

# Polypharmacy Risk Reduction in British Columbia, Canada- Practical Experience of Moving From Contemplation to Action

Preventing Overdiagnosis 2017-Towards Responsible Global Solutions

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**Shared Care Polypharmacy Risk Reduction Initiative**

## Disclosure of Commercial Support

- **No commercial financial or in-kind support.**
  - **No potential conflict of interest.**

Objective: To describe our evolving practical experience of deprescribing in British Columbia, Canada

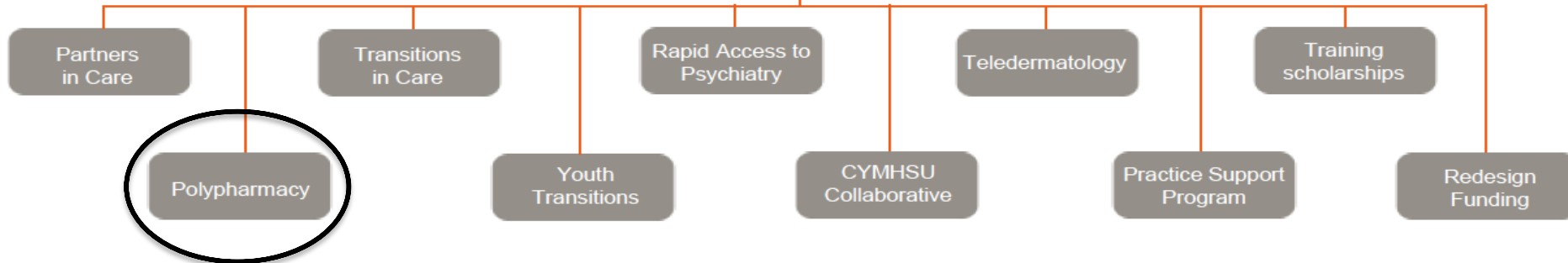
- Framed at the provincial level through the Ministry of Health and Doctors of BC joint Shared Care Committee
- But developed and tested through physicians and the local inter-disciplinary teams in residential care and in acute care.

Highlights Only- Please come talk to me today or at the cocktail reception this evening or after this conference: [rauscherchris50@gmail.com](mailto:rauscherchris50@gmail.com)  
(<http://www.sharedcarebc.ca/initiatives/polypharmacy>)

**Physician Master Agreement  
(PMA)**



**SharedCare**  
Partners for Patients



# BC 4.6M: Health Regions (5) and Divisions of Family Practice (35)-Communities (230)



# Care Environments-Phased Approach

- Residential Care (2012-Present)
- Acute Care (2014-Present)
- First Nations (2016-Present)
- Community (Not Started)

# Polypharmacy: Medications may be inappropriate if:



We treat multiple individual diseases and as a result we give the person an illness:

**POLYPHARMACY**



# Hospitalisation-Associated Disability

Hospitalization is a sentinel event that often precipitates disability. This results in the subsequent inability to live independently and complete basic activities of daily living (ADLs). This hospitalization-associated disability occurs in approximately one-third of patients older than 70 years of age and may be triggered even when the illness that necessitated the hospitalization is successfully treated.

# What Causes Polypharmacy?

## Patient-Centered:

- Multiple comorbidities
- Clinical uncertainty
- The pressure to “Do something”
- Uncertain treatment goals
- Clinical Practice Guidelines
- Drug companies emphasize benefits & downplay the risks
- Multiple prescribers-  
SPECIALIST consultation (10 years ago?)

## System-Related:

- Lack of history
- Lack of communication
- Telephone or fax based medicine
- Transfer back from Acute Care
- Nursing or family reluctance: “Don’t change anything!”
- Treating side effects of another pill
- Free medications

# EVIDENCE

- Garfinkel: Case-control, D/C 3 drugs, re-start 10%, signif dec. hosp and mortality (IMAJ Vol 9, June 2007 pp 430-434)
- Replicated early on in a few residential care homes in BC
- Drug classes rather than Beers or STOPP/START
- Since limited/no evidence in frail elderly looked at general + non-frail elderly
- You Decide Format: Evidence + Practice Points, e.g. Statins:

## **BENEFITS IN PATIENTS OVER THE AGE OF 65 – data for people over age 80 are minimal**

### **In primary prevention over 3.5 years:**

**~98% see no benefit**

**1.2% avoid MI**

**0.7% avoid stroke**

### **In secondary prevention over 5 years:**

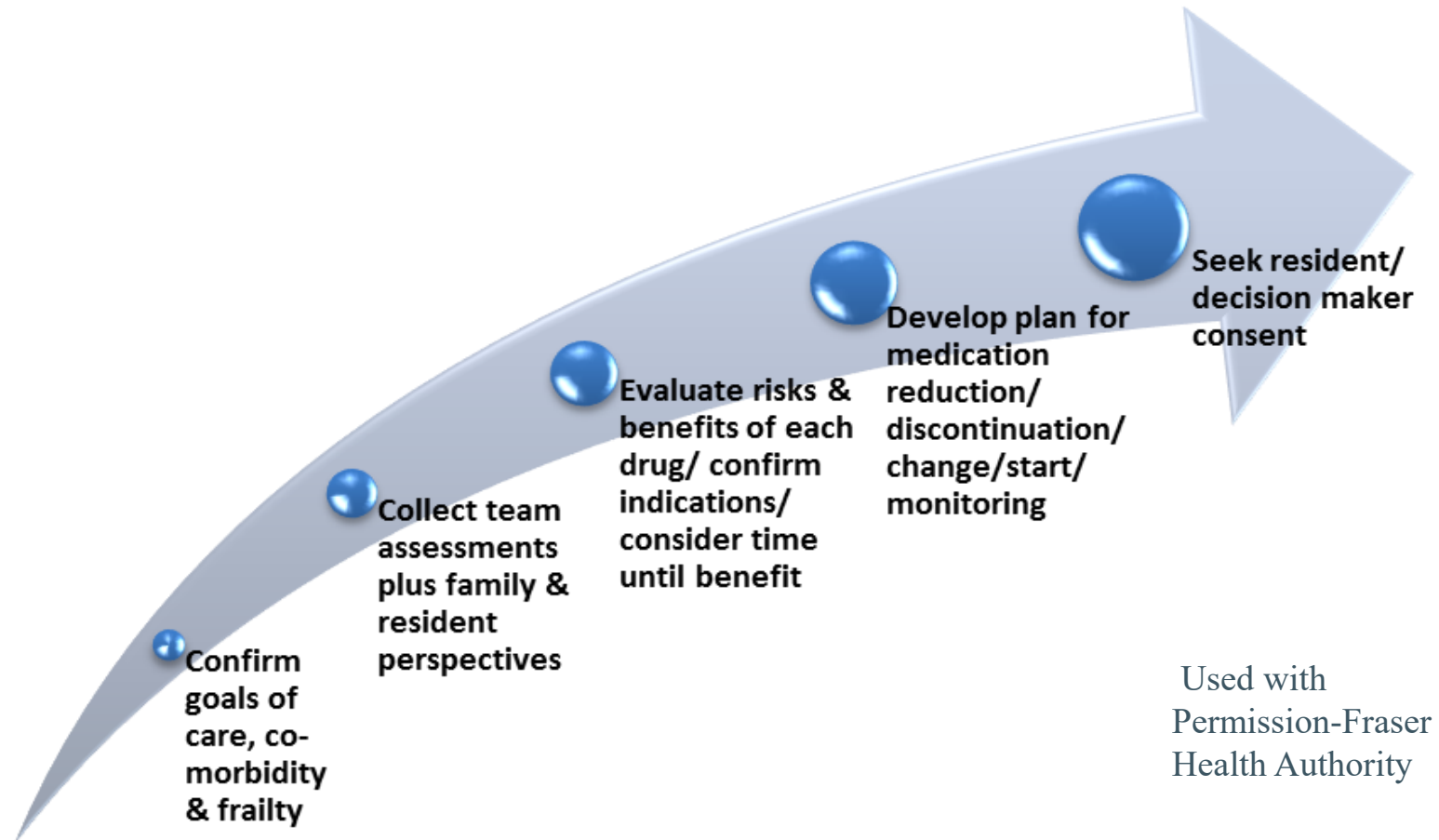
**~92% see no benefit**

**2.5% avoid MI**

**2% avoid stroke**

**3% avoid death**

# Approach To Person-Centered Medication Decisions



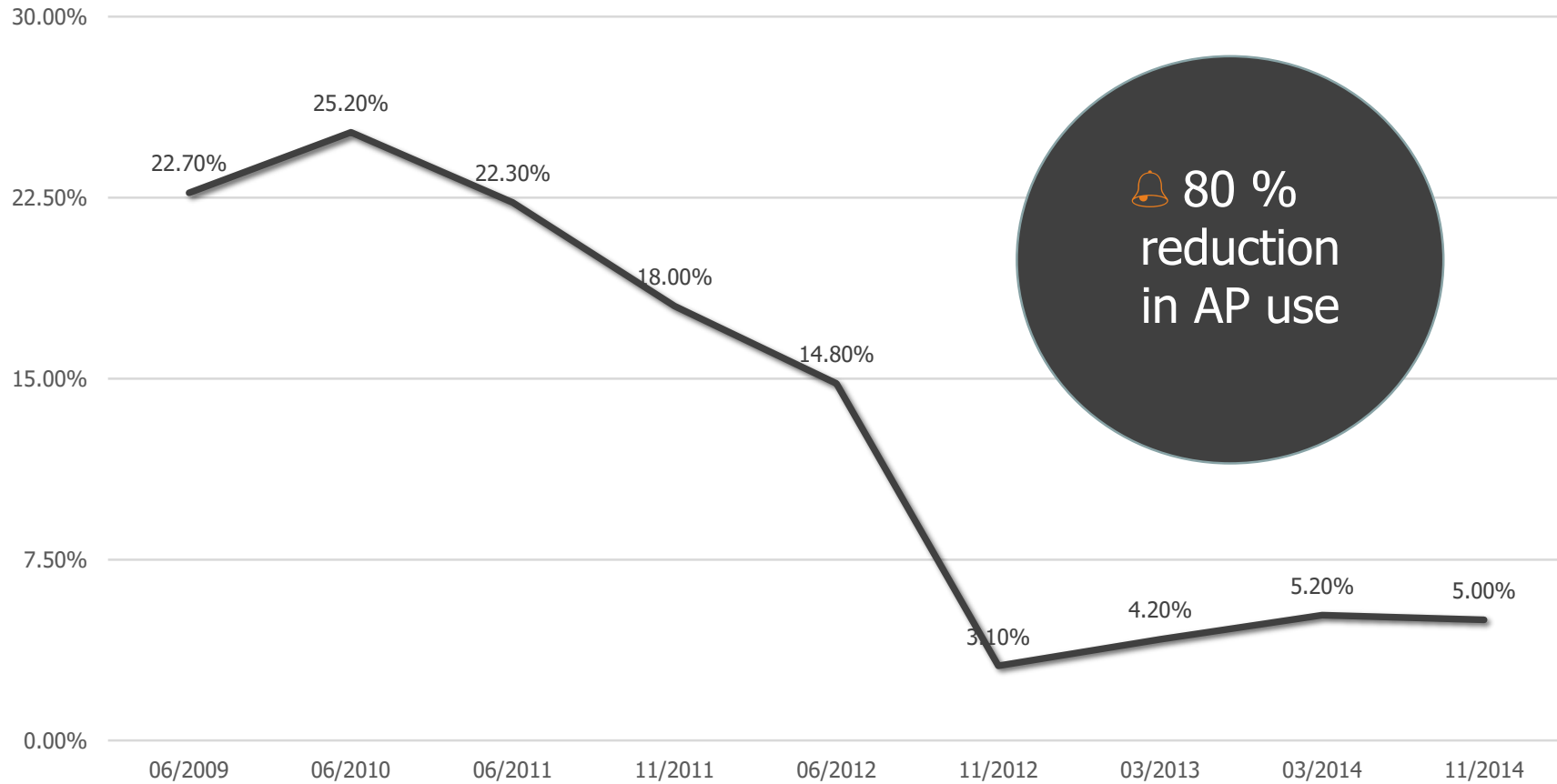
# Set the Context in GOC - Symptoms, Function Health Care CG burden

(Adapted from Template of Dr. Ted Rosenberg, Victoria, BC)

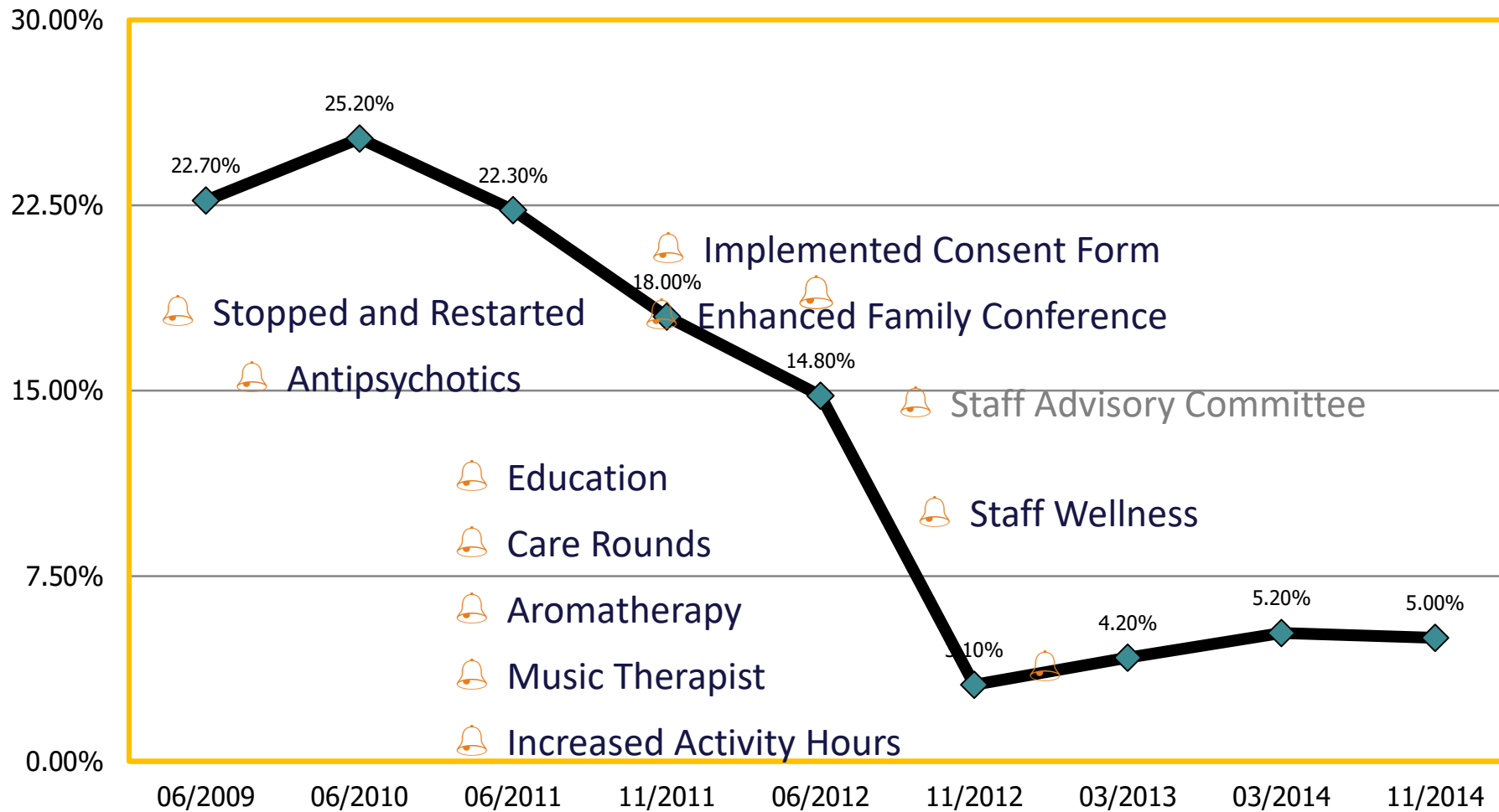
Focus on Clinical Issues/Symptoms	Agents/Factors	Actions	Monitoring Plan/Impact of Change

# Agassiz-Our Story . . . . Why listen to us?

Because we tried to reduce our use of antipsychotics we failed, we tried again - learning some lessons along the way.



## The results - sustained



Rate of antipsychotic use was 6.1 % in May 2016 at Cheam Village. Rate typically varies between 5 and 10%.

# Systems Strategy: Residential Care Initiative

## GP Services Committee

- *Best Practice Expectations*
  - 24/7 availability and on-site attendance when required
  - Proactive visits to residents
  - Meaningful medication reviews
  - Completed documentation
  - Attendance at case conferences



# Engagement so far

- 1900 Physicians who have patients in ResCare
- 30% of docs look after 70% of Residents
- 25 out of the 35 Divisions at various stages of engagement → We have had 600+ ResCare Docs at our sessions!

# Acute Care

- Prototyping: Medicine and Surgery (Fractured Hip)
- Challenges: No systematic medication reviews + lack of clinical pharmacy services
- Start with looking at current (mapping), limited and evolving quality improvement approach; champions/working group
- Most focus on discharge phase- med review/reconciliation/communication/ patient education
- Systems strategy: discharge med rec an accreditation standard

# First Nations

- Health Authority ↔ Individual Communities ↔ Primary Care
- Understand First Nations Perspectives: 'Coyote Story'
- Work With How Services Are Configured: 'Nursing'
- Physicians Leaders? Pharmacist Involvement?
- Currently Health Authority Focusing on Nursing

# Evaluation

- Being Established
- Provincial: Through administrative data sets, potential to look at all over 65 across care environments
- Residential Care-Local: ‘Data Primer’

# Lessons Learned/Enablers

- Build a ‘Coalition’ + Leverage ‘Champions’
- ‘Prototype’ When No Established Approach: Developmental (Quality Improvement)- Learned and Adapted As We Went, Local Solutions
- Centre of Goals of Care-Then Can Look at ‘Evidence’/Lack of Evidence
- Understand and Work With Culture (Team), Clinical Approach and Workflow  
→ Develop and Define An Approach, Then
- Identify and Sustain/Spread Through a Systems Strategy/Requirement:
  - BC Residential Care Initiative
  - Acute Care: Discharge Medication Reconciliation

I take Ibuprofen for the headache  
caused by the Ramipril I take for the  
hypertension from the Methylphenidate

I take for the short attention span  
caused by the Stemetil I take for  
the motion sickness I got from the  
Imodium for the diarrhoea caused  
by Orlistat for the uncontrolled  
weight gain from the Paroxetine I  
take for the anxiety from the  
Simvastatin I take for my high  
cholesterol because exercise and  
good diet are just too much  
hard work.



# Residential Care Outcome Measures

## St. Joseph Hospital, Comox, BC

### 115 Chronic Care beds

Time Frame	# Patients on more than 5 medications	# Patients on more than 9 medications
Aug 1-Oct 31 2013	83%	52%
Aug 1-Oct 31 2014	63%	23%
Aug 1- Oct 31 2015	66%	19%
July 1 – Oct 6 2016	50%	21%

# Acute Care Outcome measures

## St. Joseph Hospital, Comox, BC

### 120 beds

Time Frame	# Admissions prevented	# Pharmacy Recommendations Accepted	Medication Reduction
June 2014 to May 2015	36	84%	60-77% 4-5 meds
June 2015 to May 2016	41	91%	66 - 83% 5-6 meds

Geriatric pilot project June 2014

Target: high risk elderly patients to reduce inappropriate medications

Saved \$88,000 June 2014 to May 2015, \$84,000 June 2015 to May 2016