Designing for Improvement: Enabling Primary Care Teams to Improve Care for Elderly Patients Living with Polypharmacy

International Conference on Practice Facilitation
June 27, 2019

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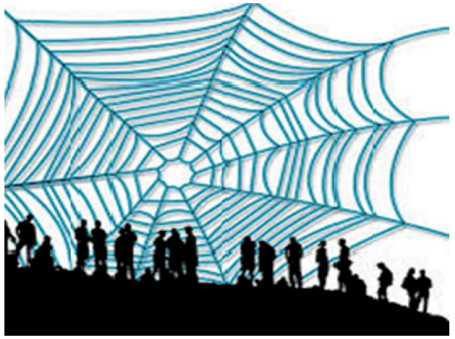
Presenter Disclosure



- **Presenter:** Patricia O'Brien RN MScCH
- **Relationships with financial sponsors:**
  - **Grants/Research Support:**
    - Canadian Institutes of Health Research (CIHR)
  - **Speakers Bureau/Honoraria:** None
  - **Consulting Fees:** None
  - **Patents**: None
  - **Other:** Program Manager, Quality & Innovation/DFCM

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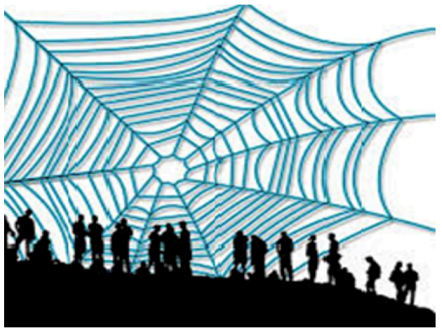

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  - **Patents**: None
  - **Other:** QI Coach, SPIDER

Disclosure of Financial Support

- **This program has received financial support from CIHR in the form of Operating Grant**
- **This program has received in-kind/cash support from the following organizations**

Organization	Support	Organization	Support
North York General Hospital	Cash/In-kind	University of Toronto Practice Based Research Network (UTOPIAN)	In-kind
Quality & Innovation Program, Department of Family & Community Medicine , University of Toronto	In-kind	The College of Family Physicians of Canada	In-kind
Dept. of Family Medicine, Faculty of Medicine, University of Ottawa	Cash	Dept. of Family Medicine, Faculty of Medicine & Dentistry, University of Alberta	In-kind
Dept. of Family Medicine, Faculty of Medicine, University of Calgary	In-kind	Manitoba Primary Care Research Network, Department of Family Medicine, University of Manitoba	In-kind
Dept. of Family Medicine, Max Rady College of Medicine, University of Manitoba	Cash	Research Manitoba	Cash
Fonds de recherche du Québec – Santé	Cash	Réseau-1 Québec, Université de Montréal	Cash
Nova Scotia Health Authority	Cash/In-kind	Dept. of Family Medicine, Dalhousie University	Cash/In-kind
Vice President Research Office, Dalhousie University	Cash	Dept. of Community Health & Epidemiology, Dalhousie University	
Undergraduate Medical Education, Faculty of Medicine, Dalhousie University	In-kind	Dalhousie Medical Research Foundation	Cash
Doctors Nova Scotia	Cash/In-kind	Maritime SPOR SUPPORT Unit	In-kind

Learning Objectives

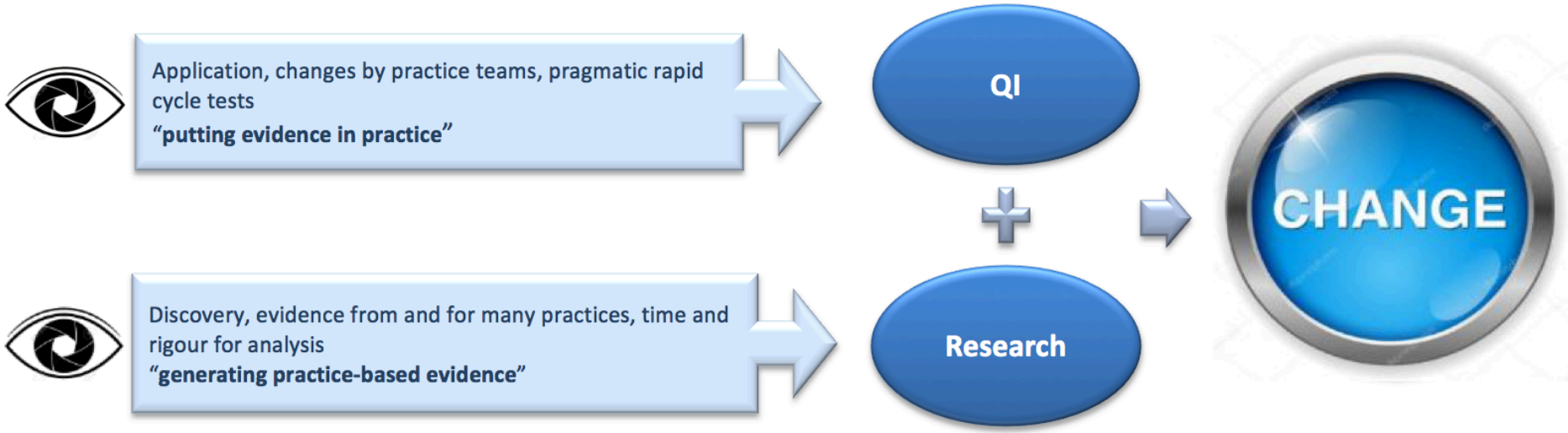
- Explore the integration of QI coaching, patient engagement, evidence-based tools, improvement methods, and team networking in the design of a research and quality improvement initiative
- Describe the design process for a large-scale national QI initiative focused on deprescribing for elderly patients
- Identify the learning collaborative elements designed for improvement success including access to a common QI pathway, evidence-based tools, patient-level data, and QI coaching

SPIDER Project Overview

Structured **P**rocess **I**nformed by **D**ata, **E**vidence & **R**esearch

A QI-research collaboration:

- Collaboration between Q&I Program and UTOPIAN-PBRN at DFCM, University of Toronto
- Focus on **translating evidence into practice**



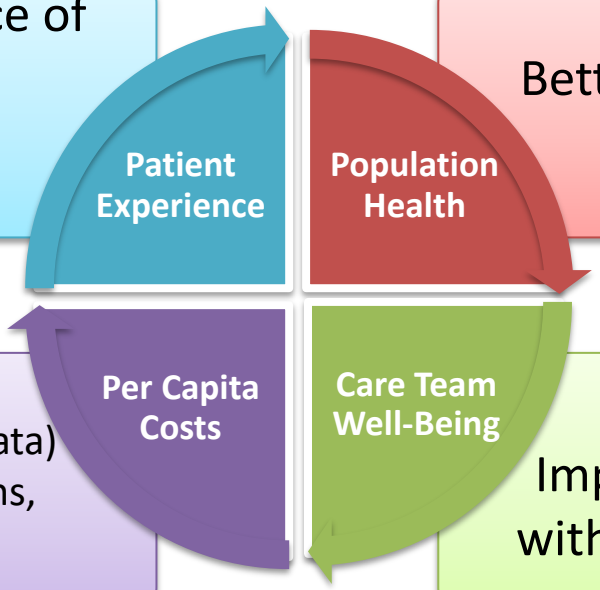
SPIDER Project Overview

- Objectives & Outcome Measures
  - To evaluate the impact of SPIDER on Quadruple Aim:

Better patient experience of care

Primary: ↓ # of PIPs
Better patient quality of life

* PIPs: Potentially inappropriate prescriptions

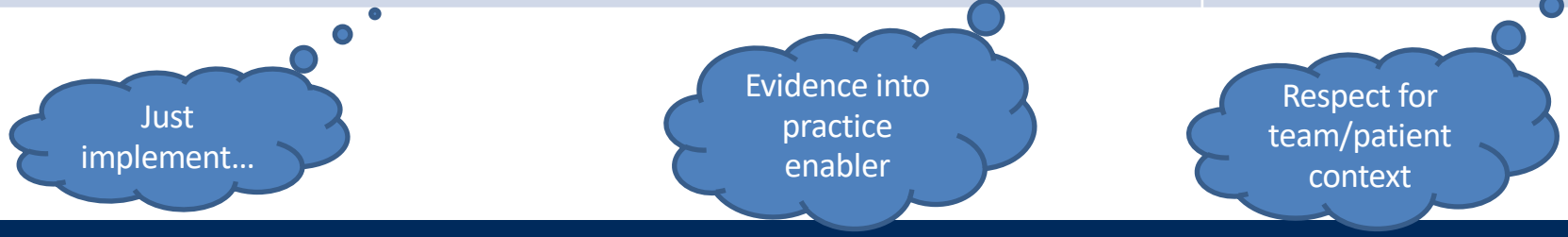


Cost- effectiveness:
- ✓Overall system costs (ICES data)
- ✓Estimate costs of medications, program delivery & practice facilitation costs

Improved team experience with deprescription process

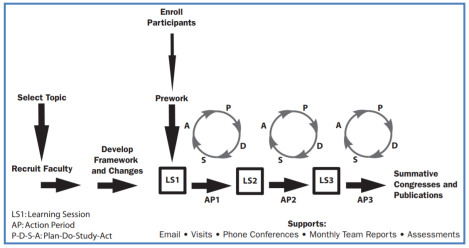
Designing for Improvement… *with good intent!*

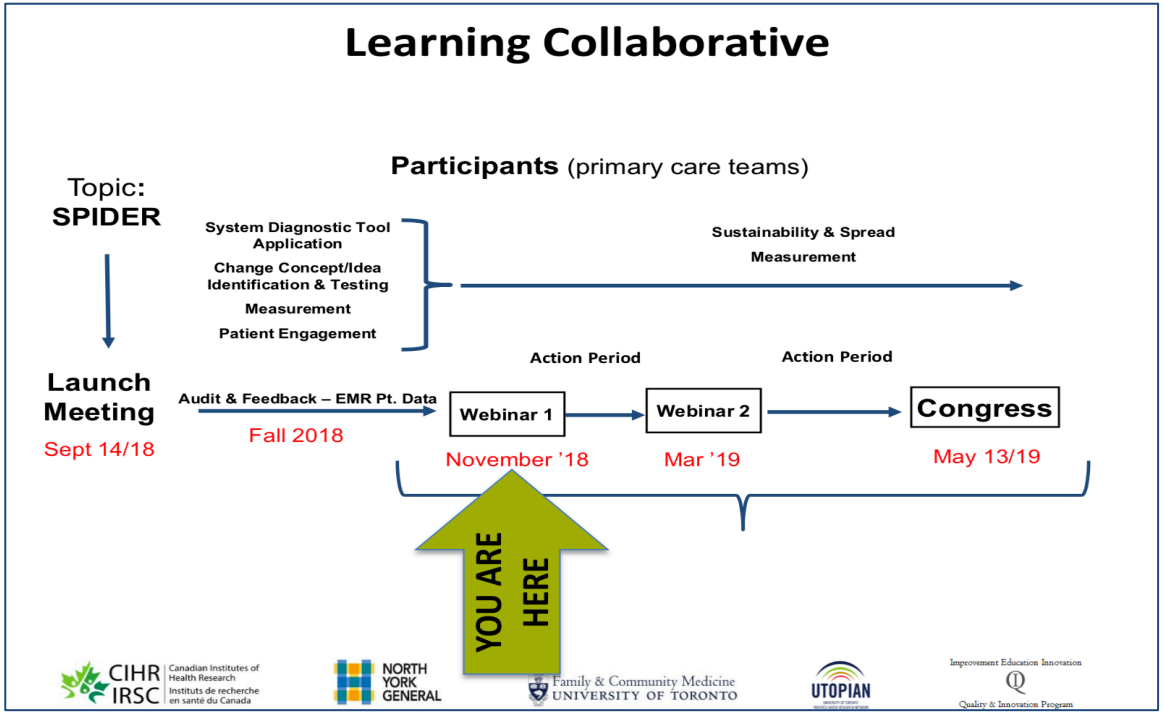
Key Elements of SPIDER Approach	Principle Embodiment
QI Learning Collaboratives ○ Involving interprofessional teams (physicians, nurses, pharmacists, admin) ○ Engaging patient partners throughout the process ○ *'All teach, all learn'*	○ Patient-focused ○ Involvement of the team/community ○ Learning together
Support of Practice Coaches/Facilitators ○ Adapt/guide QI approach for practices ○ Build capacity for using improvement tools ○ Address sustainability to ensure lasting positive change for practices and patients ○ Facilitate inter-team communication and sharing	○ Continuous improvement
Provision of validated and comparable EMR data for feedback and measurement	○ Use of data for decision making & learning



Designing for improvement... *a tried & tested approach*

The Institute for Healthcare Improvement (IHI) Breakthrough Series Model





- A structure to enable inter-team networking, sharing, and QI knowledge and skill capacity building
- A process to facilitate learning between teams and from experts

Quality Improvement Coach

- QI Methodology Guidance & Capacity Building
  - System Diagnostic Tools
  - Patient Engagement
  - Measurement Interpretation & Display
  - Change Idea Generation
  - Testing Change
  - Sustainability/Spread Considerations
  - Sharing ideas from/with others
  - Amplifying your concerns/issues

Quality Improvement Methods

To improve safer prescribing for elderly patients 65+ yrs prescribed 10+ unique medications by MM-YYYY

Patient identification, engagement & deprescribing

Reducing # of older patients prescribed 10+ unique medications who have a PIP*

Patient/family perception of experience and safety

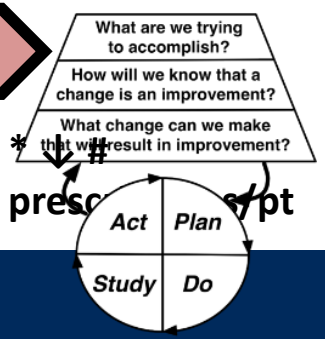
Quarterly EMR data reports

What are we trying to accomplish?

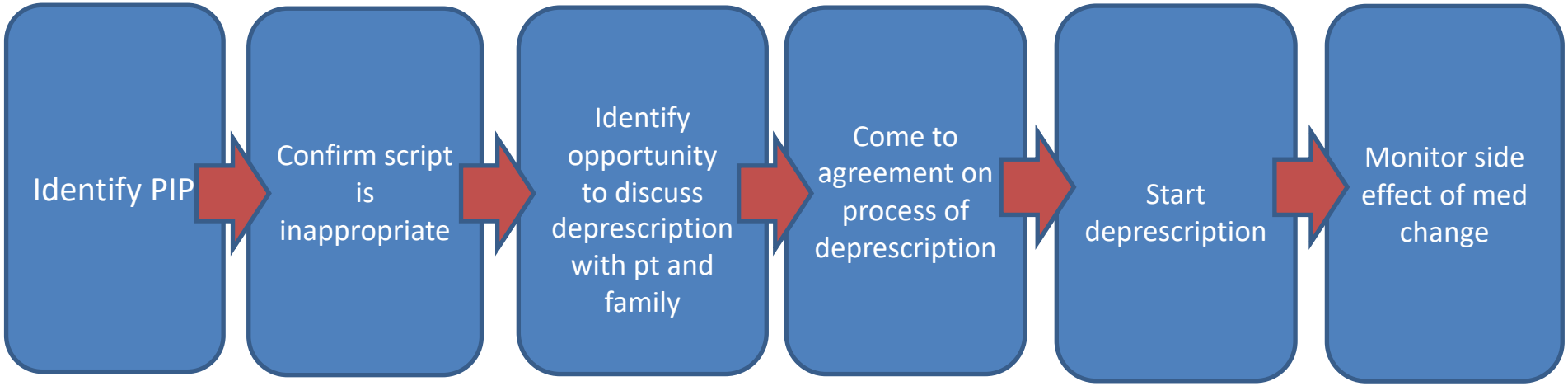
What changes can we make that will result in improvement?

How will we know that a change is an improvement?

Project Set-Up → Diagnostic → Change Idea Generation → PDSAs Testing & Implementation → Spread/ Sustainability



Quality Improvement Methods



Deprescribing Algorithms	Patient Education Materials	Deprescribing Toolkits	Webinars
PPI Antipsychotics Benzodiazepines Sulfonylurea	Patient resource for Use of PPI Treating dementia with Antipsychotics Sleeping pills in older adults PPI patient decision aid Deprescribing information pamphlets	Drowsy without feeling lowsy (deprescribing Benzo toolkit) Bye Bye PPI (deprescribing PPI toolkit)	Deprescribing in Primary care (Choosing Wisely Canada) Shared decision making with pts (deprescribing.org)

* At any point in the process, a clinician may decide if the prescription is still required and process stops for that patient

Easy Tracking in the EMR

Assessment for Sulfonylurea Deprescribing

Last DM Visit:
Last HbA1C:
Measured on:
HbA1C target:
At target: Choose item.

Original Prescriber: Choose item.
Current Provider: Choose item.

Diabetes Management

	Current	Stopped	N/A	Additional Details (e.g. current doses, adjustments, side-effects/intolerance)
Acarbose	☐	☐	☐	
DPP4-i	☐	☐	☐	
GLP1RA	☐	☐	☐	
Insulin	☐	☐	☐	
Meglitinide	☐	☐	☐	
Metformin	☐	☐	☐	
SGLT2i	☐	☐	☐	
Sulfonylurea	☐	☐	☐	
TZD	☐	☐	☐	
Other	☐	☐	☐	

Symptoms of Hypoglycemia

☐ No known hypoglycemic episodes
☐ Asymptomatic hypoglycemia
☐ Episodes requiring third party assistance

Other adverse effects:

☐ Anxiety
☐ Concentration issues
☐ Confusion
☐ Dizziness
☐ Drowsiness
☐ Hunger
☐ Nausea
☐ Palpitations
☐ Speech issues
☐ Sweating
☐ Tingling
☐ Tremor
☐ Vision Changes
☐ Weakness

Please list previous deprescribing attempts and outcomes

Assessment and Plan

To the best of our knowledge, is the patient an appropriate candidate for sulfonylurea deprescribing? ☐ Yes ☐ No

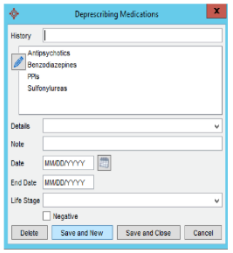
Please comment on rationale below:

If yes, discussion with patient about deprescribing was initiated, and Choose item.
If patient is agreeable, next steps include:

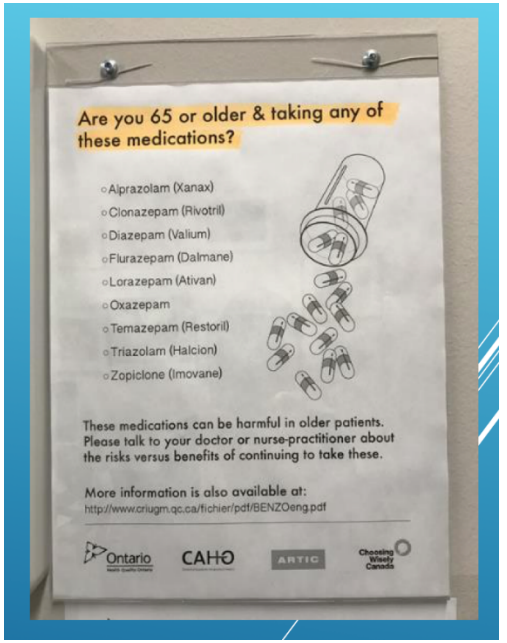
☐ Follow-up booked
☐ Patient resources provided, infographic and handout from deprescribing.org

Resources for providers

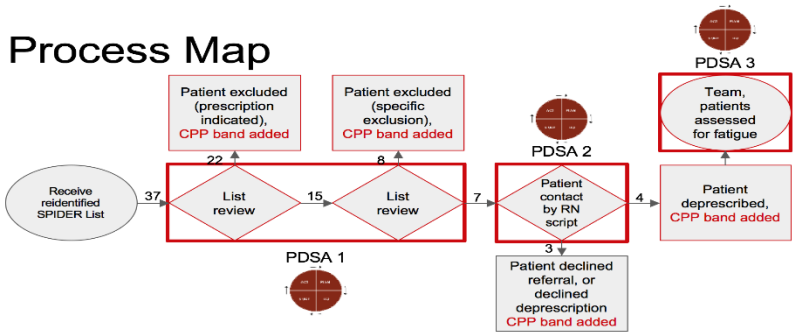
Deprescribing Algorithm
Quick Practice Guidelines



HISTORY	Antipsychotics	Benzodiazepines	PPIs	Sulfonylureas
DETAILS	Deprescribing N/A - DSM 5 diagnosis	Deprescribing N/A - Alcohol withdrawal	Deprescribing N/A - Barrett's esophagus	Deprescribing N/A - Tried and failed
	Deprescribing N/A - Tried and failed	Deprescribing N/A - Sleeping disorder	Deprescribing N/A - Chronic NSAID user with bleeding risk	Deprescribing N/A
	Deprescribing N/A	Deprescribing N/A - Specifically for anxiety	Deprescribing N/A - Documented hx of bleeding GI ulcer	Had discussion - Pt. Agreed
	Had discussion - Pt. Agreed	Deprescribing N/A - Unmanaged anxiety/depression	Deprescribing N/A - Severe esophagitis	Had discussion - Pt. Contemplating
	Had discussion - Pt. Contemplating	Deprescribing N/A - Tried and failed	Deprescribing N/A - Tried and failed	Had discussion - Pt. Declined
	Had discussion - Pt. Declined	Deprescribing N/A	Deprescribing N/A	Has discussion
	Has discussion	Had discussion - Pt. Agreed	Had discussion - Pt. Agreed	Initiated deprescribing - See form
	Initiated deprescribing - See form	Had discussion - Pt. Contemplating	Had discussion - Pt. Contemplating	Deprescribing success
	Deprescribing success	Had discussion - Pt. Declined	Had discussion - Pt. Declined	
		Has discussion	Has discussion	
		Initiated deprescribing - See form	Initiated deprescribing - See form	
		Deprescribing success	Deprescribing success	

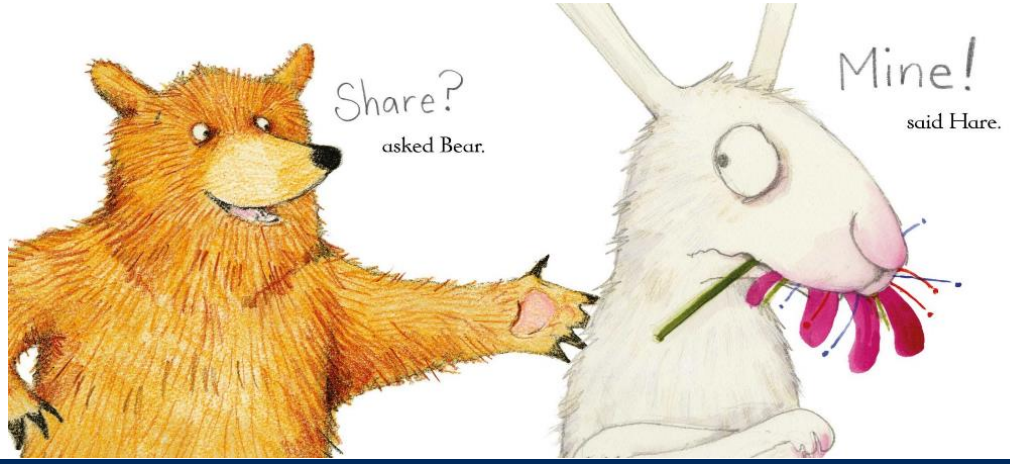


Process Map

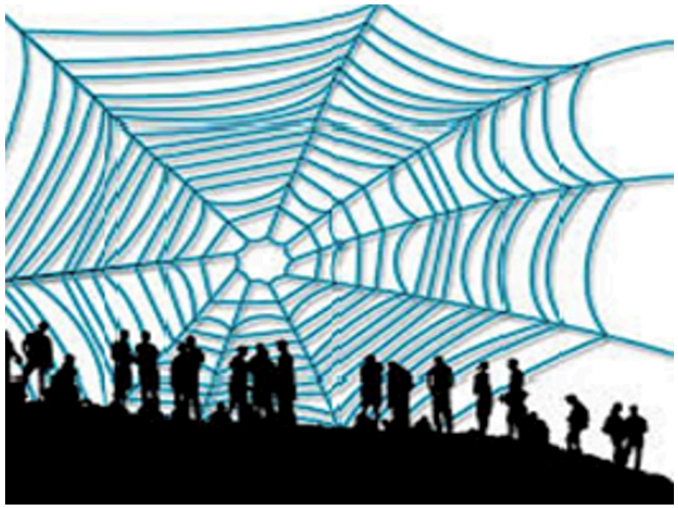


Designing for Improvement… *reflections*

- 1st feasibility site in national project
- Fair degree of capacity for QI work
- Varied teams and practices (solo practices, team-based, community health centres)
- The sustainability question - *'a pharmacist is key!'*
- Patient engagement is at the centre of this work
- Teams respectful & engaged



Designing for Improvement… *did we get it right?*

- A deprescribing project ought to result in fewer meds but is that the only mark of success?
- EMRs are a '*helpful pain*'!
- Challenges in engaging/supporting community colleagues
- Perhaps it is true that '*all data is useless but some is helpful*!'
- Did the work contribute to improved patient safety (awareness)?
- Is there a risk of optimizing one part of the system and risking all!

Thank you!