Osteoarthritis Models of Care Workshop: An Osteoarthritis Toolkit For Family Practice

AAC Annual Meeting - October 27, 2016

Dr. Gillian Hawker	Sir John and Lady Eaton Professor and Chair of Medicine, Faculty of Medicine, University of Toronto
Ms. Gunita Mitera	Director, Program and Practice Support, The College of Family Physicians of Canada
Ms. Jaime Coish	Executive Director, Arthritis Alliance of Canada
Dr. Natasha Gakhal	Rheumatologist, Women's College Hospital, Toronto

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Workshop Agenda

1. Getting Started (15mins)
   a) Welcome and introduction
   b) Workshop objectives/session overview

2. Feedback and Key Learnings from the Patient Reported Outcomes in Knee Osteoarthritis to Improve Management in Primary Care Project (20mins)

3. Osteoarthritis Clinical Toolkit for Family Practice (20mins)
   a) The approach to toolkit development
   b) Progress to date
   c) Project milestones and timelines

4. Small group discussions and report backs (60mins)

5. Adjournment (5min)

Session Objectives

- Osteoarthritis quality improvement in primary care example and key learnings
- Overview of the approach to developing the OA toolkit; progress to date
- Implementation and dissemination of the toolkit. What can you do to help?

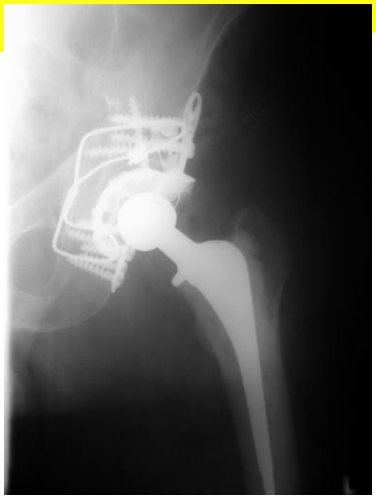
OA is the most common arthritis

three-quarters of the people who have arthritis have OA

Living with arthritis

- 2010 – 1 in 8
- By 2040 1 in 3

- Women > men
- Knee OA most likely to lead to disability
- Hand OA most common disease affecting hand function in elderly
- 95% hip/knee replacements for OA



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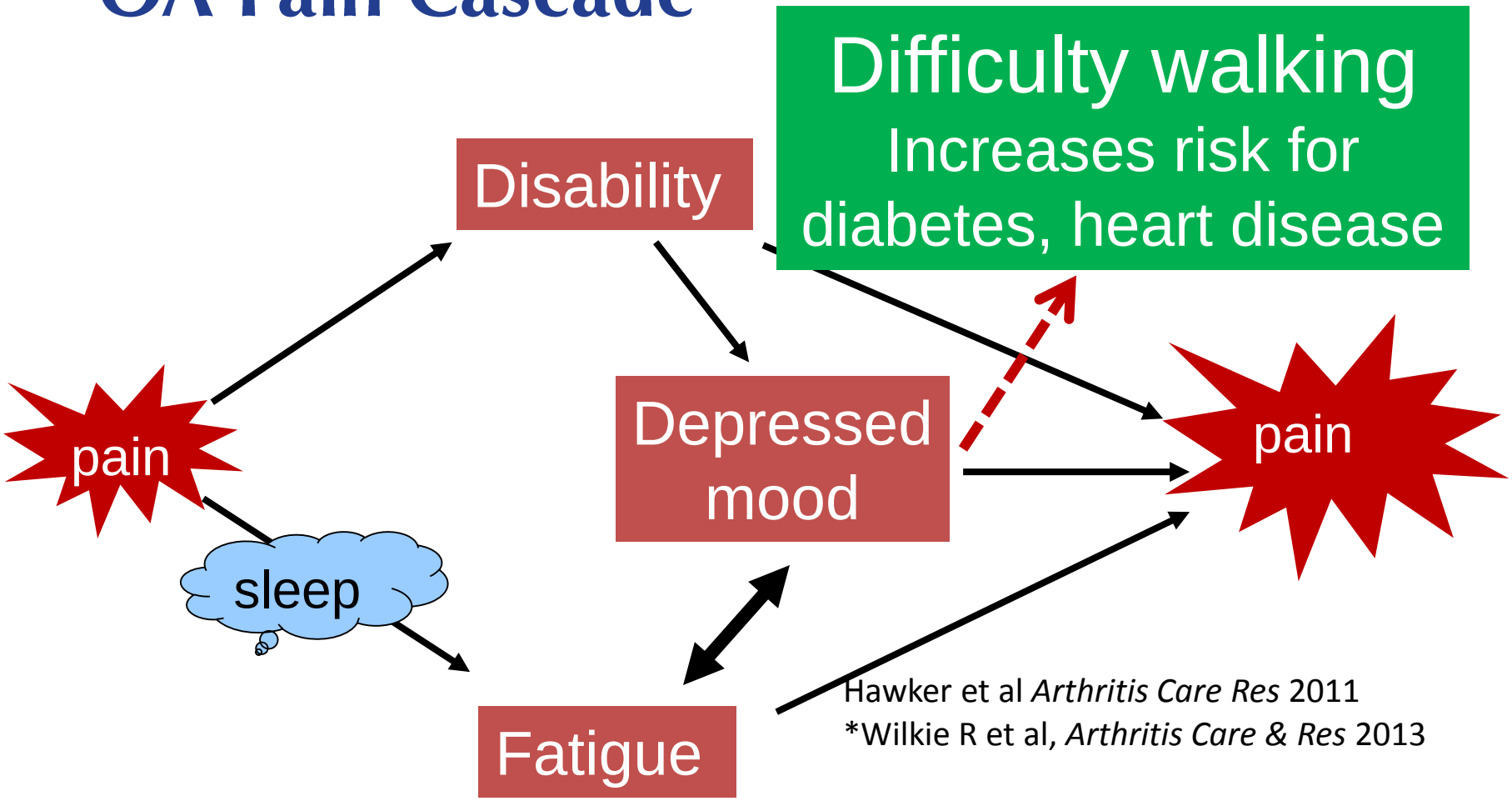
Painful OA….

- Second most frequent reason for visit to physician
- Accounts for most anti-inflammatory drug use
- #1 reason why people have joint replacement surgery

Pain on joint use, stiffness with inactivity, bony tenderness, effusion, limited ROM, ↓ physical function

OA Pain Cascade



Hawker et al *Arthritis Care Res* 2011
*Wilkie R et al, *Arthritis Care & Res* 2013

Co-Existent Medical Conditions

- 90% of people 65+ years with OA have ≥ 1 other chronic condition (common risk factors: aging, obesity)
  - Heart disease
  - Diabetes
  - High blood pressure
- Comorbidity in OA is a *major* barrier to OA care
  - Competing demands
  - Contraindications to OA therapies

US Medicare & Medicaid Report, 2012 Edition. Baltimore, MD.
Trelle S et al (2011) BMJ 342:c7086.
Hackam DG et al 2010. Can J Cardiol 26: 249-258.
Nieves Plaza et al J Clin Rheum 2013
K Magnusson et al Arthritis Care & Res 2014

2014 OARSI Guidelines for Knee OA

Core treatments

Appropriate for all individuals

Land-based exercise
Water-based exercise
Weight management
Self-management & education
Strength training

Knee OA *without* other health problems

Biomechanical interventions
Intra-articular corticosteroids
Topical NSAIDs
Capsaicin
Oral Cox-2 inhibitors (selective NSAIDs)
Duloxetine
Acetaminophen

Multi-joint OA *without* other health problems

Biomechanical interventions
Intra-articular corticosteroids
Oral non-selective NSAIDs
Oral Cox-2 inhibitors (selective NSAIDs)
Duloxetine
Acetaminophen

Knee OA *with* other health problems

Biomechanical interventions
Intra-articular corticosteroids
Topical NSAIDs

Multi-joint OA *with* other health problems

Biomechanical interventions
Intra-articular corticosteroids
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Best Practices for OA Dx and Rx

Recommendation:	Evidence for the recommendation
Standardized screening for OA	OA symptoms ascribed to aging
Clinician who can perform a joint examination	Essential to diagnosis and management of OA
Clinician who can aspirate and inject a knee	Rule out other diagnoses & for treatment
Clinicians who can assess / recommend biomechanical therapies	Excessive joint load is a risk factor for OA progression
Standardized self-management program	Improves symptom management
Appropriate OA education materials (health literacy and language)	Effective communication / education improves treatment adherence / informed decision making
Valid / reliable questionnaires to assess OA symptoms	Evaluate response to therapy
Screening for depression if chronic OA pain	Depression exacerbates OA symptoms / reduces adherence to therapies
Established referral / liaison arrangements with a multi-disciplinary team of health providers	Required for evidence-based OA care

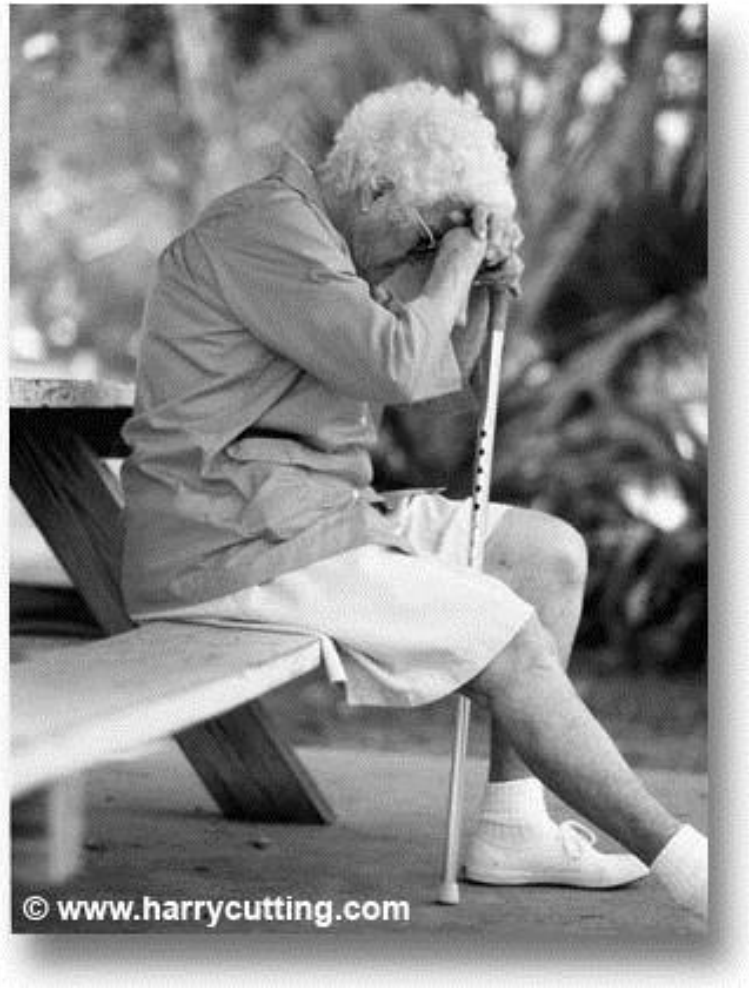
Non-surgical Rx in knee OA patients referred for surgery (n=1462)

Treatment type	'Ever' used - %
Exercise	76.7%
Physiotherapist	47.9%
Weight loss (if overweight or obese)	67.8%
Pain management (any) Acetaminophen NSAIDs Joint injection Opioids	97.3% 76.0% 77.0% 71.4% 42.8%
Walking aids	38.4%
Comprehensive Rx	61.0%

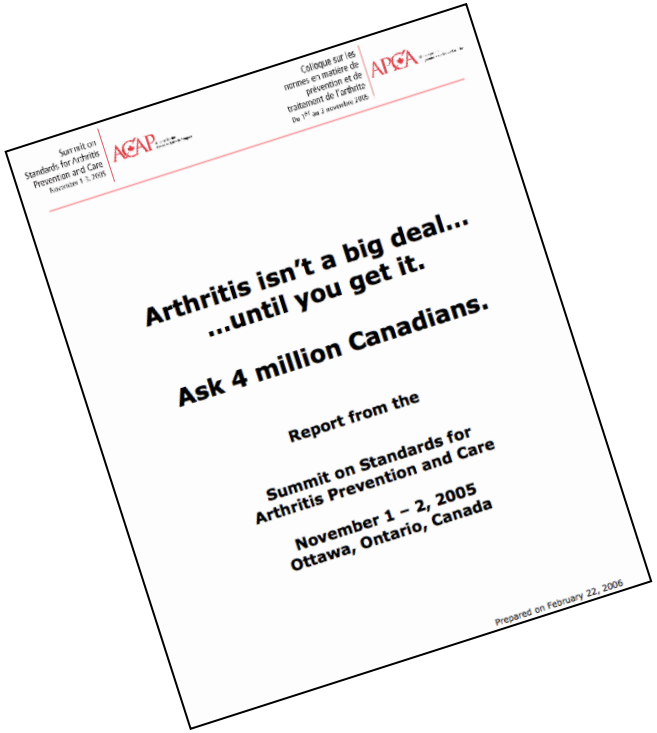
Barriers to OA Care

- Societal attitudes / beliefs about OA
  - Knowledge, awareness
- Physicians' comfort with joint exam / injections
- Attitudes and beliefs about 'pain killers'
- Co-existent medical problems
  - Competing demands
  - Contraindications to OA therapies
    - Patient-physician dialogue re treatment priorities
  - Lack of guidance re OA management in the setting of *other* health conditions

We can do *much* better!



2005 Summit Standard on Arthritis Prevention and Care



- Arthritis community developed actionable standards for arthritis prevention and care
- Consensus obtained from a broad group of arthritis stakeholders from across Canada including people living with arthritis
- 12 Standards + 3 Provisional Standards requiring additional research

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Standards for OA Prevention & Care

To educate & prevent OA:

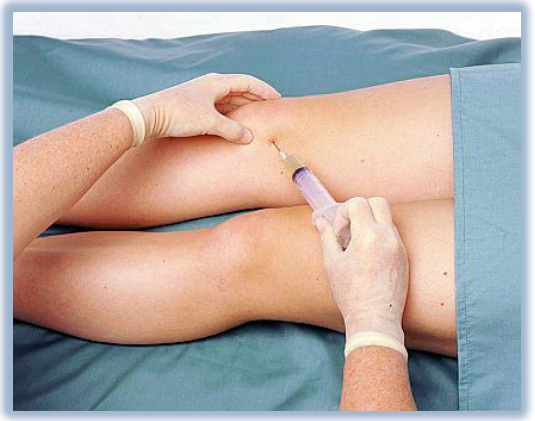
- Every Canadian aware of OA (1)
- Every Canadian understands & implements prevention strategies to reduce sport / recreation injuries (13 - *no longer provisional*)
- Every Canadian informed about importance of achieving/maintaining healthy body weight & *actively encouraged* to engage in physical activity (4)

To treat OA:

- Every Canadian with OA must have timely access to appropriate integrated health care (14 – *no longer provisional*)
- Every Canadian informed about importance of achieving/maintaining healthy body weight & *actively encouraged* to engage in physical activity (4)
- Relevant health professionals can:
  - Perform a valid, standardized, musculoskeletal screening assessment (5)
  - Recognize osteoarthritis as a significant health issue & provide evidence-based care (7)
- Patient preferences, including risk-benefit trade-offs, incorporated into …prescribing of OA medications (11)
- Participation in social, leisure, education, community and work activities used to evaluate patient outcomes by health professionals (3)

The Path Forward is Through Partnership

Tools for an OA Toolkit for Primary Care Providers



- Existing OARSI / EULAR / ACR guidelines + recent meta-analysis updates
- American College of Physician's (ACP's) OA Home Builder
  - Ensuing the primary care practice is able to deliver evidence-based OA care
    - Resources – local, regional
    - Knowledge – to educate and manage OA
    - Skills – MSK examination, joint aspiration & injection
    - Partners – pharmacist, PT, OT, dietician
    - Consultants – orthopedic surgery, rheumatology, sports medicine

OA in Primary Care:

A practice innovation pilot project funded by the AFP at Women's College Hospital Toronto, Ontario

Dr Noah Ivers (Family Practice)

Dr Natasha Gakhal (Rheumatology)

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Disclosures

- none

The Question

How do we improve management of knee OA in primary care?

- Multiple guidelines for management of knee OA
- Current care is suboptimal
- Primary care physicians (PCPs) have competing demands
  - Complex patients with multiple co-morbidities
  - Limited time and resources
  - Lack of belief/knowledge of benefits of treatments
  - Access to rheumatology is difficult

The Approach

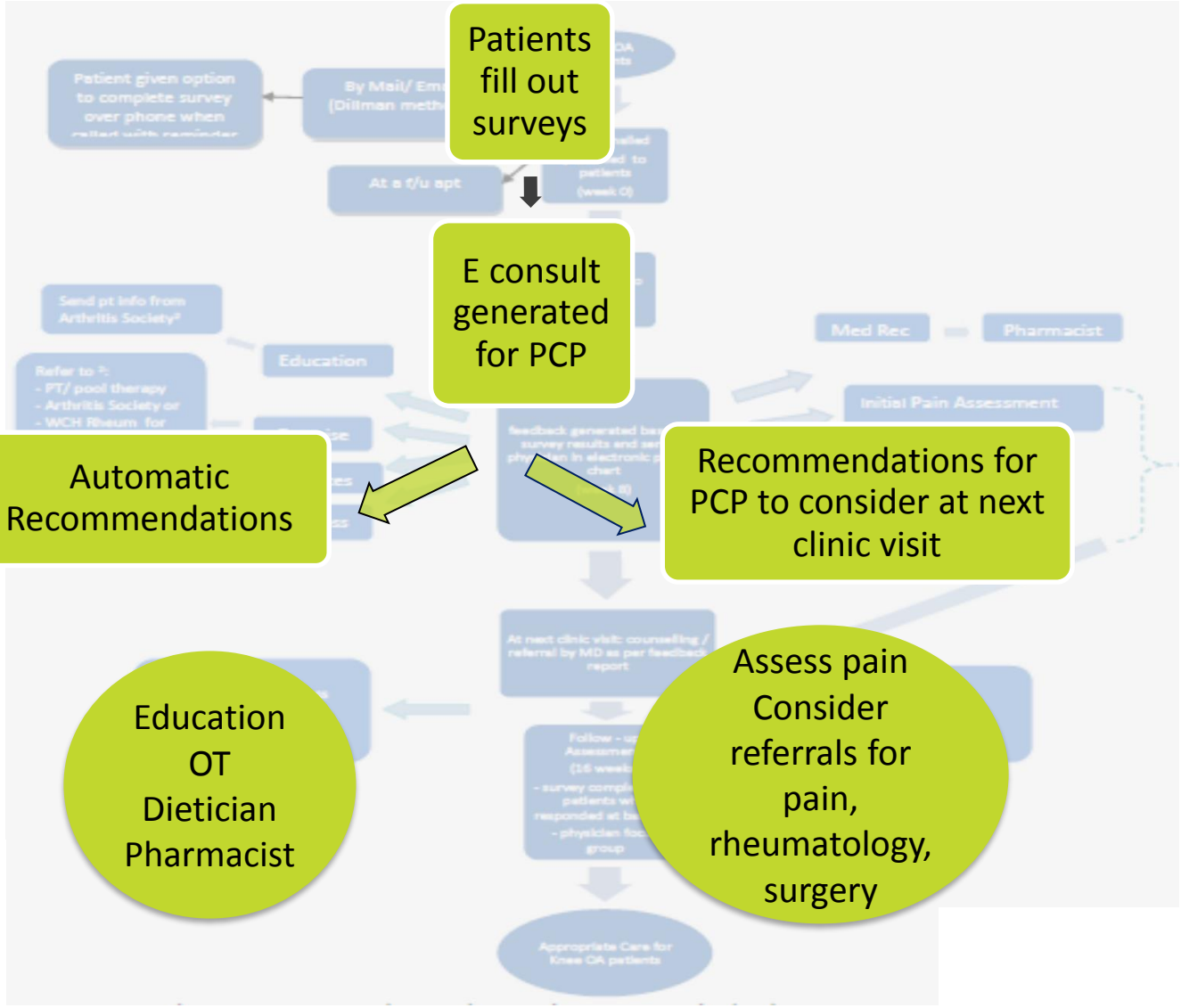
- Patient audit and feedback regarding management of knee OA to guide future care
- Quality improvement approach

  - Implement an intervention
  - Real time
  - Real patients
  - Typical clinical situation

  => ability to *assess* implementation and *change* in a ***rapid manner***

The Approach

- Identified all patients with knee OA in the family practice (approx. 800 patients among 30 primary care physicians)
- Patients completed 3 surveys:
  - OA care that they have received to date
  - Pain (ICOAP)
  - Impact on function (WOMAC)
  - Surveys were completed at t= 0 weeks and t= 16 weeks


Patients fill out surveys
E consult generated for PCP
Automatic Recommendations
Recommendations for PCP to consider at next clinic visit
Education
OT
Dietician
Pharmacist
Assess pain
Consider referrals for pain, rheumatology, surgery
Patient given option to complete survey over phone when
At a f/u apt
Send pt info from Arthritis Society²
Education
Med Rec
Pharmacist
Initial Pain Assessment

OA Quality Indicator Questionnaire

provided.

	Yes	No	Don't remember
1. Have you been given information about how the disease usually develops over time?	☐	☐	☐

	Yes	No	Not Overweight
5. If you are overweight, have you been advised to lose weight?	☐	☐	☐

	Yes	No	No Such Problems
7. If you have had problems related to daily activities, have these problems been assessed by health personnel in the past year?	☐	☐	☐
8. If you have problems with walking, has your need for a walking aid been assessed? (e.g. cane, crutch or walker)	☐	☐	☐

	Yes	No	No pain/ discomfort
10. If you have pain, has it been assessed in the past year?	☐	☐	☐

Osteras, N et al. Arthrits Care Res (Hoboken) 2013 Jul; 65 (7):

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E- consult to PCP

A) ACTIONS TO BE COMPLETED BY THE OA TEAM *WITH YOUR APPROVAL*

- ☐ Referred to Arthritis Society for education about OA, disease progression, treatment options
- ☐ Referred to dietician for counselling on weight loss
- ☐ Referred to OT for assessment of ADLs and need for aid devices
- ☐ Referred to pharmacist for review of NSAIDs and perform medication reconciliation

B) ACTIONS TO BE COMPLETED AT THE NEXT CLINIC VISIT

The following care gaps could be addressed at the patient's ***next clinic visit with you***:

- ☐ Educate about OA, disease progression, treatment options including both non pharmacological (lifestyle and physical education) and pharmacological
  - -> encourage attendance at Arthritis Society
  - -> educational pamphlets are available on the portal under MSK / OA
- ☐ Provide specific advice to pursue exercise / physical therapy
- -> locations of PT clinics, community programs and pools are available on the portal under MSK/OA
- ☐ Counsel on weight loss -> can refer to dietician if not done above
- ☐ Assessment of ADLs and/ or need for devices -> can refer to OT if not done above
- ☐ Pain assessment
- ☐ Mood assessment
- ☐ Patient has severe suboptimal controlled pain-> consider referral to Toronto Pain Medicine Institute Network
- ☐ Review benefits and side effects of NSAIDs -> can refer to pharmacist if not done above
- ☐ Consider referral to rheumatology for cortisone injection
- ☐ Consider referral to orthopaedics for surgery

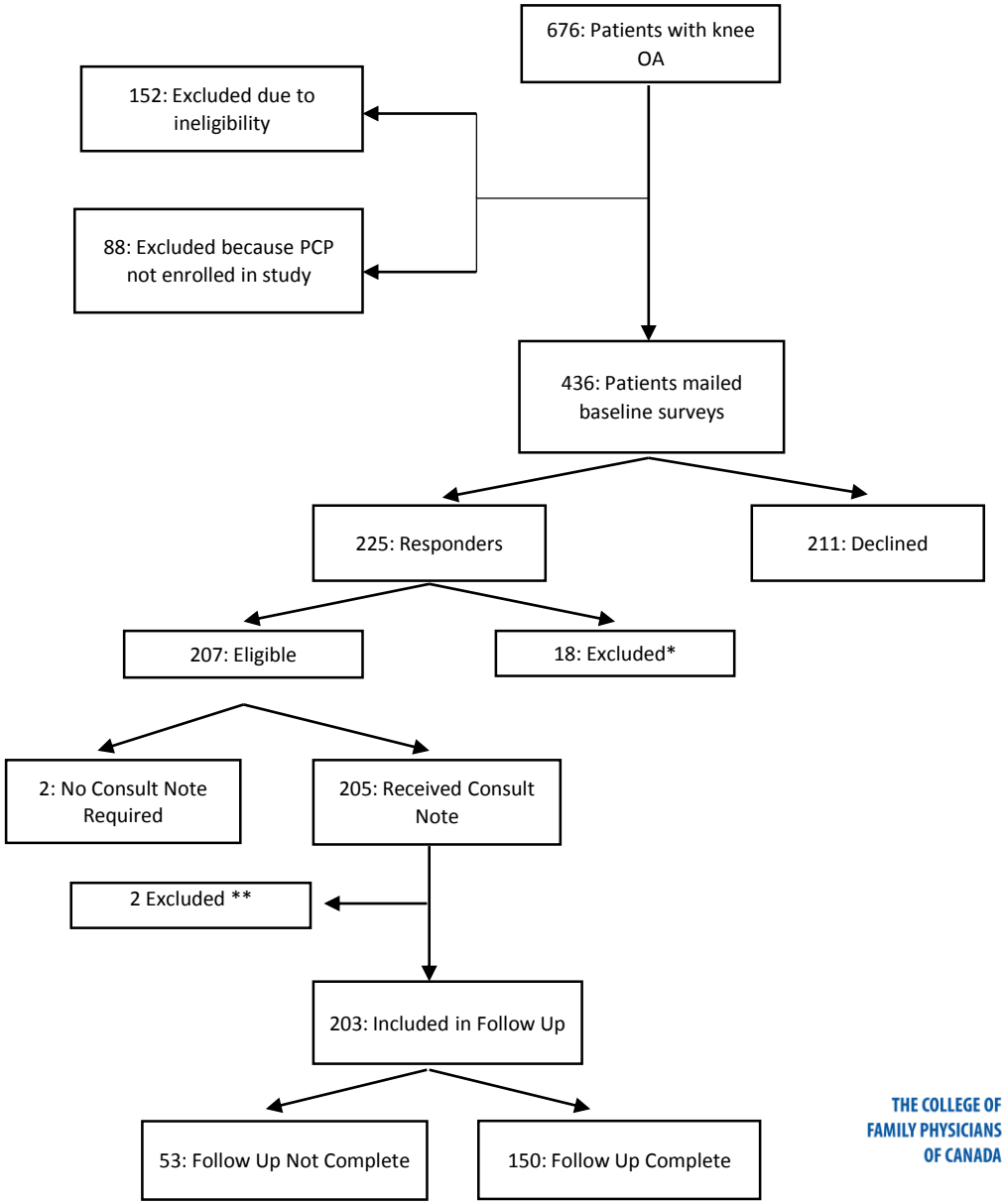
What we had:

- Dietician
- Occupational therapy
- Pharmacist
- Research student

What we did not have:

- Physiotherapy
- Extra time commitment from PCPs

THE RESULTS



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Patient Demographics by Response to Baseline Survey

Characteristic	Total	Responders	Non-Responders
Patients, N	436	225	211
Female, N (%)	340 (78.0)	179 (79.6)	161 (76.3)
Age in years, mean (SD)	64.2 (9.4)	64.7 (9.5)	63.7 (9.4)
Number of comorbid conditions, mean (SD)	2.8 (2.3)	2.9 (2.5)	2.6 (2.1)
Income Quintile, N (%)			
1	76 (17.4)	36 (16.0)	40 (19.0)
2	71 (16.3)	43 (19.1)	28 (13.3)
3	69 (15.8)	31 (13.8)	38 (18.0)
4	83 (19.0)	39 (17.3)	44 (20.9)
5	135 (31.0)	74 (32.9)	61 (28.9)
9	2 (0.5)	2 (0.9)	0 (0.0)

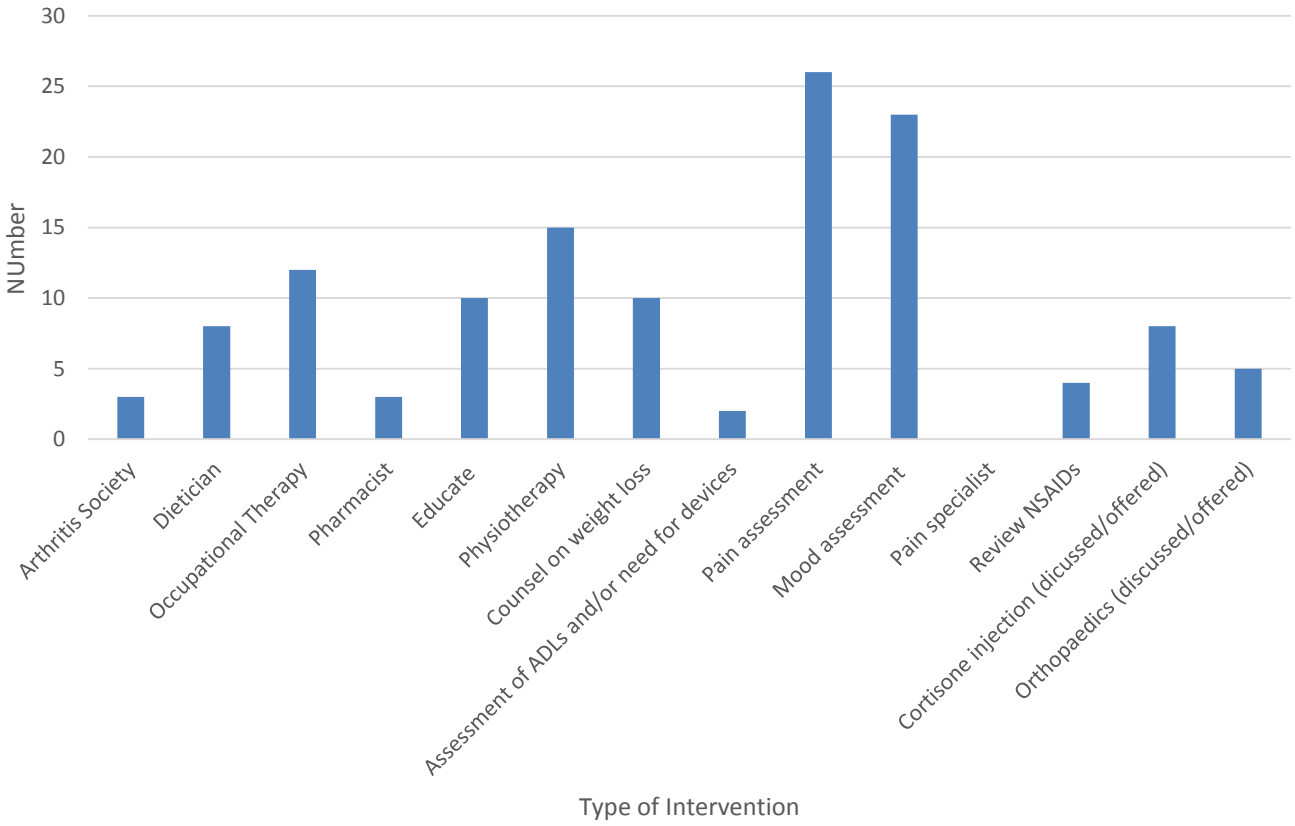
Characteristics of patients who were eligible to receive intervention, n=207

Characteristic	
Patients, N	207
Female, N (%)	165 (79.7)
Age in years, mean (SD)	64.6 (9.2)
Number of comorbid conditions, mean (SD)	2.9 (2.3)
Income Quintile, N (%)	
1 (lowest)	32 (15.5)
2	42 (20.3)
3	29 (14.0)
4	37 (17.9)
5 (highest)	66 (31.9)
missing	1 (0.5)
Baseline OA QI Questionnaire Score, mean (SD)	58.6 (22.3)
Baseline ICOAP Score (N = 199)	
Constant Subscale	18.3 (24.3)
Intermittent Subscale	30.2 (22.4)
Baseline WOMAC pain subscale (N = 199), mean (SD)	5.8 (4.4)

Pre and Post OA QI Questionnaire Scores

	N	Baseline	Follow Up	Difference	95% CI
Total OA QI Questionnaire	150	58.7	66.7	8.0	+4.08, +11.91
Education	148	47.7	57.0	9.2	+3.86, +14.61
Weight loss	148	72.0	80.7	8.8	+1.40,+16.17
ADLs	149	57.4	67.4	10.1	+2.48,+17.65
Pain*	131	47.3	58.8	11.5	+2.20,+10.15
Surgery	140	90.7	87.9	-2.9	-8.41, +2.42
ICOAP					
Constant Subscale	142	17.9	16.9	-1.0	-4.01, +2.04
Intermittent Subscale	142	30.6	28.1	-2.5	-5.57, +0.64
WOMAC Pain Subscale	144	5.7	5.0	-0.6	-1.06,-0.15

Type and Number of Interventions Completed



Of the 203 patients included in the follow up:
- 65 patients underwent at least 1 clinical action and
- a total of 144 clinical actions were completed

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Survey of PCPs

- Surveyed twice during study period
- Received a "Quality of Care" report:
  - how well the practice manages knee OA vs how well the individual PCP manages knee OA
  - Action items for next steps
- Response:
  - *Process did not increase workload*
  - *Unclear if process helpful*
  - *Found "Quality of Care" report helpful*

Summary of Results

Using a quality improvement approach, involving audit and feedback of patient reported experience and outcomes we showed:

- an improvement in the management of knee OA
  - *Education*
  - *Weight loss*
  - *Activities of daily living*
  - *Pain assessment by PCP*

What can we learn from this project?

- What we did well
  - Using a combination of methodologies
  - Involved PCPs at the planning stages of the intervention
  - Intervention was part of normal workflow or did not disrupt normal workflow
  - Provided feedback to PCPs that was: clinically relevant, from a trusted colleague, and had clear targets (action plan)

What can we learn from this project?

- What we could improve:
  - More patient input at the planning stages
  - administrative burden
  - Multi-step manual process
  - Consider generalizability of intervention

Thank you!

The Team:

Noah Ivers
Roni Propp
Karishma Ramjee
Leila Keishajvee
Sandra DaSilva
Nicole Bourgeois
Todd Tran
Leigh Hayden

QUESTIONS

Osteoarthritis Clinical Toolkit for Family Practice

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PROGRAMS AND PRACTICE SUPPORT
PROGRAMMES ET SOUTIEN `A LA PRATIQUE

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Centre for Effective Practice
Best Evidence • Best Practices • Better Health

Our goal: Close the knowledge to practice gap for osteoarthritis care

Our target audience: Primary health care team

Toolkit Purpose:
To Support The Primary Care Team In Their Everyday Practice

Traditional toolkit

Modern day toolkit

- Key ingredients of intervention
- Measurement of performance
- Sustaining early successes

Source: Choosing Wisely Canada

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Supporting Evidence: To Build OA Toolkit For Primary Care

- 2014 OARSI guidelines for the non-surgical management of knee OA

- American College of Physicians OA "Home Builder" module

Progress To Date

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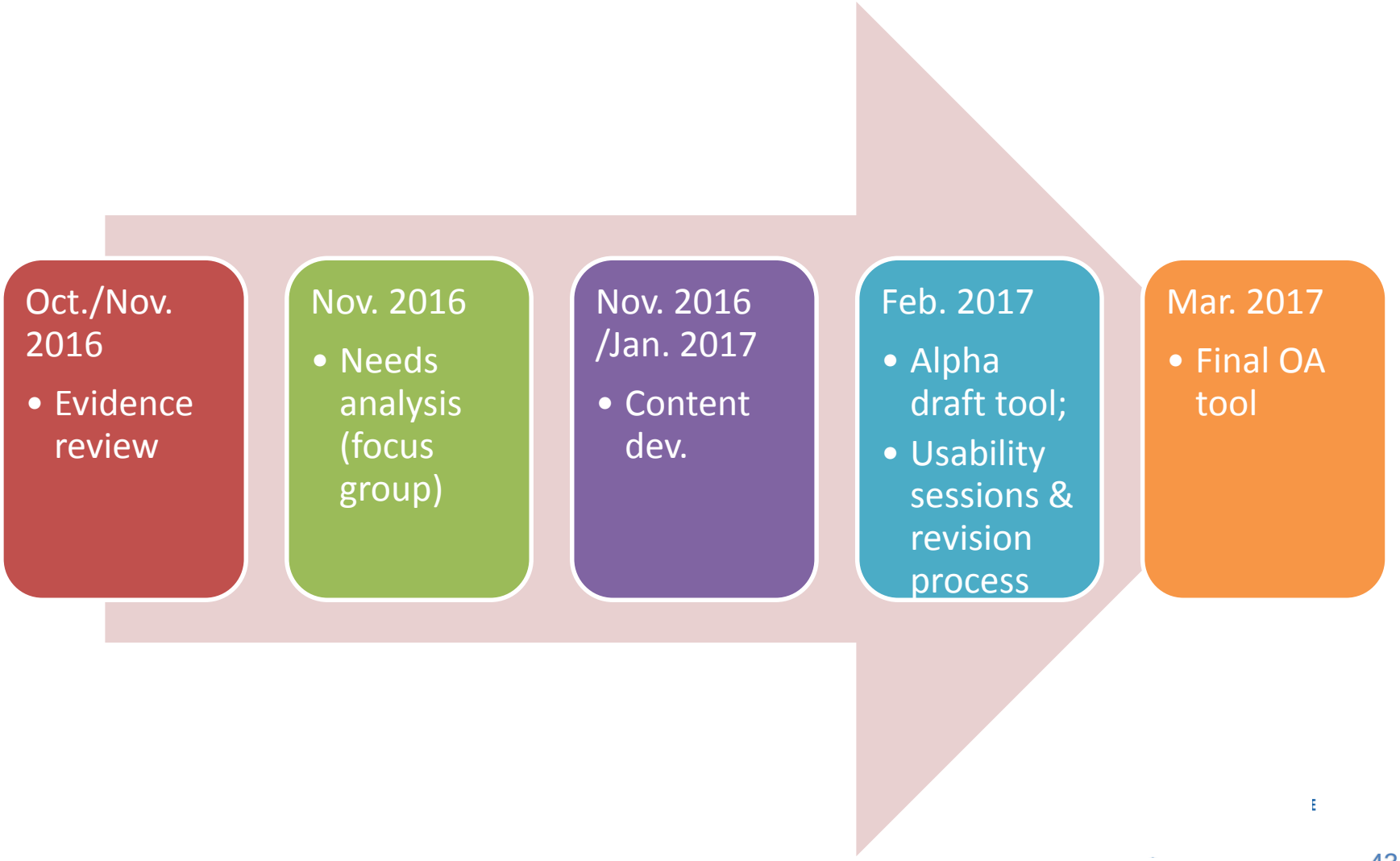
Next Steps: CEP's Tool Development Process

1. Planning & Preparation	• Identify topic & purpose • Establish working group/leads • Identify resources & players
2. Evidence Collection & Needs Assessment	• Initial needs & review of scope • Knowledge selection, evaluation & synthesis • Determine context & tailor knowledge
3. Content Development & Prototyping	• Develop and confirm key messages • Prototype design & re-design • Data gathering • Data analysis & synthesis
4. Dissemination & Evaluation	• Tailor dissemination • Identify new opportunities • Monitor evaluation metrics

Inputs

- Stakeholders
- Literature/evidence
- Existing tools
- End-users
- CEP core team
- Clinical lead
- Clinical working group

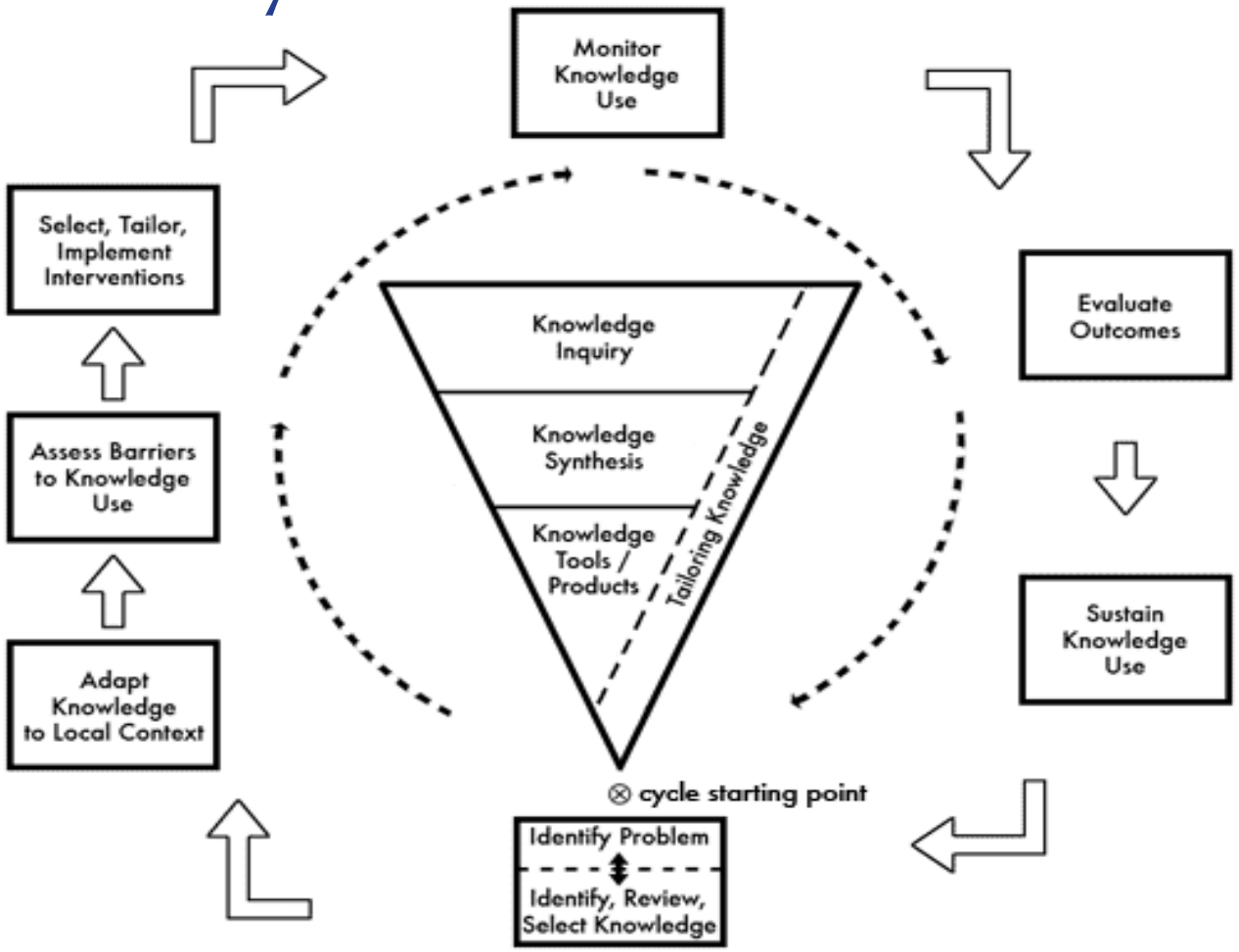
Next Steps: Project Milestones & Timeline



Breakout session: Small group discussions

1. Participants form into small groups
2. Identify a recorder for your group
3. Please use the templates on the table to record your discussions
4. Please leave completed templates on tables for collection.

Small Group Discussions: Knowledge to Action Cycle



Source: http://ktclearinghouse.ca

Small Group Discussion: Dissemination

- Our project team can develop and support a joint dissemination strategy, with the intent that:
  - Each organization can adapt this to their organizational context
  - Practitioners can adapt this to their practice setting

- Given our target audience is multi-disciplinary, please describe how you would want the project team to support dissemination of the OA tool from the perspective of:
  - Professional organization
  - Individual practitioner

- Are there specific dissemination channels that are particularly effective for your professional group that the project team should include in their strategy?

Small Group Discussion: Uptake

- From your organizational and clinical perspectives, what are the barriers to uptake of this type of tool?
- From your organizational and clinical perspectives, what are the facilitators to uptake of this type of tool?
- How do you see this tool actually being used in provider offices?
- What approaches do you think will be effective to drive physicians/allied health practitioners to use the tool?

Small Group Discussion: Evaluation

- What would "success"/ impact look like if this tool were widely used?

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Thank you