

# The Markham FHT Transitions Program:

Breaking Down Silos & Building Partnerships to  
Improve Post-Hospital Discharge Follow-Up

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AFHTO 2017 Conference

Thursday, Oct. 26; 08:30-09:15

# Presenter Disclosure

- **Presenter(s):** Dr. Allan Grill, Lisa Ruddy
  
- **Relationships with commercial interests:**
  - **Grants/Research Support:** none
  - **Speakers Bureau/Honoraria:** none
  - **Consulting Fees:** none
  - **Other:** none

# Disclosure of Commercial Support

- **This program has not received any financial support from an external organization**
- **This program has not received in-kind support from an external organization**

# Tweet Tweet



- @allan\_k\_grillMD
- #AFHTO2017



# Quality Improvement in Ontario



2016 – 69 points – missed playoffs  
2017 – 95 points – made playoffs



2016 – 85 points – missed playoffs  
2017 – 98 points – made playoffs

# Learning Objectives

- Identify opportunities within primary care to improve post-hospital discharge practices
- Examine the Markham Family Health Team's 'Transitions Program' as an innovative model to reduce avoidable hospital readmissions, enhance patient safety and increase patient/provider satisfaction
- Recognize the importance of leveraging EMR data to measure outcomes that will help evaluate the success of a clinical program

# Transitions in Care

Transfer of a patient between different settings and health care providers during the course of an illness



# Markham FHT

- Established in 2007
- 19 MDs, 4 NPs, 2 RDs, 5 SWs, 4 RPNs, 3 RNs, pharmacy, OT, chiropody
- 80 total staff including administration, IT support, clinical program manager (RN) and Executive Director
- 3 office sites; 27,000 patients
- Affiliated with Markham Stouffville Hospital
- “Care for a Lifetime”





# Reducing Avoidable Hospitalizations

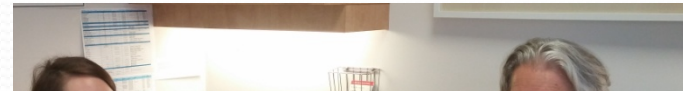
- Key area of focus within the *Excellent Care for All Strategy*
- Safe, effective transitions in care to reduce hospital readmissions -> improve quality/safety -> more effective use of resources (\$\$)
- Successful interventions include:
  - Better hospital discharge planning
  - Improved communication b/w clinicians in different settings & with patients
  - Medication reconciliation
  - Management in the patient's home
  - Patient/caregiver education
  - Timely primary care f/u in the community
- Strategic partnerships across the health care system (hospitals, CCAC, LTC, pharmacy, primary care)

# HQO – Quality Compass (2015)

- Call to Action: prevent hospital readmissions
- Readmissions occur due to: unclear/conflicting discharge instructions, medication errors (duplications, interactions)
- Provincial average of 30-day hospital readmission rate to any facility in ON is 15.1%.
  - Range varies widely and is high compared to other health care systems
- 20-30% of ER patients presenting with exacerbations related to COPD, CHF, or DM do not have f/u w/ their PCP or specialist within 30 days - vulnerability
- Advocate for improved care transition
  - lists tools and resources

# It Takes a Champion(s)...

- Transitions program inspired through the patient



Vision: reduce hospital-based care while affording the patient a better health care experience

- of the HC team to another viewed as disorganized
- Upon discharge, patients made responsible for arranging f/u – can be difficult for some



# It Takes a Champion(s)...

- Transitions program inspired through the patient perspective lens
- False sense of security on admission re: connectivity through EMRs
- Handovers from one aspect of the HC team to another viewed as disorganized
- Upon discharge, patients made responsible for arranging f/u – can be difficult for some



# Needs Assessment – MFHT EMR

From January 2014 to January 2015:

Chart Searches	# of Patients
House Calls	178
Newborns assessed in hospital	87
Pre-op forms for MSH and Southlake only	185
ITS Report “Final Note” Hospital Discharges	480
ITS Report “Admission” to Hospital	295
Documents “Discharge”	470
Documents “Admission”	100

# Transitions Program – Initial Goals

- MFHT RN visits patient in-hospital (Markham Stouffville Hospital):
  - Diagnostic information
    - Educate patients about their medical condition(s) and reason for hospital admission
    - Reduces anxiety, confusion – only 59.6% of patients can accurately describe Dx
  - Continuity of care
    - Reassure patients that their primary care provider is aware of their hospitalization
    - Improves communication
  - Discharge planning
    - Help arrange follow-up services promptly with appropriate clinical provider
    - Remove surgical staples, newborn weight check, house call, CCAC home visit, etc.
    - If notified about a patient admitted to a different hospital, will call post-discharge
    - Increases accountability – only 43.9% of patients can accurately recall f/u appointments
- MFHT Pharmacist offers a medication reconciliation:
  - Help patients understand indications, reason for changes, monitoring
  - Approximately 1/3 of patients have difficulty understanding d/c meds regimen

Kripalani S. Clinical Summaries for hospitalised patients: time for higher standards.

BMJ Qual Saf 2017; 26:354-56.

# Build Stakeholder Relationships

## External (MSH):

- Unit managers and Director of Family Medicine at MSH
- Patient Flow Coordinators (PFCs)
- Pharmacist group
- IT services

## Internal (MFHT):

- Social Workers
- Pharmacist
- Dietitians
- OT
- RN



MARKHAM  
FAMILY HEALTH TEAM

HealthLinks

# Transitions Program - Background

- Head start – Medication Reconciliation Program
  - Began in 2013
  - Led by MFHT Pharmacist and supported by a designated administrative professional (AP)
  - AP searches Markham Stouffville Hospital (MSH) database every morning via Meditech, identifying patients discharged home
  - AP calls patient and offers a Med Rec appointment with the Pharmacist via phone, home visit, or in office visit.



# Transitions Program - Resources

- 1.0 FTE Transitions RN, 0.2 FTE Well Baby RN
- Admin professional: 15-30 minutes daily
- Home care kits
- Travel/mileage for home visits
- Laptops for RNs for home visits/remote access to EMR

# Transitions Program - Process

AP searches MSH Meditech system for MFHT admitted/discharged patients



List of patients admitted/discharged sent to Transitions RN



Transitions RN arranges visits to patients in hospital, or follow-up phone calls for those who have been discharged

# Transitions Program - Process

- At present, reason for admission does not matter
  - 25 y.o. with hernia repair or 75 y.o. w/CHF are both seen
- Newborns are assessed in hospital and RN arranges a 3d follow-up home visit (decrease travel; avoid germs)
- RN assists in discharge planning
  - home visits, in-office visits, communication with CCAC
  - internal referrals to MFHT IHPs
  - chart notes documented into MFHT EMR and communicated to primary care provider
- FHT pitch

# Addressing care transitions: EMR

I didn't even know my pt was in hospital!

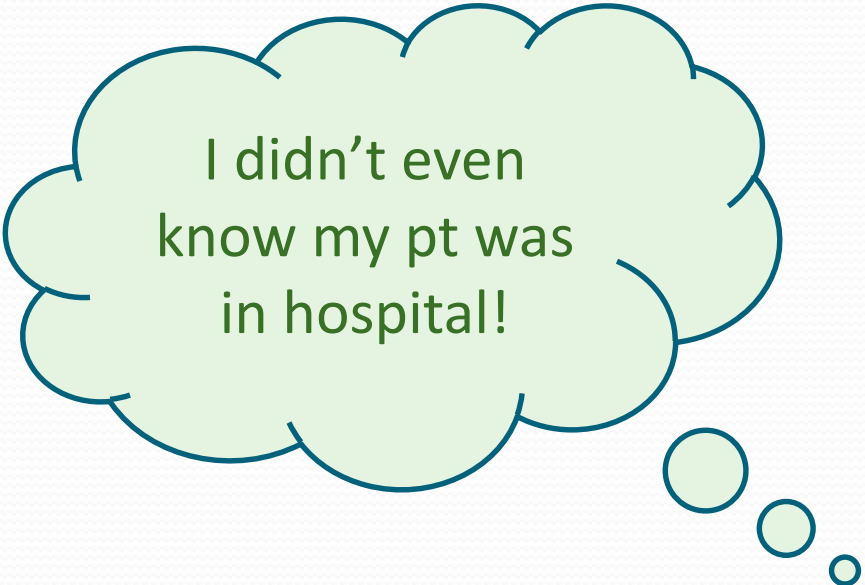
I know my pt is in hospital, but I can't get over there!

I try my best to see pts post d/c but I never know if I'm improving in this area

Those post d/c follow up visits tire out my pt and don't always meet his/her needs



# Put your EMR to work



I didn't even  
know my pt was  
in hospital!

There's an EMR feature for that!

HRM

EMR queries

Messaging/task features

Patient Cohorts

# 1. The process

## Identify pts admitted/discharged from hospital

- This involves a search of the hospital database that allows the program administrator to view pts who are *rostered to a MFHT MD*
- An EMR query can help find pts discharged from a hospital other than MSH
- A “task” is sent to the program RN, who either sees the inpatient at the bedside, or calls the discharged pt at home following discharge
- A “tracking code” is applied to the pt’s chart that records any interaction done by the program

# Step by step using your EMR

lirudd	Date	Created By	Patient	Reason	Priority	Notes
Mail	30-Aug-2017	rerobi		Transitions	Normal	2017-Aug-28   8:30 AM:
Tasks	08-Sep-2017	rerobi		Transitions	Normal	2017-Sep-08   8:57 AM:r
Documents	08-Sep-2017			Transitions	Normal	dis from smh
Labs	31-Jul-2014			Review	Normal	📎 Lisa, Please Review. I ke
Stars	01-Oct-2014			Review	Normal	📎
Supervise	07-Nov-2014			Review	Normal	📎

Filters: Overdue Reason --All-- Roles 3 Selections

“Tasks” are sent to the RN, who in turn books a hospital visit appt in the schedule, or a “telemedicine” appt for follow up phone call

Scheduler	Time	Event
	1:45pm	
	1:50pm	Visit
	1:55pm	Visit
Traffic	2:00pm	Visit
	2:05pm	
	2:10pm	Visit
	2:15pm	
Patients	2:20pm	<b>TEST, LISA (Elizabeth)</b> Transitions f/u d/c Sept 3 2:20pm for 20 minutes
Documents	2:25pm	
	2:30pm	
	2:35pm	
Claims	2:40pm	Visit
	2:45pm	
	2:50pm	Visit
	2:55pm	

# “Tasks” sent to RN

## ! Transitions

This task is due today

<b>Patient</b>		<b>Task Created By</b>	rerobi
<b>Date Due</b>	09/11/2017	<b>Priority</b>	Normal
<b>Assigned To</b>	Transitions		
<b>Notes</b>	2017-Sep-11   8:41 AM:rerobi pt admitted to MSH hypoxia Sept 10 3WG		
	11.09.2017- hosp visit booked.ml,RN		

### Note

July 20, 17 - Pt was in ER on July 17. Still having abdo pain + vomiting. Seen by Dr today, was sent to ER. SL, RN

July 21, 17 - Pt admitted last night, INESURG. SL, RN

July 24, 17 - Pt d/c home on July 22. Initial phone call done, pt not feeling well, will return to ER today. SL, RN

July 25, 17 - Pt admitted again last night MSH INESURG for SBO. SL, RN

July 26, 17 - Pt now in OR today. SL, RN

July 28, 17 - Pt remain in SL, RN

2017-Aug-02 | 8:55 AM:rerobi  
pt d/c home (diagnosis was small bowel obstruction)

Some tasks can be actioned immediately, others may “hold over” where admin support or the RN can update the pt’s status



# “Touch points”

This is where the RN “meets the pt where they are at”

- Hospital bedside
- Phone call to pt/caregiver
- Home visit
  
- ✓ Document!
- ✓ Track!



## 2. Common EMR Features Enabling Reliable Data Extraction

Hospital Report Manager – keywords inside discharge summaries can be queried

Macros – consistent language inside an encounter note streamlines searches

Tracking (Billing) – codes applicable to the program are used by the RN to capture meaningful data

# Example: HRM reports


LR TR HOSP REPORTS

Current Rules

**Office Provider** Exists

**Document Created Date** In the Last 30 Days *AND* **Document Type** Contains 'HOSPITAL REPORTS' *AND* **Document Description** Contains 'DISCHARGE'

**Document Created Date** In the Last 30 Days *AND* **Document Type** Contains 'HOSPITAL REPORTS' *AND* **Document Description** Contains 'DEC'



This query looks for pts discharged from hospital within the last 30 days, searches the document type “HOSPITAL REPORTS” and in the description field, keyword “DISCHARGE” was chosen.

The red line (the “constraint”) excludes documents that return from hospital that originated from a DEC.

# Example: Macro keyword searches

Created Date: 14-Aug-2017  
Provider: RUDDY, LISA Referred By: None  
Last Modified On: 14-Aug-2017 10:05 AM By: lirudd  
Reviewed: No

tel. call - time:1000

Re: [REDACTED]  
DOB: [REDACTED]

FROM: LISA RUDDY  
Call to pt to f/u on **Markham Stouffville Hospital** discharge  
Admission Date: Aug 6  
Discharge Date: Aug 9  
Discharge Dx: UGB

Here, the RN drops a macro into her note:

Call to pt to f/u on Markham Stouffville Hospital discharge  
Admission Date:  
Discharge Date:  
Discharge Dx:

This lends consistent language which enables easy data searches.

This search can also validate the tracking codes applied by the RN.

# Example: Tracking/Billing

Appt Date ▾	Appt Time	Batch	Submit	PCode	Qty	Total Amt	Total Owing	Provider	Insurer
14-Aug-2017	10:00am	0	Unsubmitted	TRINI	5	\$0.00	\$0.00	RUDDY, LISA	FHT Tracking
	10:00am	0	Unsubmitted	TRMED	4	\$0.00	\$0.00	RUDDY, LISA	FHT Tracking
11-Aug-2017	2:00pm	0	Unsubmitted	TRTCO	1	\$0.00	\$0.00	RUDDY, LISA	FHT Tracking
08-Aug-2017	11:10am	0	Unsubmitted	TRHOS	1	\$0.00	\$0.00	RUDDY, LISA	FHT Tracking

Tracking for this pt shows the following:

Aug 8 – hospital bedside visit by RN (TRHOS)

Aug 11 – outgoing call to pt in f/u post d/c (TRTCO)

Aug 14 – post d/c follow up call by RN, indicating 5 days since discharge (TRINI “5”), for a medical admission that lasted 4 days (TRMED “4”)

# What Can We Measure?

Question	Tracking code
How many bedside visits have been made?	TRHOS
How many pts have been discharged this month?	TRINI
How many medical admissions? Surgical? MH?	<TRMED><TRSUR><TRMH>
How many days since discharge till contact with RN?	“units” for TRINI
How many days since discharge till visit with MD or NP?	TRDOC
What is the average length of stay for our pts?	“units” for MED, SUR, MH
How many newborns have been assessed in hosp? Home?	TRNB
How many readmissions within 30d in this quarter?	TRREAD
How many phone calls made out to pts?	TRTCO
How many phone calls received from pts?	TRTCI
How many home visits made by RN?	TRHV
How many follow up calls to pts discharged from ER?	TRER

# What Can We Learn from the Data?

Question	Since Apr 1 2017
How many bedside visits have been made?	145 visits for 111 pts
How many medical admissions? Surgical? MH?	MED – 159 SURG – 152 MH – 23
How many days since discharge till contact with RN?	Average <b>1.9d</b> Within 7d of d/c: <b>98%</b>
What is the average length of stay for our pts?	MED – 8.43d SUR – 4.4d MH – 11.2d
How many follow up calls to pts discharged from ER?	58
How many home visits made by RN?	29 (21 med/surg/PP visits; 8 newborn visits)

# Transitions Program – Preliminary Findings

## EMR Tracking Codes

- TRADM- admin time
- TRPPHV- postpartum home visit
- TRBF- breast feeding
- TRBEAD- readmission to hospital

657 patients were assessed (target was 400)

43 patients required readmission within 30 days – Avg. 9 days until readmission

24% mortality rate within 6 months if readmitted within 30 days

95% of patients who received a home visit from Transitions RN were free of readmission at 30 days

Avg. time after hospital discharge before f/u with PCP – 9.46 days

- TRMH- mental health admission (47 – LOS 11 days)
- TRNAV- external resourcing for pt/physician (39)
- TRNB- newborn admission (LOS)
- TRNBHV – newborn home visit (56)
- TRTRCO- telephone call (outgoing) (1124)
- TRURG- urgent request (provider onsite)



### 3. Recognizing key players

I didn't even know my pt was in hospital!



EMR queries  
(admin, MD, RN)

I know my pt is in hospital, but I can't get over there!



Bedside visit – RN  
Phone call – RN, admin

# 3. Recognizing key players

Those post d/c follow up visits tire out my pt and don't always meet his/her needs

Medication reconciliation  
appt – Ph, RN, NP  
Home visit – RN, NP

I try my best to see pts post d/c but I never know if I'm improving in this area

Billing/tracking – admin  
Standardized documentation  
Quarter reports

# Reducing Avoidable Hospitalizations

- Successful interventions include:
  - Better hospital discharge planning ✓
  - Improved communication b/w clinicians in different settings & with patients ✓
  - Medication reconciliation ✓
  - Management in the patient's home ✓
  - Patient/caregiver education ✓
  - Timely primary care f/u in the community ✓
  - Strategic partnerships across the health care system (hospitals, CCAC, LTC, pharmacy, primary care) ✓

# Transition Program - Testimonials



# Transitions Program – Next Steps

- Further analysis of EMR data re: outcome measurement
- Meet with MSH leadership – PDSA cycle
- Consider implementing validated triage priority system (e.g. LACE) - ? Increased benefit
- Collaborate with other stakeholders re: Scale-up (e.g. LHIN); urban vs. rural phenomenon
- Present at primary care conferences (e.g. AFHTO, HQO)

# In Conclusion

- Attempts to reduce hospital readmissions through improved care transitions is a health system priority
- Primary care providers can play a crucial role through improved stakeholder collaboration within a patient's circle of care
- The Markham FHT Transitions Program is an innovative model aimed at enhancing hospital discharge planning, continuity of care and patient/provider satisfaction
- Ongoing QI research and analysis using EMR data in this area is required to determine measurable benefits

# Acknowledgments

Name	Title
Dr. Stephen McLaren	Physician Lead, MFHT Transitions Program
Lisa Ruddy, RN	Clinical Program Manager, MFHT
Danielle Meades, RN	Primary RN, MFHT Transitions Program
Rebecca Robinson	Program Administrator