Better Follow Up Includes a Med Rec

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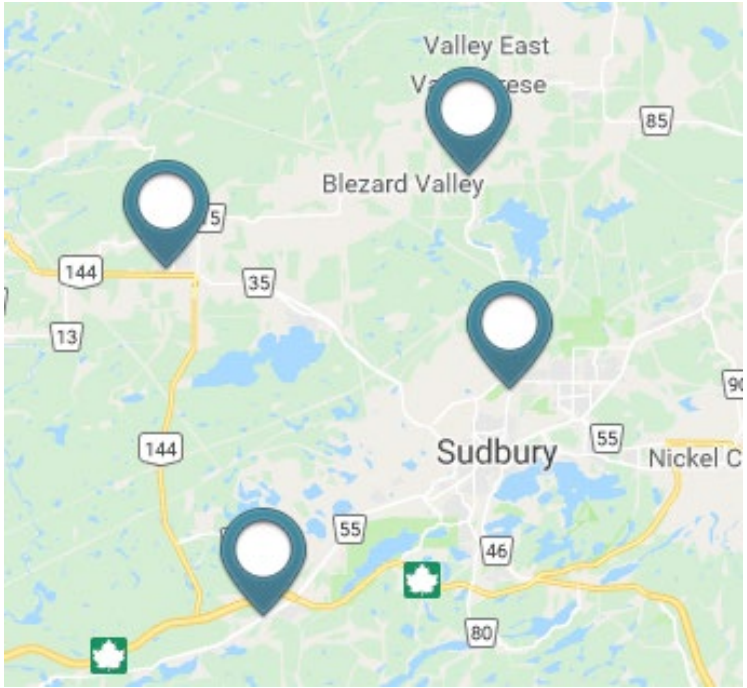
Vickie Luckham, RPh

Objectives

- Following this session, you will be able to:
  - Convince your team of the importance of reconciling your patient’s medications post-discharge
  - Identify enablers within your current discharge process
  - Learn from the challenges encountered while developing the City of Lakes discharge program

City of Lakes Family Health Team

- www.yourfht.com
- 4 sites across Greater Sudbury
  - Sudbury, Val Caron, Walden, Chelmsford
- Serving almost 20,000 patients
- Health Sciences North
- Telus PS Suite EMR



City of Lakes Family Health Team

- www.yourfht.com
- 17 Physicians (all have HSN hospital priviledges)
- 5 Nurse Practitioners
- 4 Registered Nurses
- 1 Registered Practical Nurse
- 1 Dietitian
- 1 Social Worker
- “1” Pharmacist (shared position)
  - www.mediwell.ca
- Administrative and Clerical staff

What is Medication Reconciliation

- “Medication reconciliation is a formal process in which healthcare providers work together with patients, families and care providers to ensure accurate and comprehensive medication information is communicated consistently across transitions of care.” - ISMP
- Our internal definition:
  - **Updating “our” EMR medication list, after comparing it to at least one other list we have reasonable confidence in, with the hope that our list will then be somewhat more accurate**
  - Common comparisons include: discharge note, discharge instructions, home care best possible medication history, pharmacy information (e.g. blister pack grids, MedsCheck)
  - Confirmation with the patient/caregiver is OPTIMAL

Why is this important? Waldorf

- 75 year old male
- Type 2 DM, dyslipidemia, hypertension, COPD (remote history of smoking)
- Admitted for pneumonia, spent 4 days in hospital
- New onset paroxysmal atrial fibrillation during admission
- Medication list from discharge note
  - Spiriva inhaler daily
  - Advair inhaler twice daily
  - Quinapril 20 mg daily
  - Amlodipine 10 mg daily
  - Indapamide 2.5 mg daily
  - Terazosin 2 mg at bedtime
  - Rosuvastatin 20 mg daily
  - Metformin 500 mg at lunch and 850 mg at breakfast and supper
  - Lantus 68 units at bedtime
  - Ranitidine 150 mg twice daily
  - Trazodone 50 mg at bedtime
  - Xarelto 20 mg (blood thinner) for stroke prevention *new*
  - Amoxicillin 500 mg three times daily for 1 week *new*

In the literature, how common are discrepancies?

- Electronic medical record (EMR) lists vs. pharmacy's medication fill histories
  - **Average of 6 discrepancies per patient**
  - **41% of patients had an inactive medication recorded on EMR profile**
- Chart audit of 1 FHT office of patients taking 4 or more medications; EMR medication list vs. comprehensive medication list based on a patient interview and collection of a medication history.
  - **1 of 86 EMR-based medication lists was accurate**
- Follow up home visits after discharge
  - **14-95% of patients have a discrepancy identified after discharge**

https://www.ismp-canada.org/primarycaremedrecguide/overviewMedRec.htm

Preventable medication-related events

- Elderly patients recently discharged from hospital
  - 11-18.7% have a medicaton related emergency room visit
    - Of these, 35-68% are preventable
  - .: 4-12% of elderly patients discharged could have received an intervention that would proactively solve a preventable medication-related event that prompted an emergency room visit
- Elderly patients readmitted due to adverse drug events
  - Most happened within 14 days of discharge
  - 8.4% of readmissions were attributable to preventable adverse drug events

https://www.ismp-canada.org/primarycaremedrecguide/overviewMedRec.htm

Before the CoLFHT Discharge Program…

- CoLFHT 30-day readmission rate ~7% (March 2011)
- Physicians updated medication list after discharge as required
- Following discharge, upon request, pharmacist would review medications, reconcile lists, and update EMR medication list as appropriate
- Hospital Discharge Program started in 2012-13
  - Team consisted of 12 family physicians and followed approximately 15,000 patients

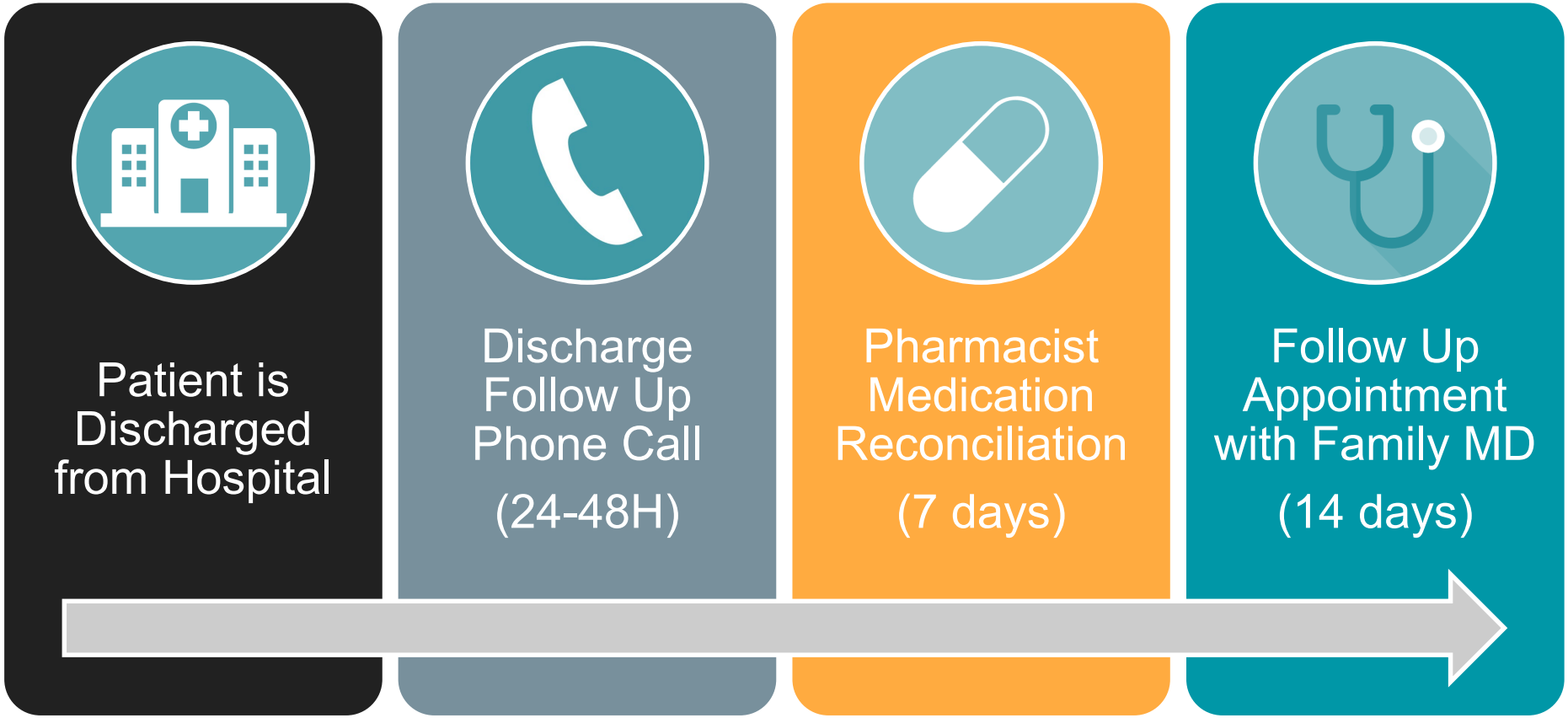
Getting started…

- Physician and pharmacist support for program
  - Recognized there were many challenges with medications after discharge
- Call groups amalgamated (2013), presenting an opportunity for formalizing
  - CoLFHT doctors care for CoLFHT patients admitted to family medicine at HSN
  - Increased team awareness of timing of discharge from family medicine
  - Discharge follow up procedures could be uniform throughout call group
- Team meeting: agreement and support of program

In the beginning…

- Discharging provider dictates discharge summaries using ‘stat’ line
- Discharging provider contacts clerical staff
- Clerical staff notifies RN and RPh
- RN calls patient
- RPh would “cold call” patient/caregiver to either
    - review medications over phone
    - book in-person RPh appointment
- PCP sees patient

CoLFHT Hospital Discharge Follow Up Program



Discharged from Hospital

Discharge from Family Medicine at HSN:

- Dictate ‘STAT’ discharge summary
- Alert patient’s home site (PSS messaging or via phone) to start hospital discharge protocol

From other services or institutions:

- Method and timing of notification varies
- *pilot* Discharge Notification through HRM

Clerical staff

- Notifies RN/RSW and RPh via EMR message
- Contacts patient to arrange RPh and PCP appointments
- Contacts patient’s pharmacy to request medication profile*

Toronto East General Hospital
825 Coxwell Ave., Toronto ON, M4C 3E7
Tel: (416) 461-8272

HRM notification

The following patient was discharged from the Emergency Department **of** Toronto East General Hospital

Patient Name: Bugs Bunny
Medical Record Number: 12345678
Birth Date: 24-APR-1950
Gender: M
HCN: 1234567890 VC

The reason for visit was LT ARM INJURY.

Registration date: 08-APR-2014 18:45.

Discharge Information

Discharge date: 08-APR-2014 22:45

Discharge disposition: Transferred to another institution - Toronto Rehab Institute

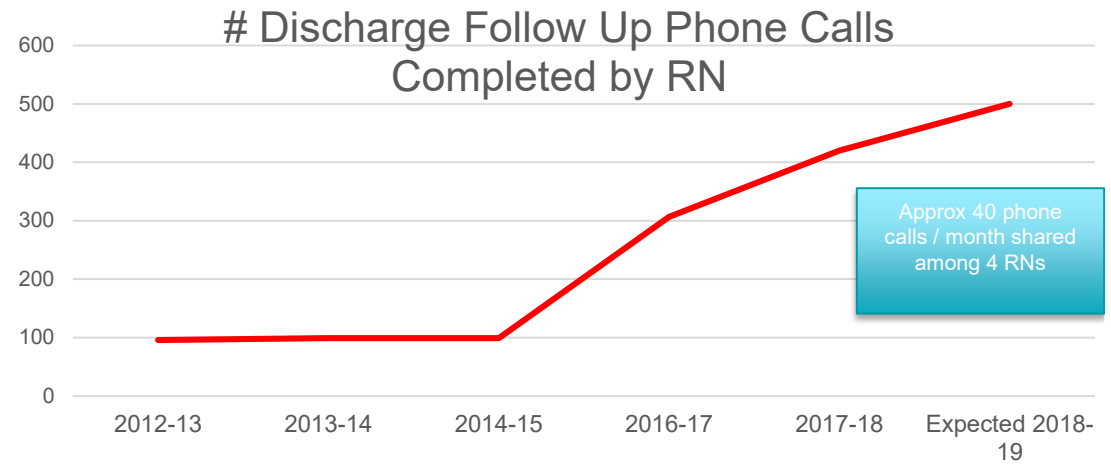
Your patient has been identified as a Health Links patient.

Please note that the patient is also registered with the following Community Care Access Centers: Toronto Central CCAC - (416) 310-2222

Discharge Follow Up Phone Call (RN/RSW)

Target: 24-48H after discharge

- RNs use standardized encounter assistant that customizes automatically based on reason for admission
- Check in on symptoms, home care coordination, urgent questions or concerns
- Seniors: Malnutrition risk screening with RD referral as needed



Nov 16, 2018 Encounter - Hospital Discharge Phone Call MRT

Discharge Date:

Hospital Discharge Phone Call Date: Nov 16, 2018

Discharge Hospital:

Discharge summary received

Hospital Discharge Follow Up Phone Call Tracking:

- Phone call made within 24 hours of discharge
- Phone call made within 48 hours of discharge
- Phone call made within 72 hours since discharge
- Phone call made within 4 days since discharge
- Phone call made within 5 days since discharge
- Phone call made within 6 days since discharge
- Phone call made within 7 days since discharge
- No phone call made, patient already seen by physician
- Message left regarding recent hospital discharge
- Unable to reach patient. No answer/No answering machine.

Hospital Discharge Tracking:

- Patient booked with physician within 7 days of discharge
- Patient booked with physician within 10 days of discharge
- Patient booked with physician within 14 days of discharge
- Patient does not require appointment with physician
- Medication reconciliation with pharmacist requested

Reason for Hospitalization:

- COPD
- CHF
- Cardiac
- General
- Operative

Other:

- Discharged from Family Med
- Discharged from a Specialists
- Discharged from Slow Paced Rehab
- Readmission within 30 days
- Readmission with 6 months
- Delirium

Discharge Instructions:

- Special discharge instructions given at the hospital

Patient is currently feeling:

- Well
- Fever
- Bowel or bladder abnormalities
- Appetitie disturbance
- Pain
- Good fluid intake
- Cough or shortness of breath
- Peripheral edema
- Orthopnea

Medication:

- New medication prescribed
- Currently on antibiotics
- Questions regarding medications
- Side effects
- Medication reconcilation completed in EMR

Nutrition Screen:

Have you lost weight in the past 6 months WITHOUT TRYING to lose this weight?

Have you been eating less than usual for more than a week?

@Malnutrition Screen: 0.0

- Not Appropriate
- Refer to FHT dietitian - * If score is 2, consider referral to FHT dietitian

Target: <7 days after discharge

- 1 hour block for review, discussion with patient and documentation
- RPh alerted when medication profile has arrived (usually)
- Prior to patient appointment, RPh reviews discharge note vs pharmacy profile vs EMR list and flags discrepancies, areas for follow-up
- Phone call or in person visit with patient and/or caregiver
    - Review collateral information (discharge instructions, home care BPMH, etc.)
    - Informal adherence assessment
    - Reconcile patients actual medication regimen with intended in EMR; updates EMR medication list to ‘best possible’
- Documentation of visit in EMR template
- Message sent to PCP with relevant findings

Meghan R Peters - PSS

File Edit Style Settings Patient View Data Letter Health Portal OLIS

Snow, John (King of the North)

Beyond the Wall
Sudbury ON P3A 2E2
705-521-5275(H)
mpeters@yourfamilyhealthteam.com

Birthdate: Jul 19, 1945 Sex: F
Health #: unknown; Not Rostered
Last Billed: Never
MD: other doctor

Family Hx

Mother: breast cancer
Father: chf

Problem List

copd
Alzheimer's disease
CAD
Multiple Sclerosis (MS)

Palliative Care Pathway

View Previous | Palliative Assessment EA | Homecare Referral | Goals of Care

ESAS:23 Jun 28, 2018 Graph
PPS: never done Graph

Ocean 69626 Email Attach Add Form Favourite Open Portal Import Refer Connected to Ocean

Advance Care Planning - CoLFHT

Insert MW Encounter | Pt. Medication List | Med Rec Completed | Date of Latest Med Rec Sep 21, 2018 | MEQ Calculator Opioid Tapering

Reason for Referral:

- [ ] General Medication Review
- [ ] New Intake Med Review
- [x] Hospital Discharge
- [ ] Warfarin
- [ ] Renal Function
- [ ] Drug Info
- [ ] Question

EMR Resources

View Warfarin Encounter

Type of Appointment:

- [ ] In Office
- [ ] Phone Call
- [ ] Consult with MD
- [ ] Consult with community pharmacy
- [ ] Admin Time

Hospital Discharge:

Admitted (dates):

Reason for admission:

- [ ] Reviewed medication within 7 days of hospital discharge

Medications reviewed with:

- [ ] Unable to reach patient prior to appointment with primary care provider.
- [ ] Reviewed medication based only on information currently available in EMR

EMR compared:

- [ ] EMR compared to discharge note
- [ ] EMR compared to patient/caregiver input
- [ ] EMR compared to pack grid
- [ ] EMR compared to pharmacy profile
- [ ] EMR compared to med vials

New:

Changed:

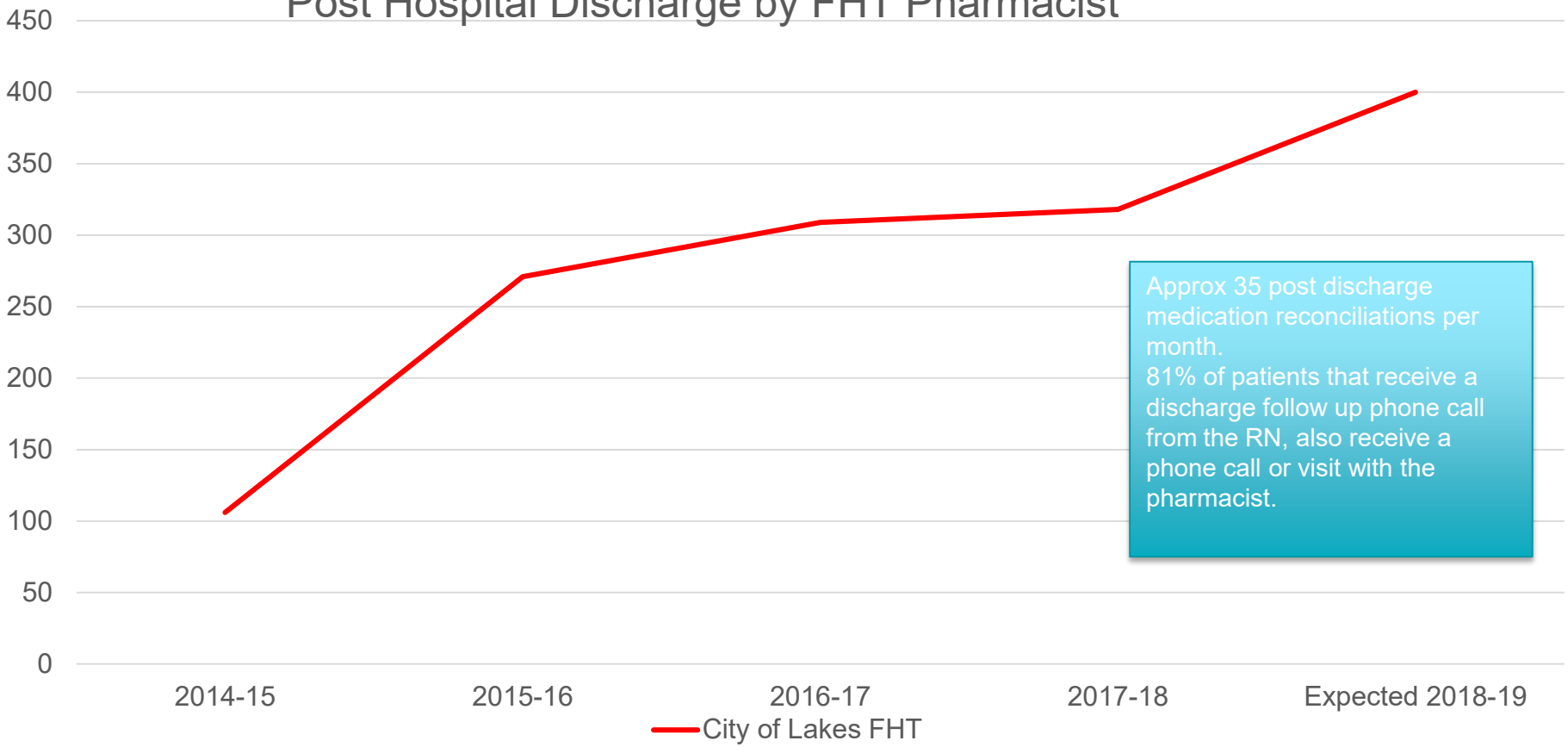
Discontinued:

Discrepancies:

- [ ] EMR Medications Reconciled

Patient scheduled for follow up:

Number of Medication Reconciliations Completed Post Hospital Discharge by FHT Pharmacist



Medication Reconcilation: Outcomes

- 81% of patients enrolled in the hospital discharge program receive a medication reconciliation
- 62% of pharmacist reviews are by phone
- From April 1, 2018 to present, 163 drug related problems requiring communication with PCP
- Patient/caregiver reassurance and education
- Positive feedback from PCPs

What do we find?

- Common Discrepancies
  - Omissions
  - Duplications
  - Wrong medication or dose
  - Misinterpreting pharmacy profiles

What do we find?

- High risk situations
  - Inaccurate admission medication reconciliation perpetuates errors or creates confusion
  - High risk medications (e.g. blood thinners, insulin, digoxin)
  - Unclear discharge notes/instructions leaving patients to wonder
  - Multiple prescribers before, during, and after hospitalization
  - Multiple transitions in care between medication reconciliation
  - Misinterpreting pharmacy or patient lists

Is reconciling with the pharmacy profile sufficient?

Challenges of relying only on pharmacy profiles

- Pharmacy profiles typically only list medications dispensed by that pharmacy
- Med may shows as ‘dispensed’ but patient is not taking it
- Doesn’t capture if actual use is anything other than the labelled directions
- Patient may be taking medications that are not on the list
  - Natural Medicines, over-the-counter products may not show up
  - Medication may have been discontinued but patient continues to take
- Overlooking or misinterpreting short forms such as “DISC” or “HOLD”
- May not capture changes made verbally that didn’t require a new prescription

Prescriber Feedback

*"The pharmacy reconciliation piece is key to a **safe and successful transition** from hospital to the community. Meeting with the FHT pharmacist is also a great opportunity for **patient education**."*

"Part of **readmission risk is non compliance or confusion** re meds in often complex medical conditions. This is a great help in clarifying regimen when we assess on discharge follow up so can ensure stability of treatment."

*"**Great time saver** as in past, patient would often present without med list and require multiple calls/visits to establish med treatment."*

"I really appreciate the post hospital med rec. It is especially helpful when a patient is on **many medications** or there are **other prescribers involved**."

"This program is indispensable. There have been many "catches" of medication errors that would have otherwise gone unrecognized."

Follow Up Appointment with Family MD

Follow Up Appointment with PCP is aimed to be booked within 10 days if necessary.

Alerted to issues identified during nursing call and medication reconciliation
- May have collateral benefit of identifying issues not related to hospitalization

2016-17**: 68%** of CoLFHT patients discharged from hospital had follow up with their family physician
(vs. NELHIN average:19%)
- Health Data Branch

Our process has evolved…

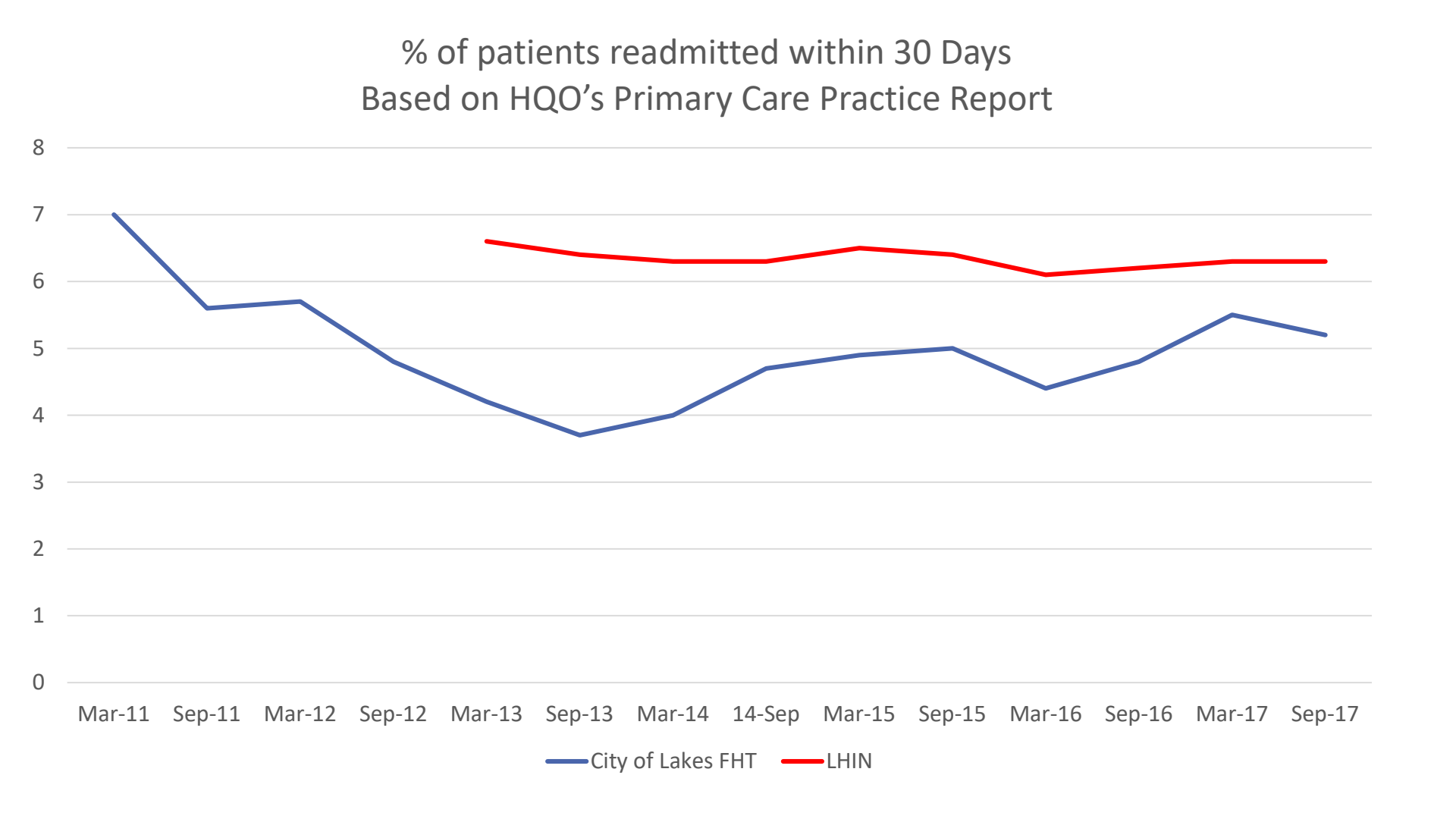
- MD may arrange FHT appointments (RPh, MD) for follow-up at discharge
- Expanded clerical role has helped efficiencies
  - They book RPh appointment and request info from community pharmacy*
    - Alert patients to the program
    - More complete information is available at (or before) the time of review with patient
    - Patients are better prepared to discuss medications at appointment (vs. “cold call”)
- Formalized information request from community pharmacy with 1 day delay
  - Profile including recent fill history, discharge prescriptions, blister pack “grid”
- SW call replaces RN discharge call for patients discharged from psychiatry
- Nutrition screen by RN
- Development of standardized documentation tools in EMR
  - RPh and RN “Encounter Assistant”
  - Med Rec ‘button’ to show date when medications were last reconciled
- Broader inclusion of patients discharged from other services/institutions

What about Waldorf?

- Medications reconciled with EMR by RPh 3 days after discharge
- Had filled his new discharge prescriptions, taking as directed
- Pharmacy profile matched discharge medication list
- Fills own dosette at home, comfortable with same
- Some NHPs
- Updated medication list
- BUT, when he returned home, he had restarted daily ASA (Aspirin) that he had been taking prior to hospitalization to prevent heart attack and stroke
    - potentially serious interaction put the patient at increased risk of bleeding complications
- Discrepancy was only flagged when medications were reconciled during follow up call
- Brought to the attention of doctor covering who agreed that there was no ongoing need for ASA in this patient

Contributing Factors?

- ASA is available without a prescription so may not be listed on pharmacy profile
- Because it wasn't administered during admission, it wasn't discussed at discharge
    - Patient was left to decide for himself if he should resume
- Patient filled his discharge prescription at a different-from-usual pharmacy because his was closed at the time of discharge (holiday weekend)
    - His usual pharmacy team may have known his typical over-the-counter medications use
    - And looking ahead, his usual pharmacy will not know he started the blood thinner unless he tells them


% of patients readmitted within 30 Days
Based on HQO's Primary Care Practice Report
8
7
6
5
4
3
2
1
0
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
14-Sep
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
City of Lakes FHT
LHIN

Challenges

- Level of detail in discharge note/instructions medication list
- Delays in receipt of discharge information
- Dictation and transcription errors
- Learning curve for conducting medication reconciliation:
  - Interpreting a variety of community pharmacy profiles
  - Distinguishing between intentional vs non-intentional discrepancies
  - Determining clinically relevent discrepancies
- Patient or caregivers' familiarity with their medication regimen
- Patient attitude/understanding of FHT pharmacist role
- 'Cold calls' for medication reconciliation
- Interpreting 'actual' med use vs if patient is reading off a list, label, etc

Challenges

- Third party involvement in med administration (retirement homes, iCAN)
- Blister packed medication changes (e.g. coordination, repacking, delivery)
- Multiple admissions in a short time span
- Intra-admission transitions in care (e.g. ICU to general medicine to SPR)
- Hospital admission medication list was not recently reconciled
- Linkages with community pharmacy
- Reconciling after visit with MD
- How to enter medications we aren’t sure of or d/c medications that are old

Enablers

- Team buy-in
- Discharging prescriber buy-in
  - Recognition of the value of clear medication list in discharge summary
  - coordinating follow-up
- Pre-booking medication reconciliation visits
  - Clerical staff booking, preparing patients for visit (practically and justification for call)
  - Email visit reminders
- Logistics (work space, EMR access, dedicated time)
- EMR software
  - Messaging
  - EMR Medication history
  - Searchability (“fish”)
  - Integration with hospital system

Enablers

- Medication reconciliation by FHT pharmacist
  - Can provide some clinical support to patient
  - Triage urgent discrepancies vs. non-urgent
- Community pharmacy partnerships
  - Circle of care
  - Blister packaging
  - MedsCheck documentation if done since discharge
- Ability to communicate with primary care physician
  - Urgent response vs. next appointment follow up vs. for future review

Lessons Learned

- Best possible medication list vs reasonable best estimate
- Adjusting medication lists in EMR - PCP preferences?
  - Putting meds ‘on hold’ vs d/c completely
  - Adding notes to sig lines
  - ‘Fast profile entry’
- Introductory ‘script’
- Delaying request for med profile until after rx’s filled

How to get started?

- Find a champion for the cause
- Discharge notification process
- Define roles and map out flow
- Pharmacist involvement
    - Internal RPh
    - Partnering with local pharmacies
- Consider targeting patients at high risk for readmission* or at high risk ADR:
    - >5 prescription medications
    - >75 years of age
    - High risk medications (warfarin, antiplatelets, digoxin, insulin, oral hypoglycemic)
    - Principal diagnosis of cancer, COPD, stroke, heart failure, diabetes, depression

What will you take back to your team?

Thank you!

- The end?

References

- Hospital to home – facilitating medication safety at transitions: a toolkit for healthcare providers, 2015. ISMP Canada