



McMaster  
Family Health Team

# **Exercise is Medicine: Prescribing Confidence in Unlimited Refills**

**Collen McPhee, PT and Laura Doyle, PT  
October 25, 2017**

# Introductions

- **Colleen McPhee** PT, MSc, FCAMPT:  
Physiotherapist, Stonechurch Family Health Centre
- **Laura Doyle** PT, BHSc (PT), B. Ed:  
Physiotherapist, McMaster Family Practice



# Presenter Disclosure

- **Presenters:** Colleen McPhee and Laura Doyle
- **Relationships with commercial interests:**
  - None

## Disclosure of Commercial Support

- **This program has received no financial support.**
- **This program has received no in-kind support.**
- **Potential for conflict(s) of interest:**
  - None

# Objectives

ED FISCHER © '08

yes, yes, yes -  
now, seriously -  
what can we do  
to improve  
our  
health?!



1. Highlight the epidemic of inactivity
2. EIM in the primary care setting
3. EIM Pilot Program
4. AFHTO program logic planning model

# Role of Physiotherapy in Primary Care

- Diagnosis, assess and treat a variety of acute and chronic conditions
- Regulated health care professionals whose practice includes health promotion and disease prevention
- Utilize education and exercise prescription to promote physical activity and exercise to maximize mobility and function across the lifespan



association of family  
health teams of ontario

## PROGRAM PLANNING & EVALUATION:

*Framework for FHTs and NPLCs*

### Step 1: Conducting a Situational/Needs Assessment



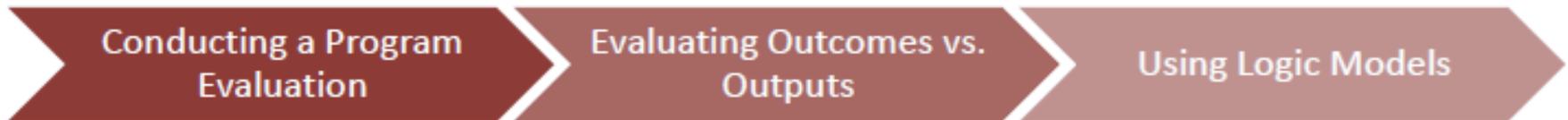
### Step 2: Setting Program Direction



### Step 3: Determining Program Elements



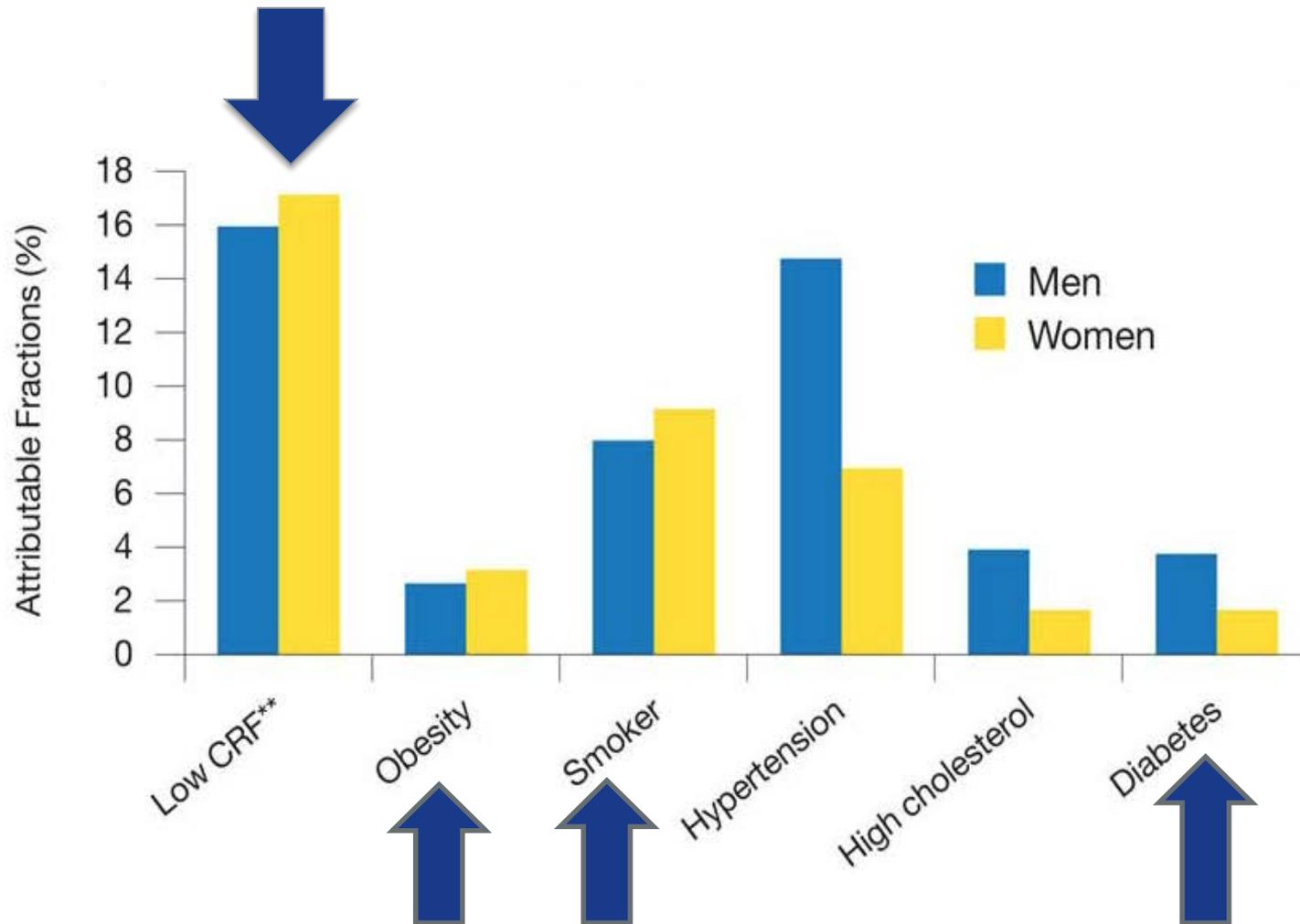
### Step 4: Conducting a Program Evaluation



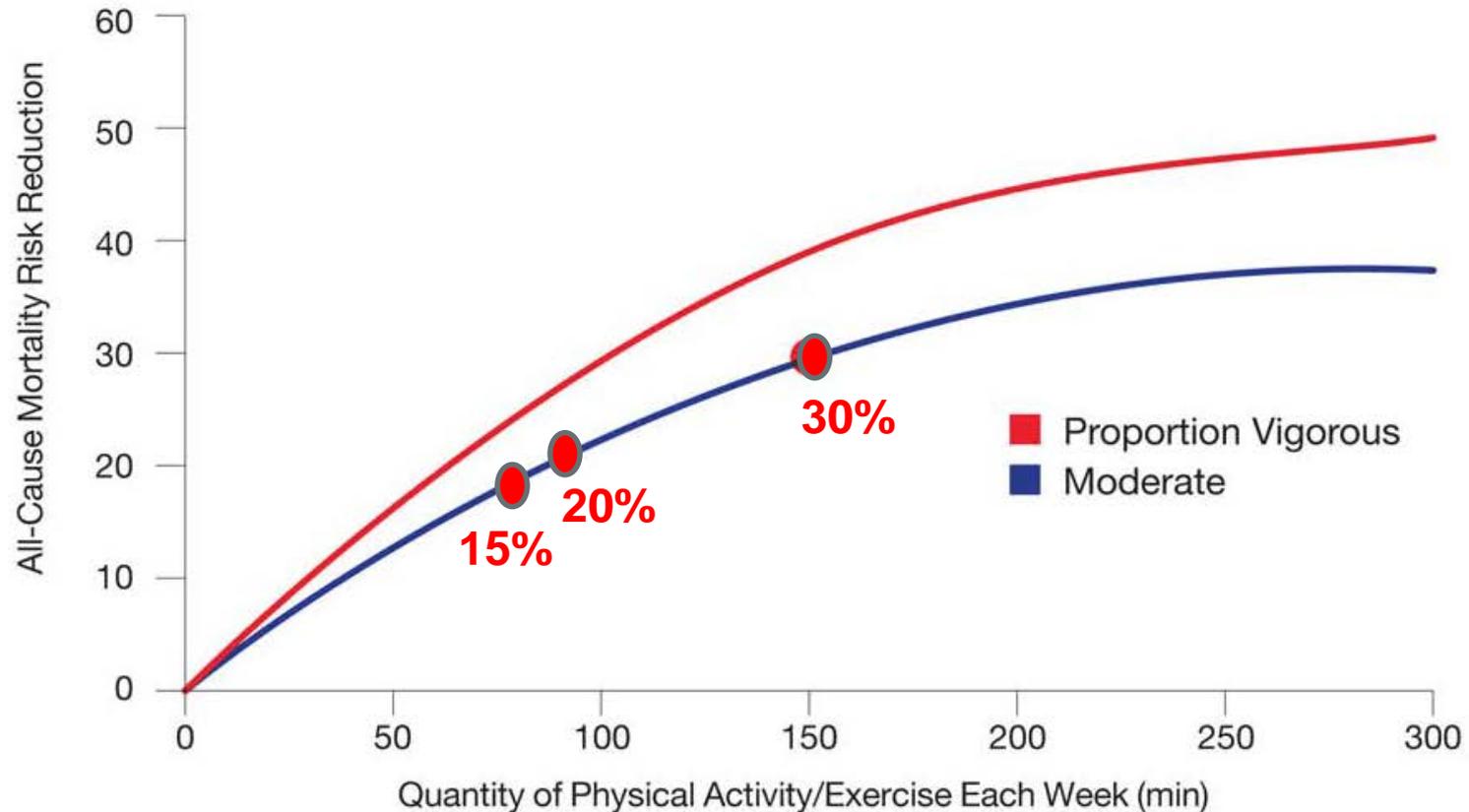
## Step 1: Conducting a Situational/Needs Assessment



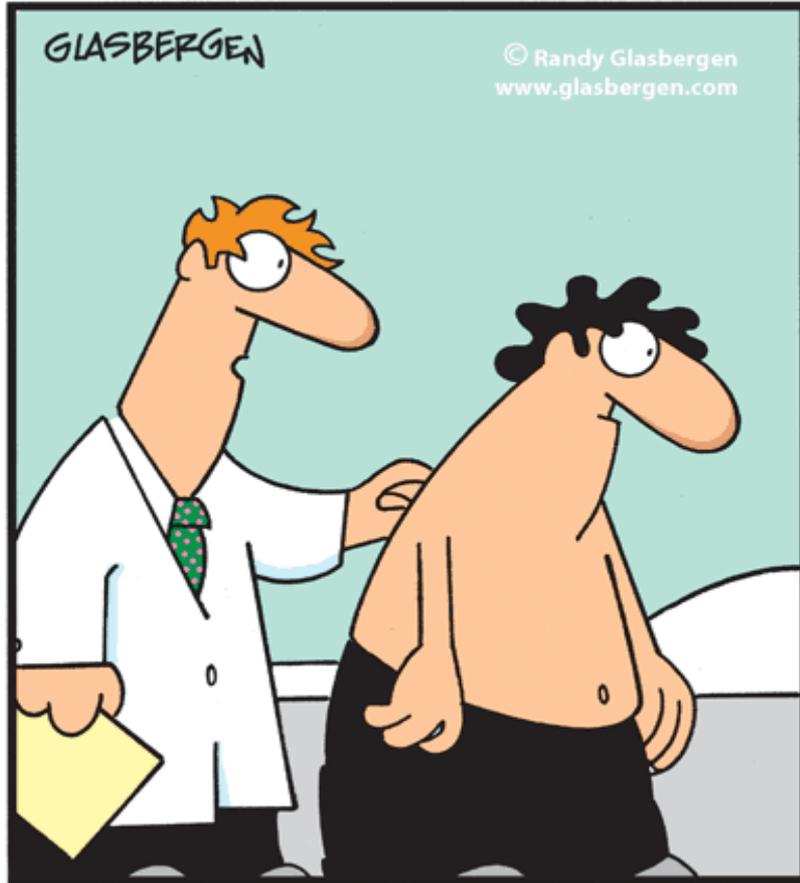
# Sit less, move more!



# As little as 10 min a day.....



# Reality in Canada?



Despite the numerous health benefits of exercise 2015 data indicates that only **17.5%** of Canadians are meeting these guidelines.

**“It’s not a rash, it’s moss. You need to start being more active than a tree.”**

# Existing Interventions in Primary Care that Encourage Exercise

- Brief Intervention Counselling: ASK, ADVISE, ACT
- On site group Programming
- Refer to supervised exercise programs in the community



**“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”**

# Evidence for Effectiveness of Exercise Counselling

- **Orrow et al 2012:**
  - Promotion of PA to sedentary adults in primary care significantly increases PA levels at 12 months
  - Insufficient evidence for referring out
- **Lamming et al 2017:**
  - BI counselling can increase self reported PA in the short term but there is insufficient evidence about long term impact
- **The Number Needed to Treat through brief counselling is 12 compared to smoking cessation which is 50-120**
- Exercise prescription and referral tool is available at [EIM/www.cfp.ca](http://EIM/www.cfp.ca)

# Exercise Counselling in Primary Care

- 16% of Canadian family physicians assess and prescribe exercise as part of routine care

## The Challenges

- Lack of time
- Perceived lack of patient engagement
- Lack of formal training/routine/resources



"Jim was diagnosed with diabetes, and his doctor says he needs to keep active, so I hide his TV remote three times a week."

# EIM: Pilot

- Create a brief intervention program that targets **behaviour change to increase physical activity** that does not already exist in our community
- Physicians and residents acknowledge importance of PA but lack time and knowledge
- Availability of programming in Hamilton not the issue ; navigating community programs, access, cost, or confidence to start maybe contributors

## Step 2: Setting Program Direction

Program Description &  
Goal Statement

# EIM: Goals

1. To provide health care professionals at MFHT education about exercise prescription/counselling and how to deem someone medically stable to exercise and specific program.
2. To provide group exercise prescription and counselling program for medically stable individuals with HTN, T2DM, CAD who are contemplating change their current activity level

## Step 2: Setting Program Direction



## Target population

- “low hanging fruit”
  - HTN, T2DM, CAD rostered patients
  - expanded referral criteria after first session
- Individuals in the **contemplation to action stage** in regard to starting a therapeutic exercise program but do not possess the knowledge or **self-efficacy** to begin.

Identifying Program  
Inputs

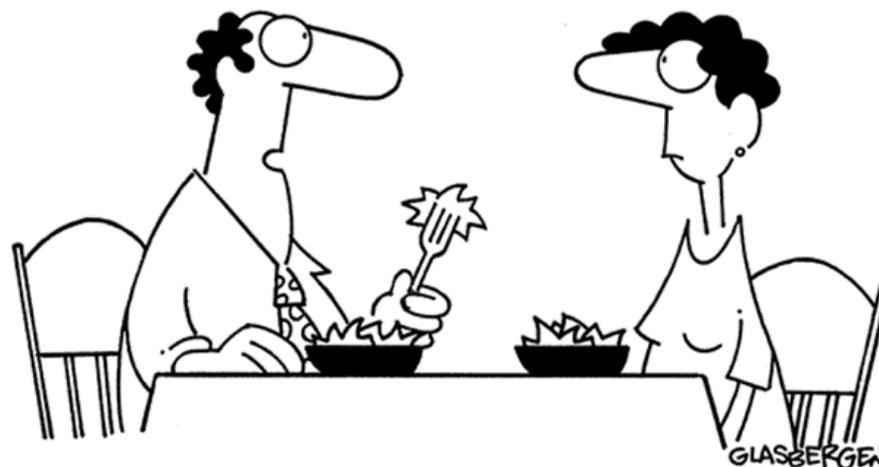
Determining Program  
Activities

Linking to Performance  
Measures

## Interprofessional Education

- Ask, Advise, Act
  - ↳ PA as a “vital sign”
- EIM Resources
- Medical Clearance  
(as per ACSM 2015)
- Who to refer
- How to refer
- Stages of Change

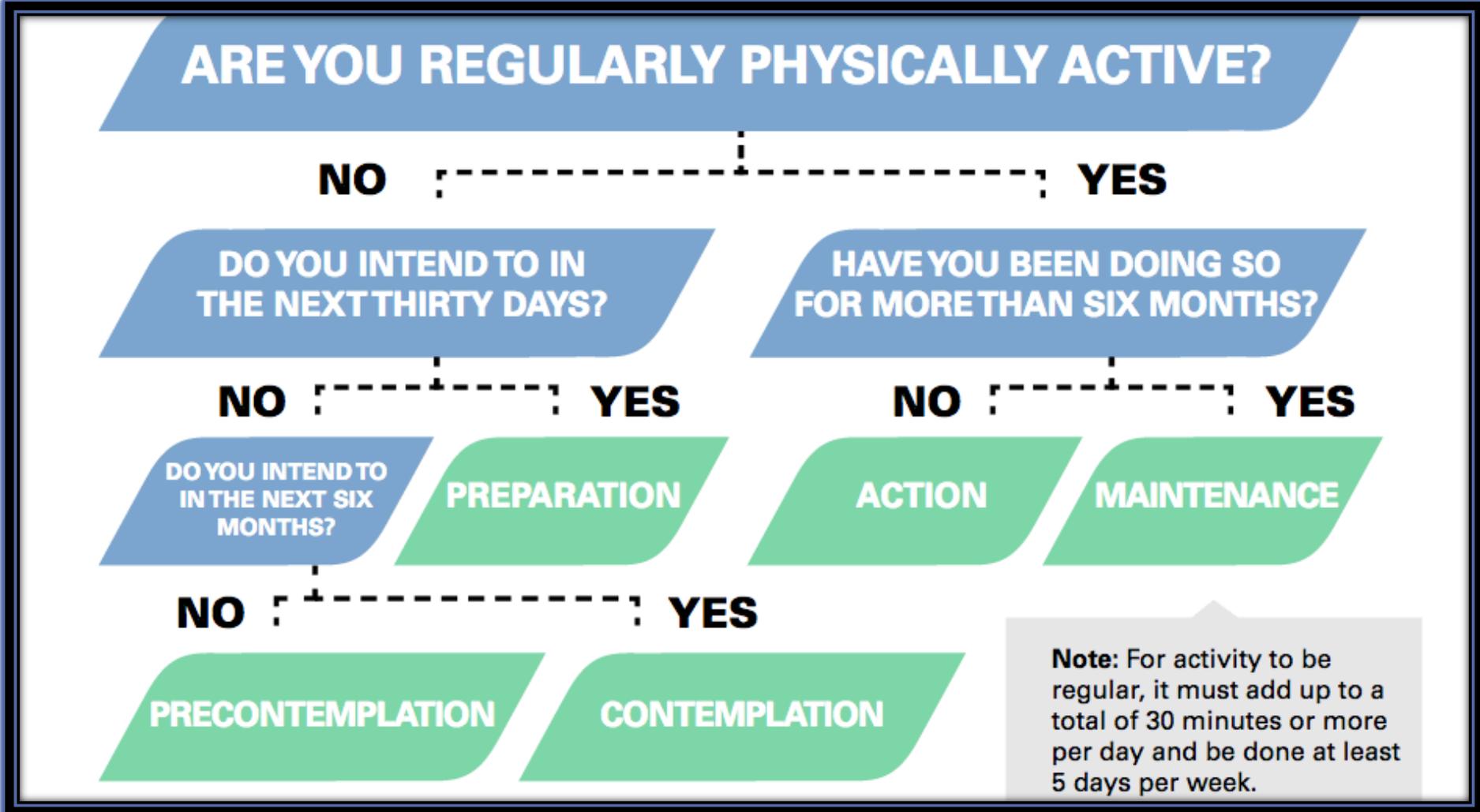
Copyright 2004 by Randy Glasbergen.  
www.glasbergen.com



“My doctor says I’m a Type 8 diabetic...that’s a Type 2  
with four times more excuses for not exercising.”

# Theory: Stages of Change Model

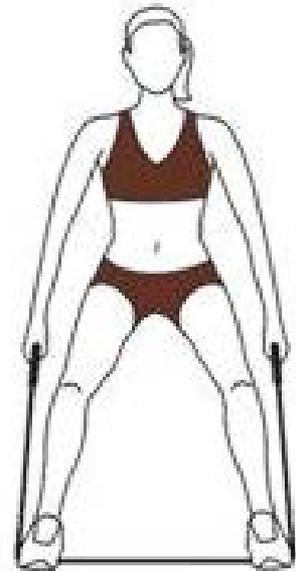
Prochaska and DiClemente



# EIM: Week #1

- PA vs Exercise
- FITT principals
- Barriers/Challenges
- Motivational interviewing
- Canadian PA guidelines
- Strength- theraband
- Tracking
- Action planning

**SRM**



**Strengthening**

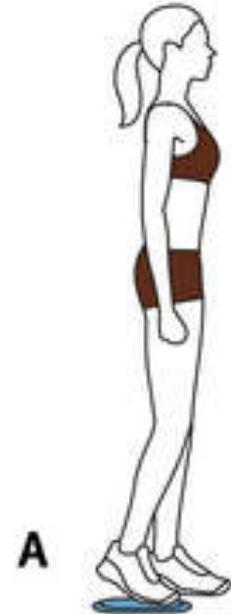
# Action Plan

Weekly Action Plan	Action Plan #1	Action Plan #2
What?		
Where?		
When?		
How much time?		
How many days/ week?		
<p>How confident are you that you will achieve this action plan on a scale of 1-10, <b>1= NOT confident</b> → <b>10 is TOTALLY confident</b> that you will achieve this plan. If you score 7/10 what can you do to raise this confidence score?</p>		
Confidence ranking	/10	/10

# EIM: Week #3

- Success & Challenges
- MI for change
- Systems of the body- what happens?
- Health Industry Buzz
- Balance
- Action Planning
- Group choice

Action  
Plan

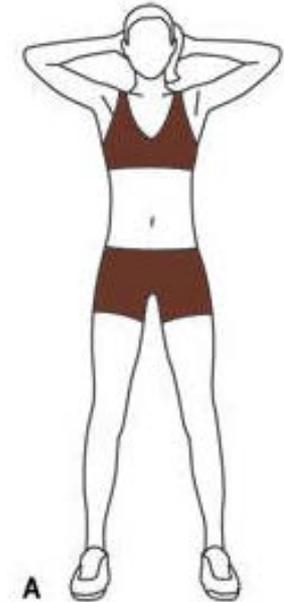


Balance

# EIM: Week #6

- Mindfulness
- Group Choice
- Stretching
- Tracking
  - Technology
  - HR
  - BP
- Action planning
- Community Resources

SRM



Stretching

# Booster calls: Weeks #2,4,5,12\*

Questions	Discussion
How did it go with your plan?	<ul style="list-style-type: none"><li>• Successes/barriers</li></ul>
What did you learn?	<ul style="list-style-type: none"><li>• Work worked/what didn't?</li><li>• i.e. time of day?</li></ul>
What do you want to do next?	<ul style="list-style-type: none"><li>• New activities?</li></ul>
Set a new Action Plan?	<ul style="list-style-type: none"><li>• What? Where? When? Time? #days of week?</li></ul>
Rank Confidence	<ul style="list-style-type: none"><li>• (0-10- must be over 7)</li></ul>

\* Repeat Self Report Measures

## Step 4: Conducting a Program Evaluation

Conducting a Program  
Evaluation

Evaluating Outcomes vs.  
Outputs

Using Logic Models

### STAGES OF CHANGE

Please pick the statement that most accurately describes the amount of Physical Activity in which you currently participate.

Physical Activity is defined as being active in bouts of 10 mins at moderate to vigorous level.

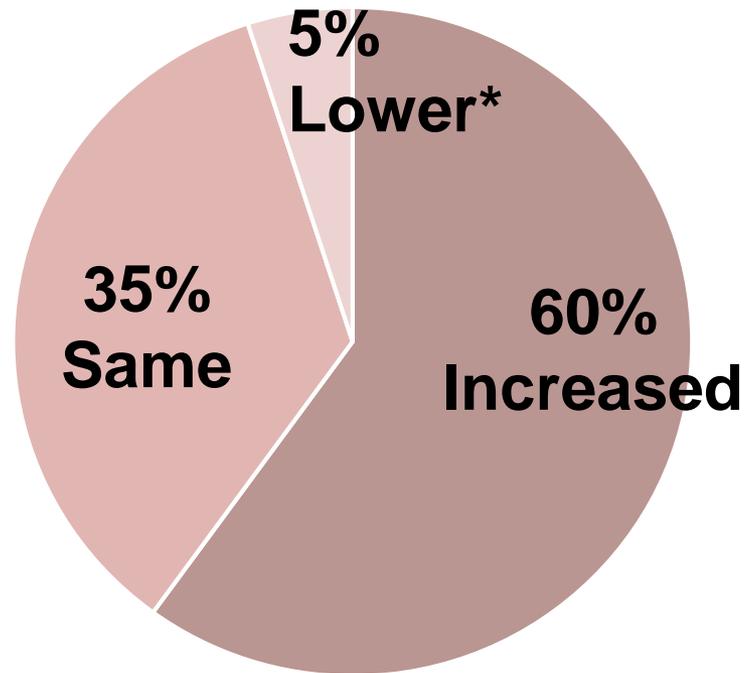
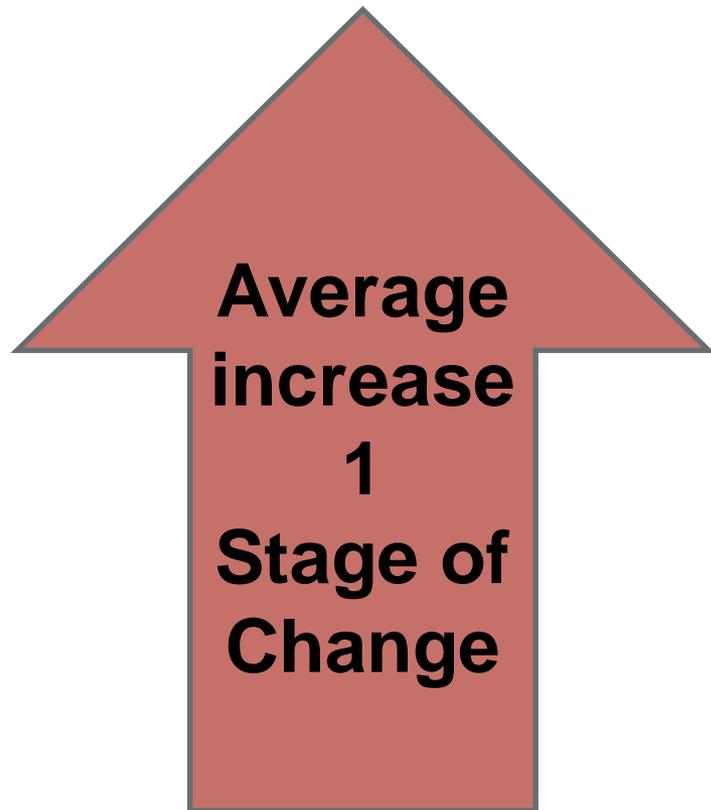
<input type="checkbox"/>	I am not currently physically active and I do not intend to start being physically active.
<input type="checkbox"/>	I am not currently physically active, but I am thinking about starting to become physically active.
<input type="checkbox"/>	I am currently physically active, but under 150 minutes per week.
<input type="checkbox"/>	I am currently physically active and achieving 150 minutes per week.
<input type="checkbox"/>	I am currently physically active 150 minutes per week and incorporating flexibility, strength and/or balance training.





# Pilot Study Results

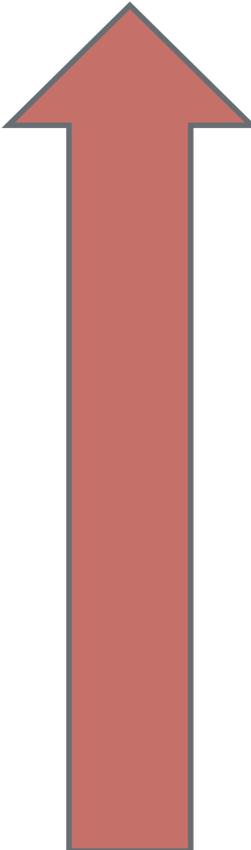
## Stages of Change: Activity Level



\* unrelated injury

# Pilot Study Results

## Self-Efficacy



All increments  
of PA increased  
ranging from  
5.6%-16%

Greatest  
increase at 30  
and 50 minutes



Greatest pre-post  
change was  
“including balance  
into weekly routine”  
at 52.6%

# EIM: Summary

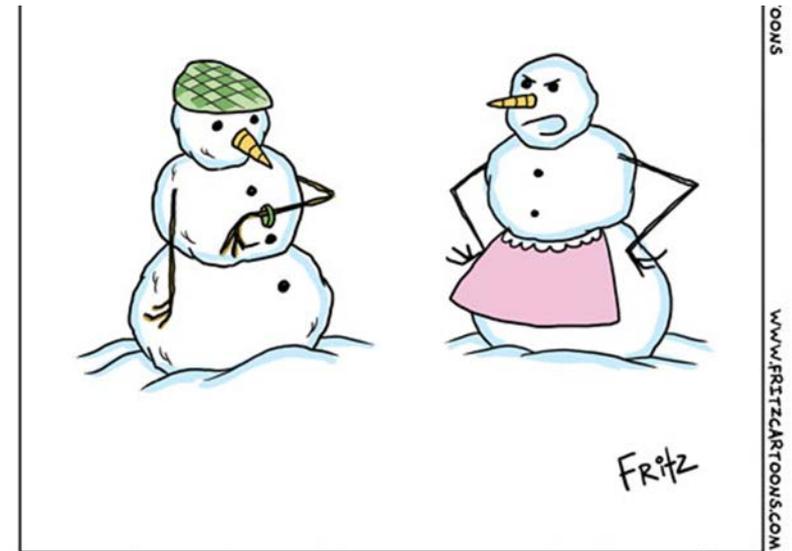
- education: patient and health care provider
- provide self monitoring tracking tools:
  - technology
  - paper and pen
- utilize Activity Action Planning based on SMART goals
- focus on enjoyable activities
- supervised exercise component:
  - strengthening: equipment provided
  - balance
  - stretching
- booster calls to prevent relapse
- build social support system

# Patient Satisfaction Survey

Your Opinion Matters About:			
I was treated with dignity and respect by all staff in the clinic	100%		
My questions were answered to my satisfaction.	100%		
I feel I have benefited from this group.	100%		
I would recommend this group to other patients, friends or family.	100%		
How would you rate your overall experience with this group?	100%		

# Impact Survey: trends

- “got me moving more”
- “learned how to set goals”
- “wanted more exercise-like meeting up as a group?”
- “I liked group discussions
- “liked the science”
- “Fitbit® tracking was fun and provided me with incentive to keep going”

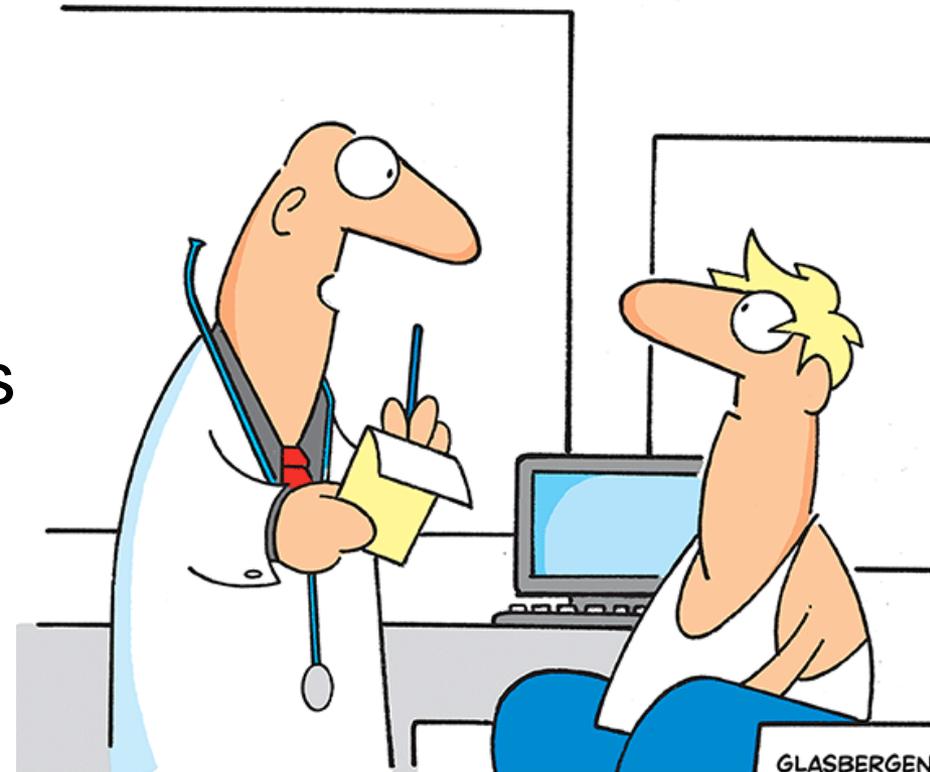


I DON'T KNOW WHY YOU EVEN HAVE THAT FITBIT. YOU HAVEN'T MOVED YOUR BUTT ALL WINTER.

# What have we learned?

- Referral base
- Referral source
- Triage
- From statistical analysis
- Administration  
continuity- funding,  
staff, location

© Randy Glasbergen / glasbergen.com



**"I'm prescribing exercise. Think of it as a stress pill that takes 30 minutes to swallow."**

# What's next?

- 12 week in person follow up (booked appointment) to improve data collection
- 6<sup>th</sup> vital sign
  - measure in younger groups
  - more often by staff
- Collecting and tracking of action plans
- Collection of other mediators of exercise
- Partnering with community
- Continued linking with in-house groups

# Resources

- [benefitfromactivity.org.uk](http://benefitfromactivity.org.uk) (patient resource)
- [gpcpd.walesdeanery.org](http://gpcpd.walesdeanery.org) (Motivate to Move- clinician resource)
- EIM Canada
- American College of Sports Medicine
- ParticipACTION
- [ssehsactive.org.uk](http://ssehsactive.org.uk) (weekly PA new bulletin)
- CSEP
- Otago Exercise Program (balance)
- Soup to Tomatoes- Espanola FHT
- Community Resources- City of Hamilton

## QUESTIONS?

Colleen McPhee

[mcpheeco@hhsc.ca](mailto:mcpheeco@hhsc.ca)

Laura Doyle

[doylel@hhsc.ca](mailto:doylel@hhsc.ca)



**“If you haven’t exercised in a while,  
you may need to stretch and warm up  
before you stretch and warm up.”**



Department of Family Medicine  
Michael G. DeGroot School of Medicine  
Faculty of Health Sciences

[fhs.mcmaster.ca/fammed](https://fhs.mcmaster.ca/fammed)  
@McMasterFamMed