

# Pharmacist-Led Medication Reconciliation to Improve Transition of Care from Hospital to Home

Karen Peters, Primary Care Pharmacist Northumberland FHT  
Joanne Jury, Access and Patient Flow Specialist Northumberland Hills Hospital  
Mandy Lee, Quality Improvement Facilitator CE LHIN

Northumberland  
Family Health Team

NORTHUMBERLAND HILLS  
HOSPITAL

HealthLinks  
Central East  
Let's Make Healthy Change Happen

Ontario  
Central East Local Health  
Integration Network

ideas  
Improving & Driving Excellence Across Sectors

## Aim

A common objective in both acute and primary care settings is the reduction of ED visits and 30-day readmissions. With this shared goal in mind, both to improve the patient experience and health outcomes, as well as to meet the requirements of our organizations' Quality Improvement Plans, we sought to improve access to 7-day follow up appointments following discharge from hospital. By October 31, 2017, 80% of patients within the Northumberland Family Health Team will be seen within 7 days of discharge for an appointment with a pharmacist for medication reconciliation and review in addition to physician check-in. (Baseline: 0%)

Through analysis of data and anecdotal experience, it was revealed that patients were often waiting extended periods of time to be seen by a primary care provider upon discharge. Reasons for this delay included communication throughout transition, as well as access to appointments.

## Intervention/Change Ideas

The Northumberland Family Health Team (FHT) has three clinics. A gradual roll-out was planned starting with Clinic One.

- Improve transitions of care through enhancing communication between hospital and FHT:
  - Early engagement of front-line staff in hospital and FHT
  - Allow FHT pharmacist access to hospital Electronic Medical Record (EMR)
  - Revise discharge summary tool and process
- Increase access to appointments following discharge by offering medication reconciliation and review with the FHT pharmacist:
  - Joint appointments with primary care provider and pharmacist
  - Appointment with pharmacist prior to primary care provider including offering home visits/telephone calls

## Evaluation/Measures/Results

### Improving communication

Improvement monitored through weekly touch bases between hospital and FHT and engagement of primary care providers.

## Improving access to 7-day follow up appointment post-discharge

- Data collected pre-implementation to establish baseline
- Tracked number of days between discharge and first appointment with FHT clinician

As of June 30, 2017 interventions had been tested at 2/3 clinics. Early results show that 40% of all patients in the Northumberland Family Health Team (Clinic One: 39%; Clinic Two: 83%) were seen within 7 days of discharge by a pharmacist for medication reconciliation and review in addition to physician check in.

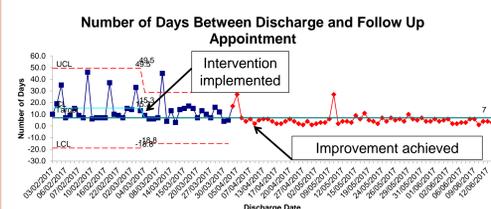


Figure 1: Clinic One- Chart represents a 56% decrease in the average numbers of days between discharge from hospital and a follow up appointment with a FHT clinician.

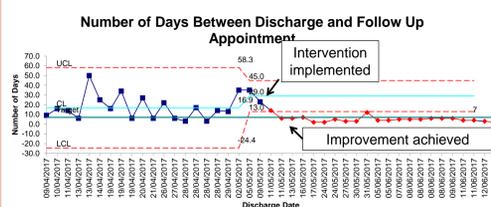


Figure 2: Clinic Two- Chart represents a 64% decrease in the average numbers of days between discharge from hospital and a follow up appointment with a FHT clinician.

## Patient Experience

Recognizing that patients would have two appointments, it was important to measure patient experience of the pharmacist appointment to ensure value add.

- 95% of patients agree or strongly agree that after meeting with the pharmacist they had a better understanding of their medications and felt safer taking them
- 100% of patients agree or strongly agree that the pharmacist appointment was a good use of their time

*"I feel listened to"*

*"I am grateful for the information"*

*"All my extra questions were answered completely. All in all a very very gratifying experience"*

## Physician Engagement

The early success and value we were able to demonstrate with the pilot clinic resulted in greater interest from other physicians. We were able to spread throughout the two clinics faster than anticipated.

*"The program has improved safety...it also improves efficiency, and allows us to focus on the patient and their symptoms. Overall the program is a resounding success."*

*"(This) program greatly enhances patient care and safety.... The patient leaves knowing why they take each medication and becomes actively engaged in their care. With excellent pharmacist support, this program also allows the physician to focus on managing the post-hospital discharge care."*

## Bonus Findings

Although the aim did not include reduction in discrepancies, this number was collected throughout the intervention. Results show an average of 10.8 discrepancies, per patient, between what medications the patient was actually taking and what was recorded on the EMR (Range: 0-53). As a result of the medication reconciliation conducted by the pharmacist, these discrepancies have been resolved, minimizing risk to patients.

## Results Post IDEAS

The project team continues to work toward the aim, meeting bi-weekly to establish the intervention as a program. Roll-out in Clinic Three is anticipated to start early September 2017.

## Organizational Enablers

### Resources

- Front line staff (i.e. primary care pharmacist) on project team
- Early engagement of physician lead
- Administrative staff support and engagement in developing processes

### Organizational Enablers

- Inter-organizational team
- Executive sponsor involvement and support from all organizations
- Project team had quality improvement knowledge and experience

### System Factors

- Linked to Quality Improvement Plans
- Aligns with Central East Health Links indicators
- Aligns with the Ministry of Health and Long-Term Care *Patients First Act*

## Sustainability

Using the National Health Service Sustainability Model we identified the following areas for improvement:

- Infrastructure of sustainability
  - Clinical leadership engagement
  - Adaptability of improved process
- Mitigation strategies will be developed

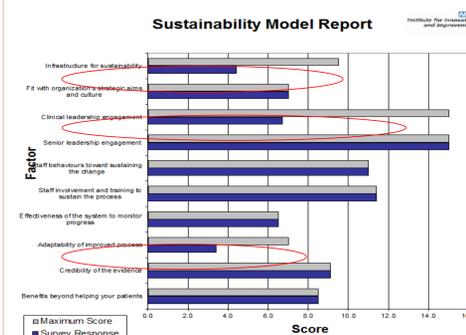


Figure 3: NHS Sustainability Scores

## Spread

Within the FHT, the intervention will be introduced to Clinic Three by early September 2017. Through presentations within the Central East LHIN, interest has been shown in adapting this intervention in other areas.

## Lessons Learned

- When you think you know, assume you don't!
- Collaboration is key to success
- It is not always easy to work across organizations, be flexible
- Front-line staff participation is essential; real time decision making and real experience

### Key Factors to Success:

Belief in the project, commitment, communication, relationships, team engagement, project sponsor engagement and support

## Contacts

**Name:** Karen Peters  
**Title:** Primary Care Pharmacist  
**Organization:** Northumberland FHT  
**Email:** kpeters@nfht.ca

**Name:** Joanne Jury  
**Title:** Access and Patient Flow Specialist  
**Organization:** Northumberland Hills Hospital  
**Email:** jjury@nhh.ca

**Name:** Mandy Lee  
**Title:** Quality Improvement Facilitator  
**Organization:** Central East LHIN  
**Email:** mandy.lee@lhins.on.ca