.[1] The development of a clinical decision rule to identify patients at risk of readmission could aid in directing interventions and resources, potentially improving cost-effectiveness of care and reducing postdischarge mortality.

There are generalized clinical decision rules to help predict readmissions for all types of patients, and condition-specific clinical decision rules for patients with conditions such as heart failure or pneumonia. Two of the most widely used and validated generalized clinical decision rules for predicting readmissions are LACE (length of stay, acuity of admission, comorbidity, emergency department use within six months of admission)[2] and HOSPITAL (low hemoglobin level, discharge from oncology, low sodium level, procedure during hospitalization, nonelective index admission type, number of hospital admissions during the previous year, length of stay).[3,4]

The LACE rule (*Table 1*) predicts 30-day early death or unplanned readmission after discharge from a hospital to the community.[2] It was derived from a multicenter cohort of 4,812 patients from 11 hospitals in five cities in Ontario, Canada, and then it was externally validated using 1,000,000 patients selected from databases of all hospital admissions in Ontario.[2]

comorbidity indices published, the LACE rule uses the Charlson Comorbidity Index.[5] The rule has a possible total score of 19. The validation study showed that for each one-point increase in the LACE score, the odds of an unplanned readmission increases by 18% (odds ratio = 1.18; 95% confidence interval [CI], 1.14 to 1.21), with a moderately predictive c-statistic of 0.68. A one-point increase in LACE score increases the odds of early death by 29%, with a c-statistic of 0.793.[2]

In another validation study, a five-point increase in the LACE score doubled the risk of readmissions or death (hazard ratio = 2.0; 95% CI, 1.7 to 2.3).[6] It is important to note that although the LACE rule was originally derived and validated in Canada, this validation study was performed in a U.S. hospital, using 1,239 patients from the Vanderbilt Inpatient Cohort Study.

The HOSPITAL rule predicts potentially avoidable hospital readmissions and includes the following components and points[3,4]:

- Low hemoglobin level at discharge (< 12 g per dL [120 g per L]) = 1 point
- Discharge from oncology service = 2 points
- Low sodium level at discharge (< 135 mEq per L [135 mmol per L]) = 1 point
- Procedure during hospital stay = 1 point
- Index admission type is nonelective = 1 point
- Number of hospital admissions during the previous year: 0 = 0 points, 1 to 5 = 2 points, ≥ 6 = 5 points
- Length of stay ≥ 5 days = 2 points

This HOSPITAL score was derived from a cohort of 9,212 patients discharged from the Brigham and Women's Hospital in Boston, Mass., and then it was externally validated using a cohort of 117,065 patients

# METHODS CONT…

**<u>Resident Survey</u>:**

Pre- and Post-Surveys are similar

Surveys focuses on:

- TCM Knowledge
- Qualifications of TCM
- Understanding standardized d/c process
- Scheduling TCM

2022-23 Pre-rotation TCM resident survey

Sign in to Google to save your progress. Learn more

* Required

How confident are you in knowing what a TCM visit is? *

- Not at all confident
- Slightly confident
- Confident
- Very confident

How confident are you in scheduling a TCM visit? *

- Not at all confident
- Slightly confident
- Confident
- Very confident

# RESULTS

## Pre-Intervention Data

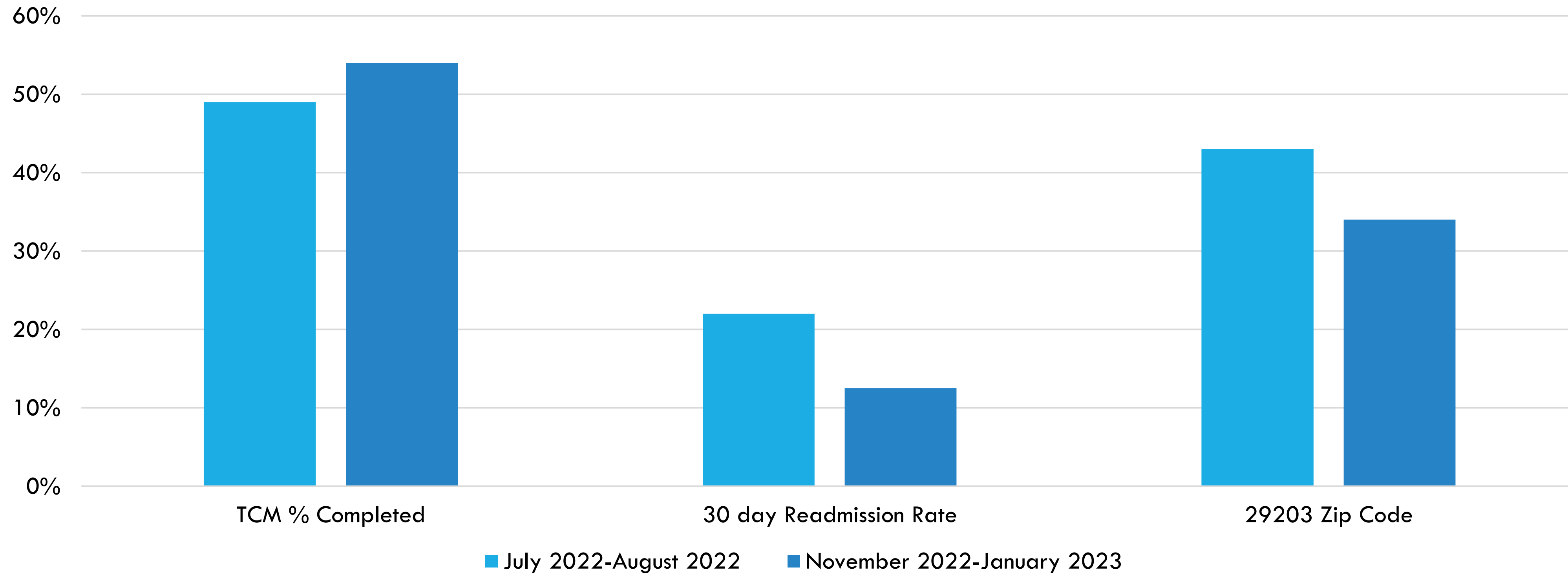
| Month | Eligible Discharges | TCM Visits Completed | TCM % Completed | 30 Day Readmission Rat e | 29203 Zip Code |
|---|---|---|---|---|---|
| July 2022 | 27 | 15 | 55.5% | 18.5% | 26% |
| August 2022 | 4 | 1 | 25% | 50% | 50% |
| September 2022 | 18 | 8 | 44% | 22% | 67% |
| Totals | 49 | 24 | **49%** | **22%** | 43% |

# RESULTS

Post-Intervention Data

| Month | Eligible Discharges | TCM Visits Completed | TCM % Completed | 30 Day Readmission Rate | 29203 Zip Code |
|---|---|---|---|---|---|
| Nov 2022 | 14 | 9 | 64% | 7% | 43% |
| Dec 2022 | 14 | 5 | 36% | 7% | 36% |
| January 2023 | 20 | 12 | 60% | 20% | 30% |
| Totals | 48 | 26 | **54%** | **12.5%** | 34% |

# RESULTS



# RESULTS

Other interesting Post-Intervention Data

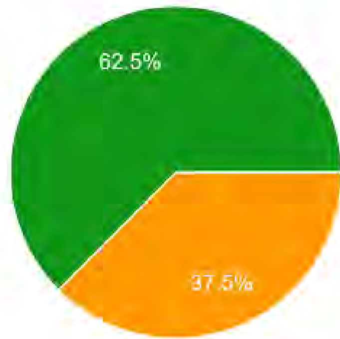
- Total discharges attributed to FMC- Colonial: 125
- Total discharged from HIM/Baptist/Other services: 67 (53.6%)
- Only one TCM eligible (per our criteria) and not billed correctly

# FAMILIARITY WITH TCM VISIT

## Pre-rotation

How confident are you in knowing what a TCM visit is?

8 responses

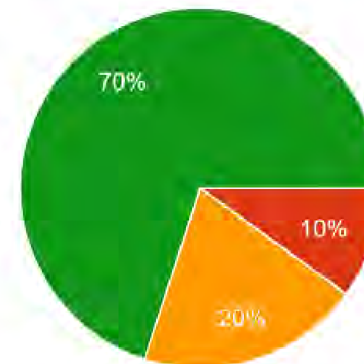



- Not at all confident
- Slightly confident
- Confident
- Very confident

## Post-rotation

How confident are you in knowing what a TCM visit is?

10 responses



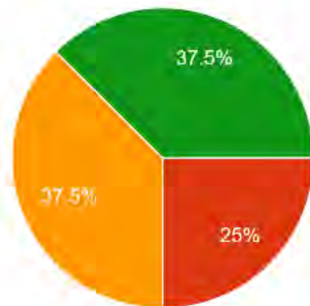

- Not at all confident
- Slightly confident
- Confident
- Very confident

# SCHEDULING TCM VISIT

## Pre-rotation

How confident are you in scheduling a TCM visit?

8 responses

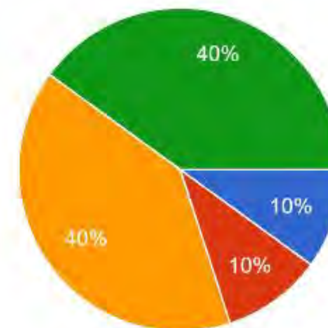



- Not at all confident
- Slightly confident
- Confident
- Very confident

## **Post-rotation**

How confident are you in scheduling a TCM visit?

10 responses




- Not at all confident
- Slightly confident
- Confident
- Very confident

# DISCUSSION

Achieved a 5% increase in TCM show rates after incorporation of a standardized discharge process (goal was 10%).

- **Barriers**: Frequent IP team changes, new system to incorporate, inability to predict discharges, contact information not up-to-date, etc

Approximately 10% reduction difference in 30-Day Readmission Rates with the incorporation of the new process.

Roughly 9% reduction difference in TCM show rates for patients in the 29203-zip code.

- **Reasons**: Limited finances, limited transportation, difficulty getting time off from work, etc

# DISCUSSION

Residents appear confident in the definition and criteria of TCM visits.

Confidence in scheduling a TCM visit appears to be appropriate as well.

Limitations with survey:

- Small sample size
- Resident identifier. Unclear if all the same residents participated.

# FUTURE DIRECTIONS

Analyze a larger time frame with the newly implemented standardized process (6 or 12 months).

Focus on barriers from the patient perspective that lead to any missed TCM appointments and develop solutions.

Dr. Matthew Nodelman

Dr. Morgan Rhodes

# REFERENCES

Krook, Maura, et al. “The Discharge Process—from a Patient’s Perspective.” *SAGE Open Nursing*, vol. 6, 20 Jan. 2020, p. 237796081990070., https://doi.org/10.1177/2377960819900707.

Soong, Christine, et al. “Development of a Checklist of Safe Discharge Practices for Hospital Patients.” *Journal of Hospital Medicine*, vol. 8, no. 8, 2013, pp. 444–449., https://doi.org/10.1002/jhm.2032.

Tong, Liping, et al. “The Association between Outpatient Follow-up Visits and All-Cause Non-Elective 30-Day Readmissions: A Retrospective Observational Cohort Study.” *PLOS ONE*, vol. 13, no. 7, 2018, https://doi.org/10.1371/journal.pone.0200691.

Walraven, C. V., Wong, J., & Forster, A. J. (2012). LACE+ index: extension of a validated index to predict early death or urgent readmission after hospital discharge using administrative data