Closing the primary care loop after hospital discharge:

The Markham FHT Medication Reconciliation Program

Sheetal Desai, RPh, CDE, CGP – Clinical Pharmacist
Lisa Ruddy, RN – Clinical Program Manager
Rebecca Robinson – Program Administrator

Presenter Disclosure

* **Presenters:** Sheetal Desai
* **Relationships with commercial interests:**
  * Honoraria: Markham Stouffville Hospital Dept of Family Medicine
  * Honoraria: Pediapharm Inc.
  * Advisory Board/Honoraria: Jaansen Inc.

* **Presenters:** Lisa Ruddy - none
* **Presenters:** Rebecca Robinson - none

Disclosure of Commercial Support

* None

Mitigating Potential Bias

* None

Learning Objective

* Learn about Markham FHT and the process for the development of a clinical program
* Explore the objective of integration and how it aligns with the Primary Care Quality Improvement Plan for FHTs
* Observe the practical implementation of the Markham FHT Medication Reconciliation Program
* Understand the benefits of working within an interdisciplinary team and optimizing the use of the Electronic Medical Record (EMR).
* Learn what is necessary to set up a similar program within your FHT.

WHO WE ARE…

* 27, 000 patients
* 19 physicians, NPs, RPNs, RNs, Pharmacist, Dietitian, Chiropodist, OT, Social Workers, IT, Administrative staff
* EMR: Accuro
* Affiliated hospital: Markham Stouffville Hospital (MSH)
* Programs: Aging at Home, Diabetes, Diabetes Prevention, Eating Disorder Bridge, Smoking Cessation, Healthy You, Heart Smart, 50+ Wellness and… MEDICATION RECONCILIATION!

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Quality Improvement

The terms "quality improvement" and "performance measurement" are familiar to FHT's

Care gaps are often identified while working through the QI process

"This is where we are"….measured against…"this is where we want to be…."

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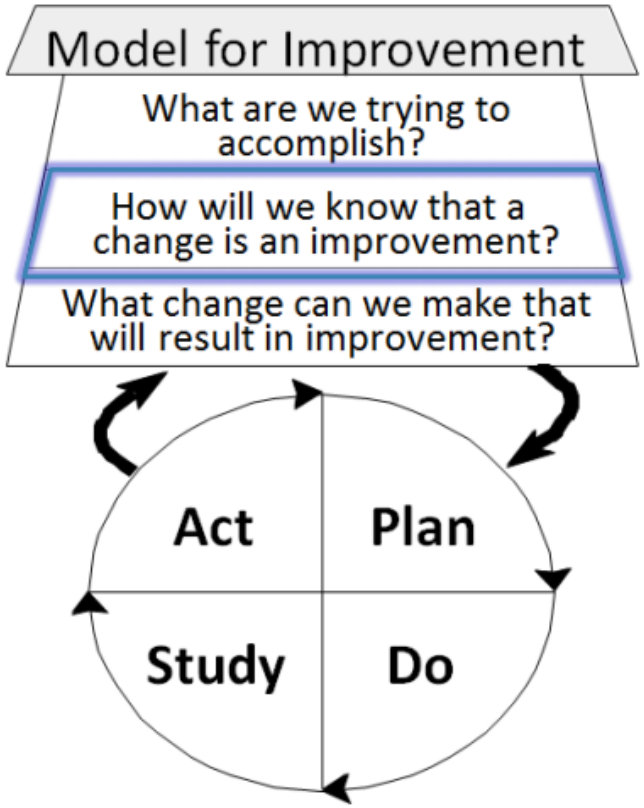
Alignment with the MOHLTC Annual Operating Plan



Health Quality Ontario: Understanding Measurement – Using Data in Primary Care QIP's

To address the *Local Integration and Collaboration* theme, Markham FHT identified a gap in how it provided care to patients recently discharged from hospital

Markham FHT "Clinical Program Package – Phase 1, 2, and 3"

* In 2011, Markham FHT developed the "Clinical Program Package", consisting of 3 templates that are used to present an idea for a clinical program

* A fourth template was created to facilitate program evaluation

Phase 1

CLINICAL PROGRAM PACKAGE

PHASE 1: COMING UP WITH AN IDEA

This initial step helps the process of turning an idea into a clinical program. Anyone in the MFHT organization can complete this package and start the process of creating a new clinical program.

This first step outlines your idea and should not take more than 15 minutes to complete. It is not necessary to put together formal numbers or content at this stage.

1) What is your idea?

2) How does this idea align with the vision of the FHT? (To provide unparalleled primary health care)

3) What is your goal? How do you plan to meet this goal?

4) What are your expected outcomes?

5) Why do we need this program? Where do you perceive the care gap to be? (It is not necessary to obtain specific metrics at this time?

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Phase 2

CLINICAL PROGRAM PACKAGE

PHASE 2: THE SKELETON

This is the 2nd part in the process of creating a new clinical program. This is where the outline and metrics of the program is created. You may require the help of various persons in completing this section, including IT and the clinical program manager. It is not the intention of this phase to put the content of the program together. We are just looking for an outline and metrics.

1) Create a needs assessment by specific metrics.

2) What metrics will you use to monitor your idea?

3) How do you expect the care gap to be improved by your program? i.e. What outcome do you expect and how will you measure this?

4) Who will be on your team?

5) Which physician will be on your team?

6) How much time/effort/resources will be required? Please meet with the ED to review the financial implications.

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Program Evaluation

Markham FHT CLINICAL PROGRAM PACKAGE
Evaluation Tool

Review date: For period:

Program				
Program Lead(s)				
Physician Lead(s)				
Program Members				
Program Synopsis				
Does program align with vision/mission?	Optimizes health? Y/N	Collaborative approach? Y/N		
	Best practices? Y/N	Advanced IT? Y/N		
Target Population				
Objective 1				
Objective 2				
Objective 3				
Objective 4				
Patient Encounters				
Resources/Personnel Utilized				
Metrics 1			Met objectives? Y/N	
Metrics 2			Met objectives? Y/N	
Metrics 3			Met objectives? Y/N	
Metrics 4			Met objectives? Y/N	
Summary				
Recommendations				

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Questions?

…and can we ensure medications are up to date to prevent med related issues?

Is there a way to find out when patients are discharged from the hospital?

Phase 1!

Program Idea

Med Rec!

Care Gap

* Providers not always aware when patients are admitted/discharged from hospital
* Can be several weeks before patient is seen by their provider
* Weeks can go by before med errors are detected
* Discharge Rx's may not always be filled at usual pharmacy
* Lack of discharge reconciliation in primary care

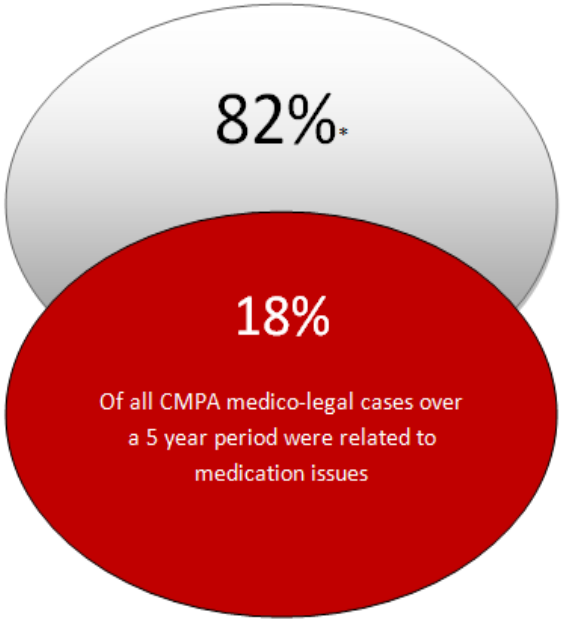
FHT MODEL: Care Gaps Addressed

* Access to local hospital EMR
* Scanning personal to filter discharge reports
* Clinical pharmacist (and other IHPs) available
* Primary care provider available to consult
* Admin support for scheduling
* Relationship with community pharmacy for clarifications
* Limitations of other reconciliation programs

Synopsis

To prevent medication related issues post hospital discharge and the potential for readmission through a standardized documentation process whereby patients and physicians will be able to know **with 100%** certainty what a patient is taking and obtain the ***"best possible medication list".***

Evidence



58% of the patients involved in medication reconciliation related cases, died or had serious clinical outcomes.

https://oplfrpd5.cmpa-acpm.ca/documents/10179/300031190/medication_reconciliation-e.pdf

Evidence

MED REC PREVENTS READMISSION AND SUFFERING

MED REC SAVES LIVES!!

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Objectives

1. When the discharge is known, **100%** of eligible patients will have a med rec appointment offered to them.
2. Patients will be seen for a medication reconciliation within **10 days** of program eligibility.
3. 100% of eligible patients who attend a med rec appointment will have an EMR that reflects a **"best possible medication list"** with discrepancies noted.

Players

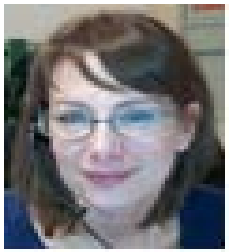
Program Lead
Sheetal Desai, RPh

Clinical Program Manager
Lisa Ruddy, RN

Physician Consult
Dr. Bill Newton

IT Support
Tony Pallaria

RN Support
Danielle Duns

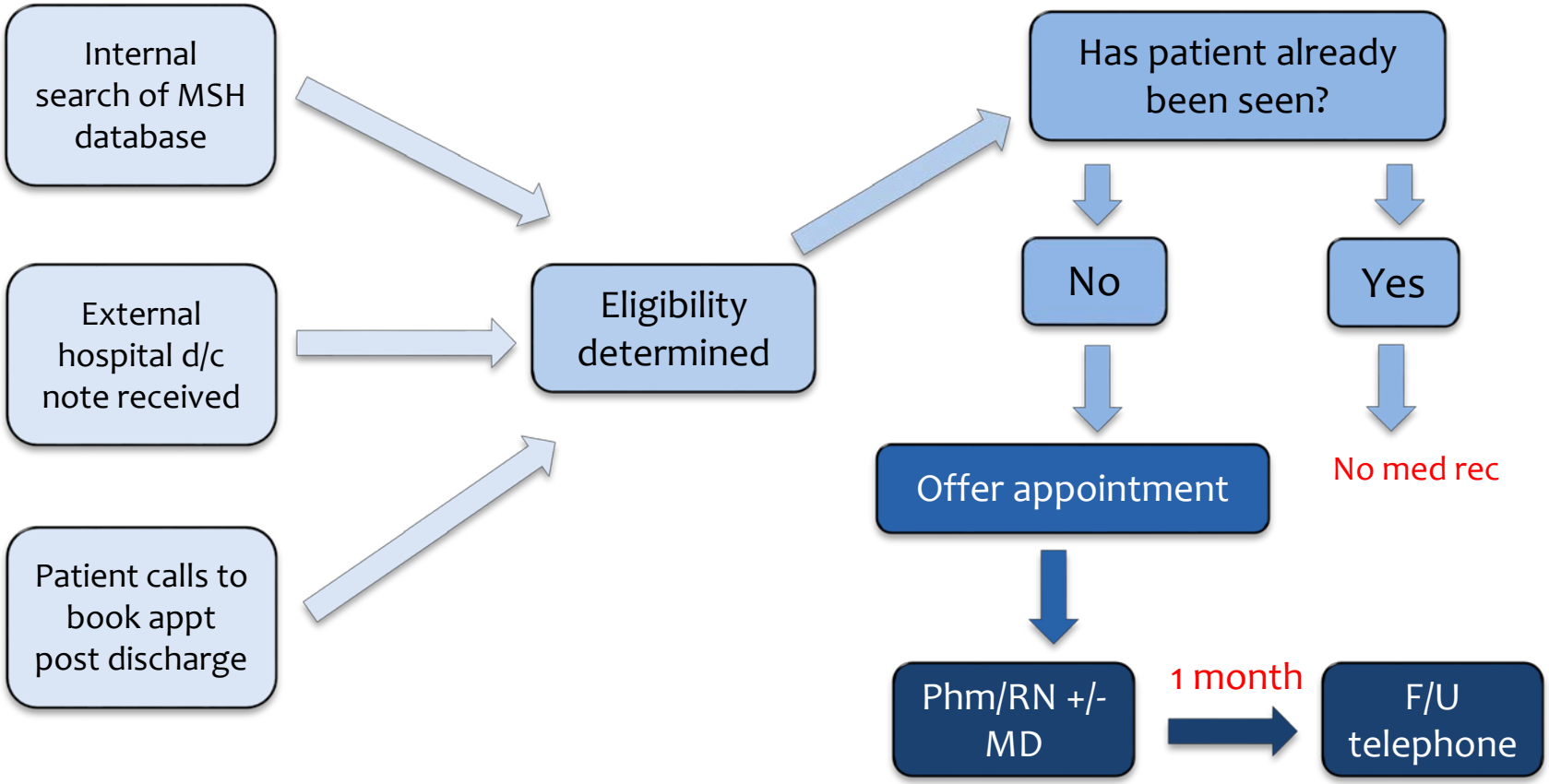


Admin Support
Rebecca Robinson

Admin Support
Janet Masson

Workflow

Potential Patients



Eligibility

* Discharged from hospital/rehab and at home
* Discharging diagnosis: pneumonia, asthma, COPD, heart failure, diabetes, CAD (stroke/TIA, MI, angina), GI disorders
* **NEW!** Any patient ≥ 70yrs, regardless of discharging diagnosis
* Patient has not already seen provider since discharge

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Appointment Specifics

* Patient detailed about program and asked to bring in any discharging documents and all medications (including OTCs)
* Pharmacist/RN to review chart and pre-existing medication history
* 60 min appointment booked and documentation note and meds updated prior to seeing provider
* Consult with provider if pressing issues
* 1 month post visit telephone call

Tracking

ADMIN:

* MEDELI – patient eligible for program
* MEDREF – patient refused program

PHARMACIST:

* MEDINI – initial visit
* MEDDIS – # of discrepancies
* MEDDAY – # days since discharge
* MEDDC – 1 month t/c - patient discharged from program

Med Rec EMR Template

Medication Reconciliation {|Initial Visit|F/U call|}

Accompanied by:{M|F|B|S|GM|GF|Spouse|Friend|Subst. D.M.|Son|Daughter|Other-}

SUBJ: Here today to reconcile meds post hospital discharge.

Date of Admission:
Date:of Discharge:
Hospital:
Discharging Diagnosis:
Allergy updated: {|Yes|No|}

Current Meds:

Discontinued Meds:

Recommendations:
-
-
-
-Active/External meds updated to reflect accurate med list

Rx's requiring renewal:
1.
2.
3.

F/U/: t/c 1 month

For internal program tracking:
Days since discharge:
# of discrepancies:

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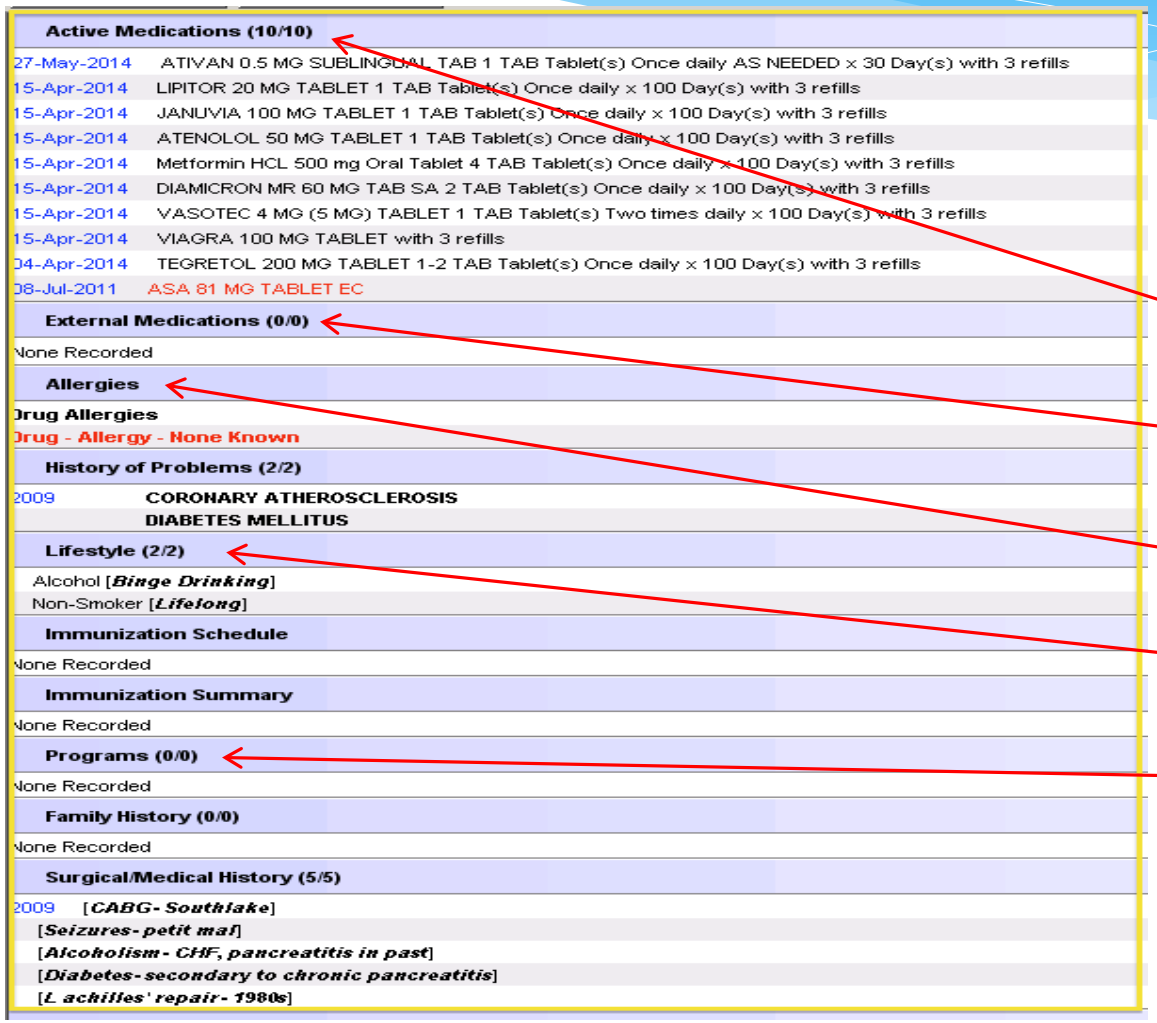
Patient JJ: Pre med rec



Active Medications (10/10)

27-May-2014 ATIVAN 0.5 MG SUBLINGUAL TAB 1 TAB Tablet(s) Once daily AS NEEDED x 30 Day(s) with 3 refills
15-Apr-2014 LIPITOR 20 MG TABLET 1 TAB Tablet(s) Once daily x 100 Day(s) with 3 refills
15-Apr-2014 JANUVIA 100 MG TABLET 1 TAB Tablet(s) Once daily x 100 Day(s) with 3 refills
15-Apr-2014 ATENOLOL 50 MG TABLET 1 TAB Tablet(s) Once daily x 100 Day(s) with 3 refills
15-Apr-2014 Metformin HCL 500 mg Oral Tablet 4 TAB Tablet(s) Once daily x 100 Day(s) with 3 refills
15-Apr-2014 DIAMICRON MR 60 MG TAB SA 2 TAB Tablet(s) Once daily x 100 Day(s) with 3 refills
15-Apr-2014 VASOTEC 4 MG (5 MG) TABLET 1 TAB Tablet(s) Two times daily x 100 Day(s) with 3 refills
15-Apr-2014 VIAGRA 100 MG TABLET with 3 refills
04-Apr-2014 TEGRETOL 200 MG TABLET 1-2 TAB Tablet(s) Once daily x 100 Day(s) with 3 refills
08-Jul-2011 ASA 81 MG TABLET EC

External Medications (0/0)

None Recorded

Allergies

Drug Allergies
Drug - Allergy - None Known

History of Problems (2/2)

2009 CORONARY ATHEROSCLEROSIS
DIABETES MELLITUS

Lifestyle (2/2)

Alcohol [*Binge Drinking*]
Non-Smoker [*Lifelong*]

Immunization Schedule

None Recorded

Immunization Summary

None Recorded

Programs (0/0)

None Recorded

Family History (0/0)

None Recorded

Surgical/Medical History (5/5)

2009 [*CABG- Southlake*]
[*Seizures- petit mal*]
[*Alcoholism- CHF, pancreatitis in past*]
[*Diabetes- secondary to chronic pancreatitis*]
[*L achilles' repair- 1980s*]

Modifiable fields:

- Active medications
- External medications
- Allergies
- Lifestyle
- Program

Patient JJ: Documentation

Medication Reconciliation Initial Visit

SUBJ: Here today to reconcile meds post hospital discharge. Fell backwards climbing the stairs, called 911. Was admitted for several weeks then rehab. Pt states he has not drank since coming home. Licensed was pulled for 1 year. Pt states lost approx 40lbs in hospital. Had several hypoglycemic episodes - 3x in hospital and twice at home. Finances an issue - unemployed, difficulty affording meds, is in the process of applying for Trillium.

Date of Admission: May 30, 2014
Date:of Discharge: July 14, 14
Hospital: Rouge Valley
Discharging Diagnosis: fracture, pneumonia, EtOH withdrawal?
Allergy updated: Yes - demerol (vomiting)

Current Meds:
-palafer (ferrous fumarate) 300mg qnoon - **NEW** in hospital
-pantoprazole 40mg qd- **NEW** in hospital
-atenolol 50mg BID - dose **INCREASED** in hospital (was on QD before)
-gliclazide MR 60mg qd - dose **REDUCED** by patient (was on 120mg, reduced due to hypo episodes)
-metformin 500mg bid - dose **REDUCED** in hospital (was on 2g before)
-januvia 100mg qd- SAME as before
-ASA 81mg qd - SAME as before
-atorvastatin 20mg qd - SAME as before
-enalapril 5mg bid - SAME as before
-multivitamin qd - SAME as before
-carbamazepine 200mg qd - SAME as before

Discontinued Meds:
-lorazepam - was discontinued by hospital
-acetaminophen - was given in hospital for pain, no longer taking
-viagra 100mg - pt stopped, can't afford

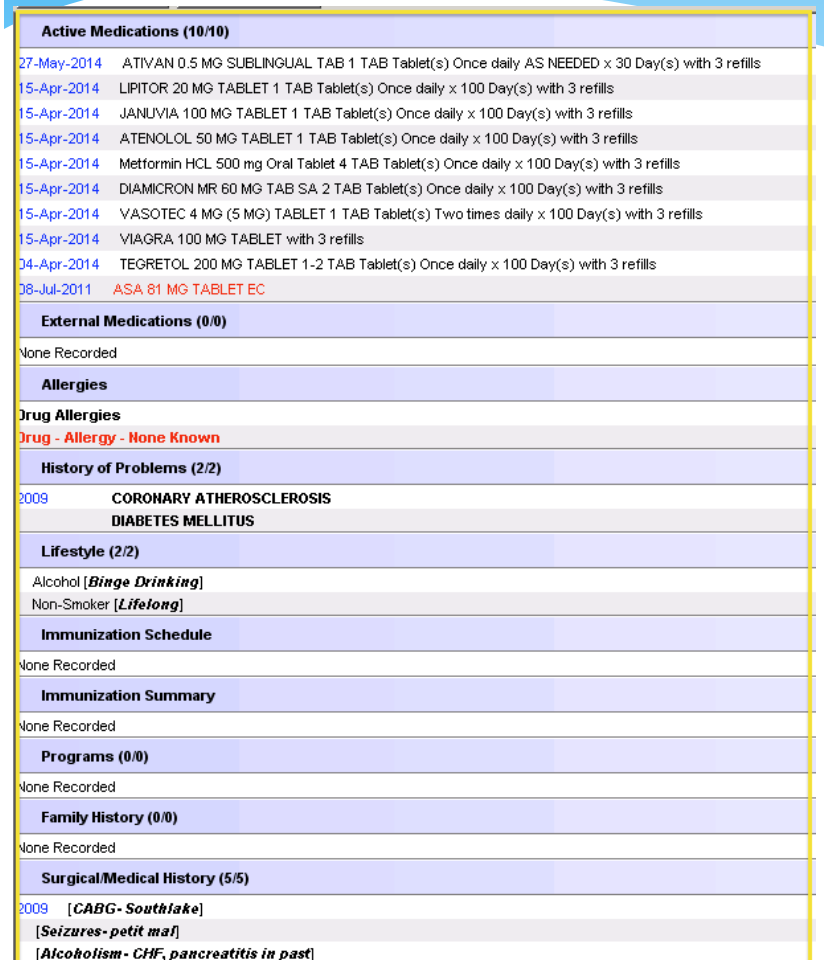
Recommendations:
-d/c januvia - blood sugars have improved, hypo episodes and expensive for patient, can always increase metformin/diamicron if BS worsens
-discuss with MD re: restarting ativan, pt states having a difficult time sleeping and stress
-discussed Trillium program ad how to apply
-Active/External meds updated to reflect accurate med list

F/U/: t/c 1 month

Sheetal Desai RPh, CDE, CGP
24-Jul-2014, 9:58 AM

For internal program tracking:
Days since discharge: 10
# of discrepancies: 8

Pre Med Rec



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08-Jul-2011 ASA 81 MG TABLET EC

External Medications (0/0)

None Recorded

Allergies

Drug Allergies
Drug - Allergy - None Known

History of Problems (2/2)

2009 CORONARY ATHEROSCLEROSIS
DIABETES MELLITUS

Lifestyle (2/2)

Alcohol [*Binge Drinking*]
Non-Smoker [*Lifelong*]

Immunization Schedule

None Recorded

Immunization Summary

None Recorded

Programs (0/0)

None Recorded

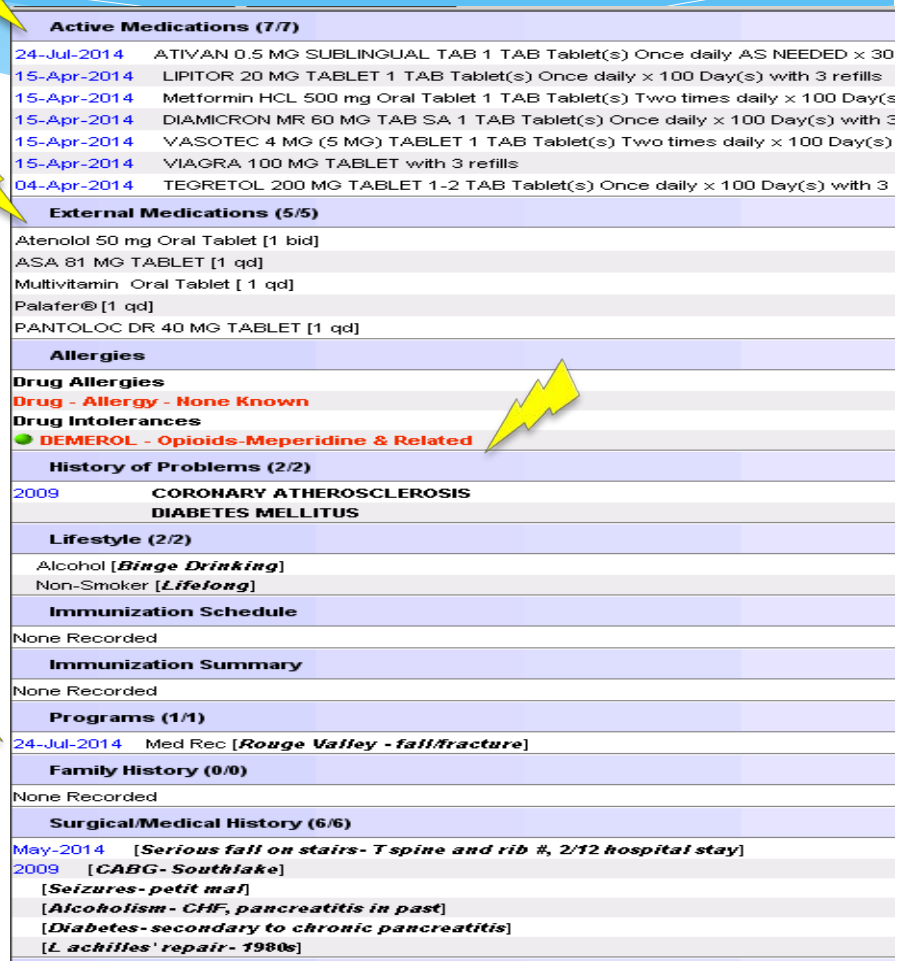
Family History (0/0)

None Recorded

Surgical/Medical History (5/5)

2009 [*CABG- Southlake*]
[*Seizures- petit mal*]
[*Alcoholism- CHF, pancreatitis in past*]

Post Med Rec



Active Medications (7/7)

24-Jul-2014 ATIVAN 0.5 MG SUBLINGUAL TAB 1 TAB Tablet(s) Once daily AS NEEDED x 30
15-Apr-2014 LIPITOR 20 MG TABLET 1 TAB Tablet(s) Once daily x 100 Day(s) with 3 refills
15-Apr-2014 Metformin HCL 500 mg Oral Tablet 1 TAB Tablet(s) Two times daily x 100 Day(s
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15-Apr-2014 VASOTEC 4 MG (5 MG) TABLET 1 TAB Tablet(s) Two times daily x 100 Day(s)
15-Apr-2014 VIAGRA 100 MG TABLET with 3 refills
04-Apr-2014 TEGRETOL 200 MG TABLET 1-2 TAB Tablet(s) Once daily x 100 Day(s) with 3

External Medications (5/5)

Atenolol 50 mg Oral Tablet [1 bid]
ASA 81 MG TABLET [1 qd]
Multivitamin Oral Tablet [1 qd]
Palafer® [1 qd]
PANTOLOC DR 40 MG TABLET [1 qd]

Allergies

Drug Allergies
Drug - Allergy - None Known
Drug Intolerances
DEMEROL - Opioids-Meperidine & Related

History of Problems (2/2)

2009 CORONARY ATHEROSCLERSOSIS
DIABETES MELLITUS

Lifestyle (2/2)

Alcohol [*Binge Drinking*]
Non-Smoker [*Lifelong*]

Immunization Schedule

None Recorded

Immunization Summary

None Recorded

Programs (1/1)

24-Jul-2014 Med Rec [*Rouge Valley - fall/fracture*]

Family History (0/0)

None Recorded

Surgical/Medical History (6/6)

May-2014 [*Serious fall on stairs- T spine and rib #, 2/12 hospital stay*]
2009 [*CABG- Southlake*]
[*Seizures- petit mal*]
[*Alcoholism- CHF, pancreatitis in past*]
[*Diabetes- secondary to chronic pancreatitis*]
[*L achilles' repair- 1980s*]

Metrics so far…

Metric #1 – Eligibility

* *Eligible: 113*
* *Med rec completed: 70*
* ***Refusals: 43***

Metric #2 – Time to be seen

* *Average 9.24 days*

Metric #3 – Discrepancies

* *364 instances for 64 pts*
* *Average discrepancy/pt:5.68*

Discrepancies:

Medication started
Medication stopped
Medication on hold
Omissions/duplications
Change in dose
Change in frequency

Getting Started …

* Determine if your FHT has affiliations with local hospital
  * Access to computer system – training required?
  * GEM RNs/ PFCs
* Determine current way providers know about hospital discharges
  * Discharge summary fax, lab results, booked appts, pharmacies
* Seek out patients vs. wait for referrals
* Use EMR to fullest potential
* Develop a plan
* Formalize the process
* Measure work that is being done

Get the Right Players!

Admin: multiple appointments required

Scanning admin: gatekeeper of data

Backup for pharmacist: RN, NP

Physician: consultant

Advertise!

* Call center: triage calls – Admin champion!
* Providers: FYIs when patient admitted
* F/u after med rec with patient/provider
* Website/pamphlets/newsletter
* Get to know hospital discharge staff
* Collaborate with local pharmacies
* Be visible (virtual or in person)

Challenges

- **Scheduling!!**
  - multiple sites
  - FT vs PT
  - 1 dedicated Admin preferred
- Timely notice of discharge
- Patient already seen
- Vacation coverage
- Patient not prepared
- No discharge summary note
- Meds not up to date in chart
- Time to reconcile
- Provider unable to read note or liase

Updates to Program

* Inclusion criteria to include any patient over age of 70 yrs (even if no eligibility is met)
* Back to back appointments with MD not required
  * Improves access and less scheduling conflict
  * RNs available as backup
* Telephone med rec's can be done for house bound patients or those requiring 2nd med rec
* Patient to be seen within 10 days of program knowing of discharge vs date of discharge

What's Next…

* HRM
* Health Links

What's your story?

* What's in your FHT toolbox?

…Today?

…Tomorrow ?

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QUESTIONS?

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