Quality Improvement: Learning Collaboratives & Pharmacist involvement

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Ontario FHT Pharmacist Conf
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Objectives

• To review the goals and objectives of the Learning Collaboratives
• To explain the 3 models central to quality improvement in Ontario Primary Care
• To show examples of a pharmacists role in Quality Improvement
QIIP

• QIIP is a non-profit corporation that is funded by the Ministry of Health and Long-Term Care.
• Mission - The Quality Improvement and Innovation Partnership will be the provincial leader in quality improvement methods for primary healthcare.

• [www.qiip.ca](http://www.qiip.ca)

Quality Improvement

- Complex
- Unclear Path
- Efficient use of resources
- Fast learning
- Commitment
- Co-operation
- Cross-functional
- Creativity
The Learning Collaboratives

• The methodology is based upon three components:
  – a learning model (the breakthrough series)
  – a model for conceptualizing changes in the way care is organized (the care model)
  – and an improvement model

The Breakthrough Series

• Accelerate improvement in health care settings.
• Brings together quality improvement teams from different practices

12-15month timeframe

Action Period Supports
E-mail  Visits  Web-site
Phone  Assessments  Senior Leader Reports
Ontario’s CDPM Framework

INDIVIDUALS AND FAMILIES

- Healthy Public Policy
- Supportive Environments
- Community Action

HEALTH CARE ORGANIZATIONS

- Personal Skills & Self-Management Support
- Delivery System Design
- Provider Decision Support
- Information Systems

COMMUNITY

Productive interactions and relationships

- Activated communities & prepared, proactive community partners
- Informed, activated individuals & families
- Prepared, proactive practice teams

Improved clinical, functional and population health outcomes

"The definition of insanity is doing the same thing over and over again and expecting different results".

Albert Einstein 1879-1955

South East Toronto
Family Health Team
The Model for Improvement

- Understanding the problem
- Clear, desirable aims & goals
- Data - Measuring processes and outcomes
- Testing hunches; what can we learn along the way?

The PDSA Cycle for Learning and Improvement

**Act**
- Act upon the study
- What changes are to be made?
- Next cycle?

**Plan**
- Objective
- Questions and predictions (why)
- Plan to carry out the cycle (who, what, where, when)
- Plan for data collection

**Do**
- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data

**Study**
- Complete the analysis of the data
- Compare data to predictions
- Summarize what was learned

South East Toronto
Family Health Team
1. Identify a problem
2. Try-Storm possible solutions
3. Choose one to test
4. Write a PLAN for your test
5. DO it! Conduct the test and document the data.
6. STUDY the data to determine whether or not this test solved the problem
7. Take ACTion—your most logical next step to solve the problem or retest for effectiveness

Do It!!!!

DO: Carry out the change/test, collect data, and begin analysis

- What was actually tested?
- What happened?
- Observations

Start Small 1 or 3 or 5 or 10 ➔ All
A reflection of what the team learned by what they DID as they had PLANNED to meet the OBJECTIVE.

It is the conclusion you draw based on the data and should tell you whether or not you met your objective.

Act

Based on what you learned from the STUDY, what is the most logical next step to work out the bugs and test another cycle?

OR

If it was successful, test it with more providers/patients for a longer time-frame to increase belief and confidence.
PDSA Worksheet for Testing Change

**Objective:** What collaborative measures are you trying to monitor? List your display set of measures.

**Domain** (Check box): [ ] Access [ ] Efficiency [ ] Colorectal Cancer Screening [ ] Diabetes [ ] Components of the Care Model: [ ] Delivery System Design [ ] Care Management [ ] Decision Support [ ] Clinical Information Systems [ ] Organisation of Health Care [ ] Community

Every objective will require multiple smaller tests of change

<table>
<thead>
<tr>
<th>Describe your first (or next) test of change</th>
<th>Person responsible</th>
<th>When to be done</th>
<th>Where to be done</th>
</tr>
</thead>
</table>

**Plan**

List the tasks needed to set up this test of change

<table>
<thead>
<tr>
<th>Person responsible</th>
<th>When to be done</th>
<th>Where to be done</th>
</tr>
</thead>
</table>

Predict what will happen when the test is carried out

| Measures to determine if prediction succeeds | |
|---------------------------------------------| |

**Do**

Describe what actually happened when you ran the test

**Study**

Describe the measured results and how they compared to the predictions

**Act**

Describe modifications to be made to the plan for the next cycle from what you learned

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Adapted From: Institute for Healthcare Improvement by CSI Solutions, LLC 2008
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Areas of Learning Collaboratives

- Office Redesign
  - ACCESS & EFFICIENCY
- Preventative medicine
  - COLORECTAL CANCER SCREENING
- Chronic Disease management
  - DIABETES

Access and Efficiency

- Access – how fast can you get into see a provider?
  - Third next available appt (3NA)
- Access – how often do you see your own primary provider?
  - Continuity
- Efficiency – when you are seeing your provider, time they are with you?
  - Red Zone time (Time spent face-to-face)
Colorectal Cancer Screening

- Number of patients 50 – 74 years old
  - This is the population that should be screened

- Patients who have been screened
  - FOBT test done in past 2 years
  - Colonoscopy in past 5 years

Diabetes

<table>
<thead>
<tr>
<th>Process Measures</th>
<th>Clinical Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBA1C screened ≤ 3 m</td>
<td>90% Pts at target HBA1C 60%</td>
</tr>
<tr>
<td>BP screened ≤ 12 m</td>
<td>N/A Pts at target BP 55%</td>
</tr>
<tr>
<td>LDL screened ≤ 12 m</td>
<td>N/A Pts at LDL target 65%</td>
</tr>
<tr>
<td>On ACEI/ARB</td>
<td>60%</td>
</tr>
<tr>
<td>Self-management goals set</td>
<td>70%</td>
</tr>
<tr>
<td>Retinopathy &lt; 24m</td>
<td>90%</td>
</tr>
<tr>
<td>Chiropody ≤ 12m</td>
<td>90%</td>
</tr>
<tr>
<td>ACR screened ≤ 12 m</td>
<td>70%</td>
</tr>
</tbody>
</table>
Pharmacists in Quality Improvement

• These are examples of pharmacists work, I would like to thank them for sharing with me

Medication Reconciliation (PLAN)

• Components of Care Model affected
• Community linkage
  – With hospital
  – With community pharmacies
• Clinical information support/ EMR
  – Updating the EMR/ using IT system appropriately

• PREDICTION
  – More appointment time spent with patient on issues (increased efficiency), instead of clarifying changes to medications post-discharge
Do-Study-Act sections

- Pharmacist contacted community pharmacy to get most recent medication list
- Pharmacist updated EMR in preparation for appt
  - Flagged potential problems prior to appt
- MD has more “red zone” time with pt (Increased efficiency of appts)
- Potentially decreased phone calls for pharmacist
- 1 community pharmacy faxes automatically now

EAP Applications

- Components of Care affected
  - Delivery System Design

- PREDICTION – Decreased time for paperwork for MD (Improved Access) and improved access to medications for patients
Do-Study-Act sections

• All EAP requests put in Pharmacists mailbox to complete

• EAP requests completed more timely (usually before previous expires)
• MD have less paperwork
• EAP requests easier to locate and retrieve from EMR

Self management goals

• Components of Care Model
  – Clinical Decision Making
  – Clinical Information System

• PREDICTION – A standard form and EMR stamp for patients with diabetes to choose self-management goal will increase self-management goals
Diabetes Self Management

Diabetes is a very serious disease which may cause damage to the blood vessels and nerves leading to the brain, eyes, heart, kidneys, toes and feet.

You, the patient, are the most important person to manage your diabetes. We will guide you and offer support as you manage your diabetes. The following goals will help you gain and maintain diabetic control to reduce damage to your blood vessels and nerves.

Do-Study-Act Sections

- No changes were made to the original form

<table>
<thead>
<tr>
<th>Goal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1</td>
<td>I will check my feet daily. If I notice a sore or irritation, I will seek medical attention.</td>
</tr>
<tr>
<td>Goal 2</td>
<td>I will visit the Chiropodist/Podiatrist (foot specialist) yearly, or as instructed.</td>
</tr>
<tr>
<td>Goal 3</td>
<td>I will follow my diabetic and low fatty eating plan to reduce any blood sugar and cholesterol.</td>
</tr>
<tr>
<td>Goal 4</td>
<td>I will try to obtain my ideal body weight. I will lose ___ pounds by my next office visit.</td>
</tr>
<tr>
<td>Goal 5</td>
<td>I will quit or significantly reduce my smoking.</td>
</tr>
<tr>
<td>Goal 6</td>
<td>I will have an eye exam every year, or as instructed.</td>
</tr>
<tr>
<td>Goal 7</td>
<td>I will check my blood sugar as instructed and will call if the results are consistently below 4 or above 8.</td>
</tr>
<tr>
<td>Goal 8</td>
<td>I will take care of my mental health by talking about how I deal with supportive people in my life. I will attend the Diabetes Support Group.</td>
</tr>
</tbody>
</table>

Adapted from [SouthEastToronto.ca](http://www.south-easttoronto.ca/133-DiabetesManagement/Diabetes.html?diabetes_form.pdf) (Personal) [ShelbyP]
### Goal 5
I will follow my diabetic and low fat healthy eating plan to reduce my blood sugar and cholesterol.

| Goal 1: | I will work hard to keep my HbA1c below 7%. One of the ways I will do this is to take all of my medications exactly as directed. |
| Goal 2: | I will take a low-dose aspirin (81 or 325 mg) every day. |
| Goal 3: | I will exercise 30 minutes per week. If I notice chest pain, shortness of breath or chest tightening, I will seek medical attention. |
| Goal 4: | I will check my feet daily. If I notice a sore or irritation I will seek medical attention. |
| Goal 5: | I will follow my diabetic and low fat healthy eating plan to reduce my blood sugar and cholesterol. |

### Goal 6
I will try to obtain my ideal body weight. I will lose ___ pounds by next office visit.

| Goal 1: | I will try to obtain my ideal body weight. |
| Goal 2: | I will lose ___ pounds by my next office visit. |
| Goal 3: | I will quit or significantly reduce my smoking. |
| Goal 4: | I will have an eye exam every year or as instructed. |
| Goal 5: | I will check my blood sugar as instructed and will call if the results are consistently below 4 or above 9. |

### Goal 10
I will take care of my emotional health by talking about how I feel with supportive people in my life. I will attend the Diabetes Support Group.

| Goal 1: | I will take care of my emotional health by talking about how I feel with supportive people in my life. |
| Goal 2: | I will attend the Diabetes Support Group. |

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**Diabetes Self Management**

Diabetes is a very serious disease which can do damage to the blood vessels and nerves. You, the patient, are the most important person to manage your diabetes. We will guide you and offer support as you manage your diabetes. The following goals will help you gain and maintain diabetic control to reduce damage to your blood vessels and nerves.

- Please choose goals you are willing to work on to manage your diabetes.

| Goal 1: | I will work hard to keep my HbA1c below 7%. One of the ways I will do this is to take all of my medications exactly as directed. |
| Goal 2: | I will take a low-dose aspirin (81 or 325 mg) every day. |
| Goal 3: | I will exercise 30 minutes per week. If I notice chest pain, shortness of breath or chest tightening, I will seek medical attention. |
| Goal 4: | I will check my feet daily. If I notice a sore or irritation I will seek medical attention. |
| Goal 5: | I will follow my diabetic and low fat healthy eating plan to reduce my blood sugar and cholesterol. |
| Goal 6: | I will try to obtain my ideal body weight. I will lose ___ pounds by my next office visit. |
| Goal 7: | I will quit or significantly reduce my smoking. |
| Goal 8: | I will have an eye exam every year or as instructed. |
| Goal 9: | I will check my blood sugar as instructed and will call if the results are consistently below 4 or above 9. |

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Percent patients with SM Goal set in last 12 months

Target for population setting
self-management goals

Refill prescriptions with missing lab information (PLAN)

• Components of Care
  – Clinical Information Systems
  – Decision Support

• PREDICTION – By identifying patients with missing HBA1C & recent (≤6m) refills for DM medications, patients “falling through the cracks” will be identified
Do-Study-Act Sections

- EMR search created to find patients

- 13/20 patients with missing HBA1C had refills in past 3 months
  - Prescription refills for 3 – 12 months
  - 2 had endocrinology notes (no HBA1C noted) but stated continue on current therapy

- EMR reminders for HBA1C created just after this
- Education to MDs/ NPs re: refill requests
- Review of these patients re: best care practices

Medical Directive to adjust lipid medications

- Components of Care
  - Delivery of Services

- PREDICTION – By enabling an alternate provider to titrate cholesterol medication, more patients will achieve target
Do-Study-Act Section

- Medical Directive completed
- EMR search for DM patients not achieving target LDL

- 2 – 12 patients identified for each staff physician. MD reviewed and returned to pharmacist

- 32 patients started or adjusted meds.

Target for patients reaching LDL target = 65%
Diabetes visits

• Several models of diabetes visits have been done for the learning collaboratives
  – Diabetes Education Programs (RN/RD visits)
  – Consecutive visits (planned visits, “round robin”, group education visits)

• If your FHT is considering, I would encourage talking to QIIP to see if they can help connect you

My Diabetes Visit experience

• Our clinic had a Healthforce Ontario grant for a diabetic foot wound clinic
• Part of this clinic’s mandate was to involve providers in the care
• These pts were FHT pts & community patients
  – Community patients could not receive care as per medical directives from the pharmacist
  – Were only able to provide 2 visits per provider (except chiropodist) to each patient
  – Useful as planning/ consultant session
Diabetes visit - PDSA #1

- Component of Care – Delivery of Services

- Pts scheduled with chiropodist for foot care. At 1st appt, RN explained that they could see various other Providers (beside the chiropodist/RN)

- Prediction - Pts would be amenable to seeing other providers & benefit from education

Do-Study-Act

- 6 patients
  - 2 Pts agreed & then didn’t come to appts
  - 4 Pts refused

- Difficult for staff, as mandate of grant application was for collaborative care.
  - Also disruptive, as caused several cancellations/no shows in a busy day of work

- Moved on to PDSA #2
**Diabetes Visit - PDSA #2**

- Scheduling for patients getting foot care so that pts would see RD/ RPh before or after chiropodist appt (as well as another pair of providers)
  - 1 hour appt (30min chiropodist & 60 min initial)

- PREDICTION – by scheduling appt and combining disciplines, less excuses for patient to not come
  - Pts would benefit from DM education (shorter ulcer healing etc…)

**Do-Study-Act**

- By end of grant, we have seen ~50% of the patients
  - Discharge notes on all patients

- Patients who came to appointments were happy with care
- Staff felt like it was a positive change for them

- This is where we go on to PDSA #3
Diabetes Visit - PDSA #3

- Component of Care – Delivery System Design
- The dietitian and I both thought the combined visits were helpful in patients on insulin (after 3 patients in DFU clinic)
  - So much interplay with our advice

- Prediction – patients starting on insulin or having insulin adjustments would benefit from combined visits
  - More consistent messaging
  - Less appointment time for patient

Do-Study-Act section

- Reviewed our charts for ~ 2 months prior to pick out insulin patients seeing both of us
  - 3 identified & rescheduled their appts
- ++ duplication in initial assessments
  - We used our own paperwork 1st time
- After sessions, pts commented on clarity of plans & felt goals were manageable
- Providers found some difficulty in scheduling
Diabetes Visit - PDSA #4

• Component of Care – Clinical Information System

• Finding new patients for the combined visit & improving data capture

• PREDICTION – If we could capture data & find appropriate patients, patient care for DM patients will improve

Do-Study-Act

• EMR stamp created for initial visit/follow-up visit
  – Comfort for both providers to type into same note

• Discussion with 2 QIIP MDs that for new insulin referrals, would integrate into this if possible

• Appts decreased from 60 minutes to 30 minutes for follow-ups
So...what the Learning Collaboratives gave me..

- An interest in Quality Improvement as a facilitator for change
- An appreciation for Collaboration as a facilitator for Quality Improvement
- A background to discuss patient issues at a different level

QIIP in the future

- The new website (not yet launched) will help to link action groups for specific therapeutic and practice areas
  – Diabetes, hypertension, cancer screening
- Important to use this as a forum to share our practice enhancements & learn more about quality improvement