#### Peri-operative optimisation workshop:

# Enhancing preparation for surgery through application of behaviour change techniques

#### Dr Anne M Haase, Dr Rachael Barlow, Prof Tom Wainwright



# Overview

- Why it's important....problem...
- What it looks like....behaviour change techniques
  - Key factors? Techniques/models
  - *Communication style motivation*
  - Change who best to target
  - Complexity of approaches multiple strategies and flexibility
- How do we do it?....practical interventions to try..
  - Cancer surgery exemplar (prostate)
  - Discussions



# Why it's important...Background

- ~1.7 million people undergo surgery each year in UK
- ~250,000 (15%) high risk patients.
- High risk patients 4 out of 5 deaths after surgery

#### The Royal College of Anaesthetists Perioperative Medicine vision document:

'We must use the time between the decision to perform surgery and the procedure itself to assess the needs of individual patients and to optimise the treatment of long term disease.'





# Peri-operative optimisation (prehabilitation)

- Pre-admission interventions to improve patients' health and fitness:
  - Physical activity, nutrition, education, psychological, clinical, smoking, alcohol drug cessation/reduction interventions

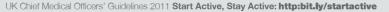
Multimodal / multicomponent



### Policy – lifestyle change

#### Physical activity benefits for adults and older adults

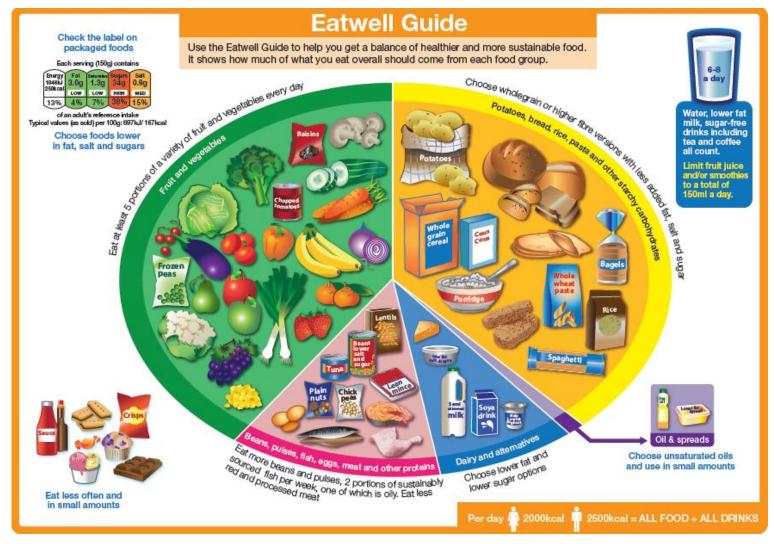






UK Chief Medical Officers' Guidelines 2011 Start Active, Stay Active: www.bit.ly/startactive

### Policy – lifestyle change

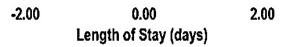




https://www.nhs.uk/change4life-beta/food-facts

#### **Effect of total-body prehabilitation on postoperative** outcomes: a systematic review and meta-analysis, Santa Mina et al, Physiotherapy, 2014

Study	Surgical Population	Samp	le Size	Hedges g and 95% Confidence Interve
		Тх	Con	
Arthur	Visceral	123	123	
Carli	Visceral	56	53	-∎-
D'Lima TX1	Ortho	10	10	
D'Lima TX2	Ortho	10	10	
Dronkers	Visceral	22	20	│ -₩-
Herdy	Visceral	29	27	
Hoogeboon	n Ortho	10	11	│ —∰— │
Nielsen	Ortho	28	32	
Rosenfeldt	Visceral	60	57	
Williamson	Ortho	60	61	- <b>-</b>





# **Does it work?**

- Randomised controlled trials (RCTs) show that prehabilitation interventions can:
  - Reduce postoperative complications
  - -Decrease the length of hospital stay
  - -Facilitate the patient's recovery



### But...how and why do interventions work?

- Mechanisms behaviour change
- Why do we need to know this?

- More effective, repeatable outcomes
- Teachable moments
- Postoperative care
- Opportunity for sustainability of behaviour



# **Context of surgery (peri-operative care)**

- Why it's important....problem....
- What it looks like....behaviour change techniques
  - Factors to consider
  - Models simple to complex
- *How do we change behaviour....practical interventions..*

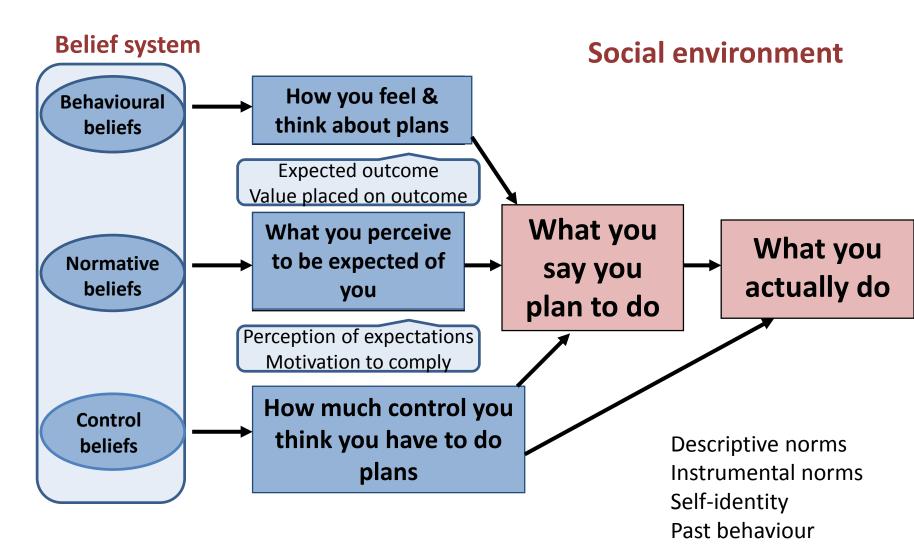


# Why we change

# "Factors that help us"



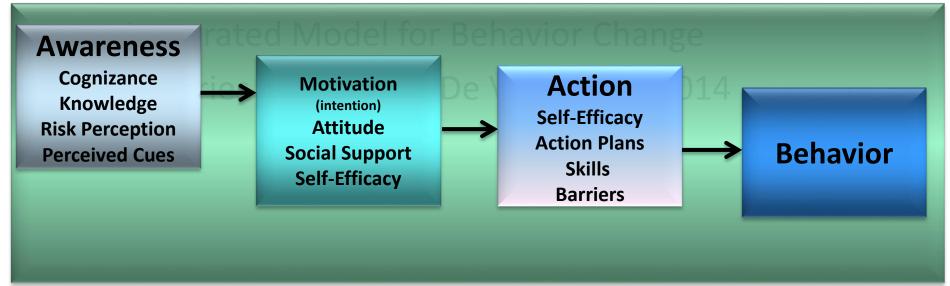
### **Theory of Planned Behaviour....extended**





### The Integrated Change Model (simplified)

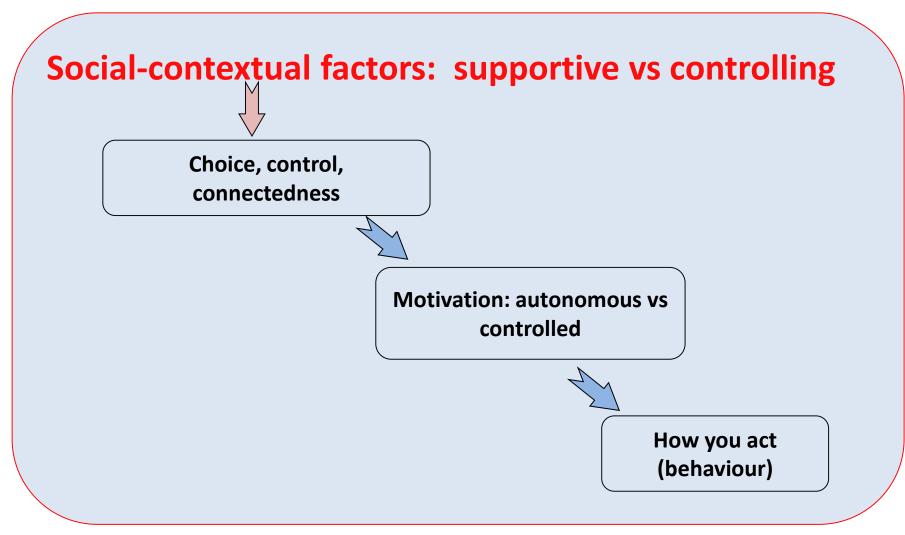
• I-Change Model (deVries, 2016)





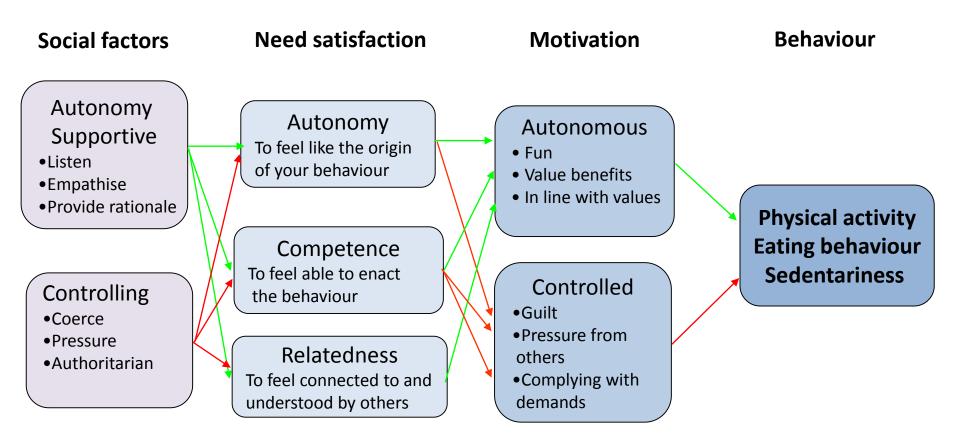


### **Context of motivation – how it might work**





### **Self-Determination Theory model**





## **Psychological needs**

#### <u>A</u>utonomy

 To be the origin of one's behaviour, to experience volition and psychological freedom

#### <u>Belongingness</u> (Relatedness)

• To feel mutually connected with and understood by others

#### <u>C</u>ompetence

- To be effective in one's environment & pursuits.
- The needs are <u>innate</u> and when <u>satisfied</u> promote growth, wellbeing and positive forms of motivation



#### **Motivation to change**

**Importance - Why** 

Is it worthwhile?

Why should I?

How will I benefit?

What will change

At what cost?

Do I really want to?

Will it make a difference?



Confidence - How, what? Can I?

How will I do it?

How will I cope with x,y,z? Will I succeed if..?

What change?

<u>Readiness - When</u>

When?

Should I do it now?

What about other priorities?

## Why don't people change?

- Conflict between two courses of action each of which has perceived costs and benefits associated with it.
- Unresolved ambivalence is often the reason why people get stuck.
- How ambivalence is handled influences outcome.



Miller & Rollnick (2002) Motivational interviewing: Preparing people for change. 2nd edition. New York: Guilford Press

## How can we help patients change –

### communication strategies....





# Conclusions

- Key BCTs:
  - regulation, social support, goals and planning
- Only 2 studies reported use of theoretical model
- Quality reasonably good
- Implications for practice
  - Need for integrating theory and BCTs
  - Consider communication approach MI based??
  - Sustaining behaviour change after surgery...

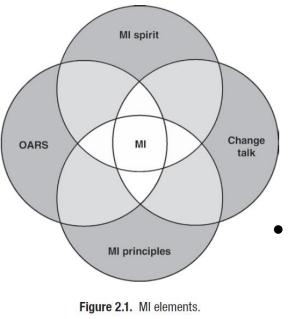




# It's <u>what</u> you say & <u>how</u> you say it

#### **Need-supportive language**

Autonomy supportive language	Controlling language
Something you might find helpful is if you	You're holding you racket all wrong, you
adjust your grip, can I show you?	should hold it like this, see?
This is a tricky activity isn't it? Does anyone	You need to focus on walking in a straight
have any tips on how to get across the	line to get this right.
balance bar?	
Which warm up would you like to do today?	We're going to do X warm up today.
Well done Finn, you tried really hard on your	Well done Finn, you did that dribbling
dribbling.	exactly the way I wanted.
You might find it easier to try this first.	Do it like this.
Almost there, you're so close.	You should get it in a minute.
You may find that holding your hand like this	You two should work on your relay hand
helps to improve your relay hand over.	over.
Keep your speed down, just a bit of room!	Slow down!
ERAS <sup>®</sup> Society	



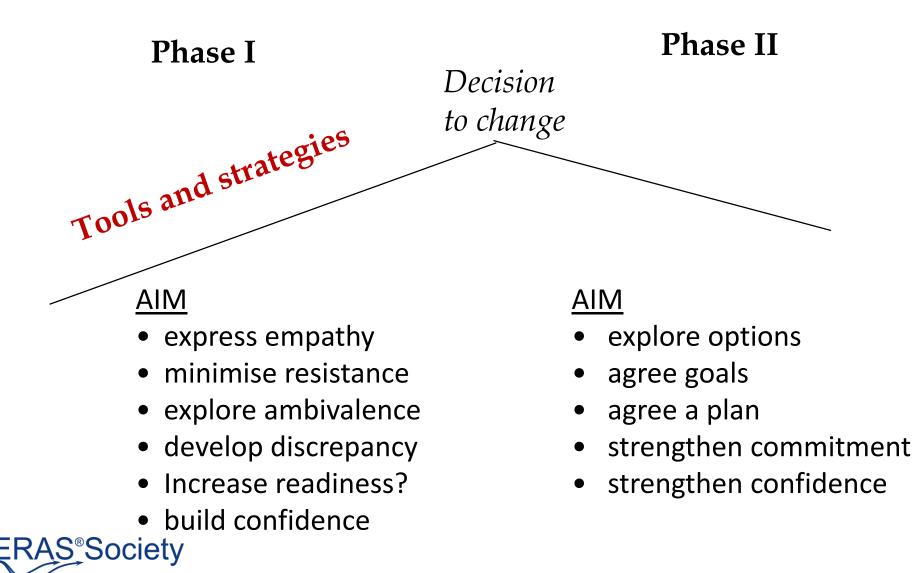
### Motivational Interviewing Useful method....

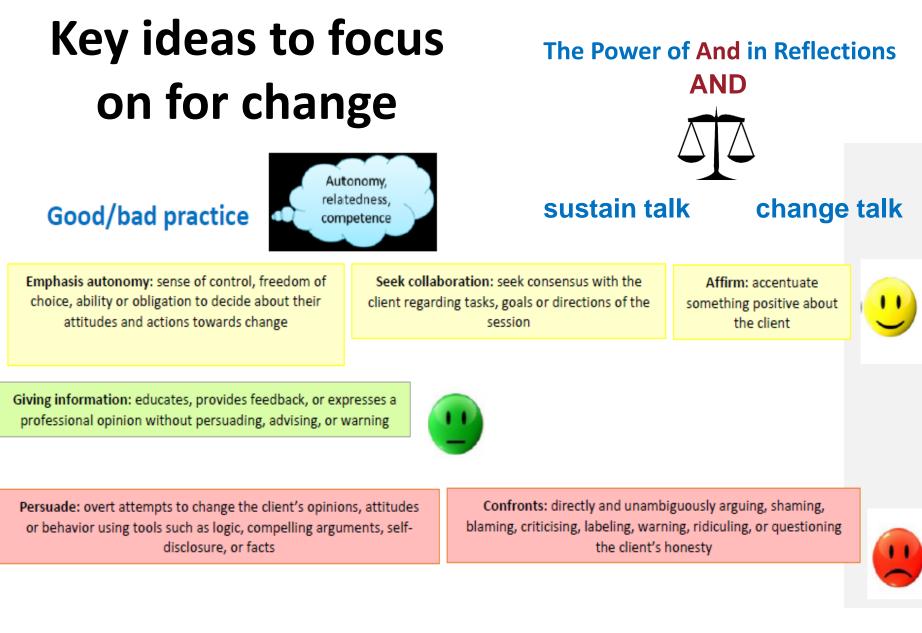
"a client centred, directive method for enhancing intrinsic motivation to change by exploring & resolving ambivalence"

- To help clients explore and resolve ambivalence about exercise and eating behaviour
  - Collaborative
  - Evocative draws on patient perspective/ideas
  - Honors client autonomy



### **2** phases of Motivational Interviewing







### Questions to use for change....

#### Change Talk – Evoking

#### Start with preparatory change questions:

Desire:What would you *like* to change?Ability:How could you do it?Reasons:Why might you want to.....?Need:What needs to change?

What do you *hope* to accomplish? How *confident* are you that you could do this? What are the *down sides* of *how things are now*? How *important* is it for you to....?

#### Move to mobilising when the client appears engaged and ready:

Commitment:How do you feel about the change?Action:What ideas do you have for change?Taking steps:What have you achieved so far?

How *ready* are you to change? How could you *implement* this change? What *steps* could you take towards...?



#### **Communication techniques....**

#### Motivational Interviewing

- 1. Evoke their ideas (open questions) How do you feel about this, what do you want to do, what are your ideas?
- 2. Listen to be heard (reflect/summarise) Reflect as much as you question! You're hoping to..., you're worried about..., you're feeling...,
- **3.** Affirm the positive (affirm) You've put a lot of effort into this. You're the expert on your situation, what do you think?

#### MI advice giving: 3 stages

**1. Explore their ideas** What are your thoughts on ...? How are you managing this issue right now?

#### 2. Ask permission and provide information

I have some ideas about ....., would you be happy for me to share them? Would it be alright if we talked about.....?

**3. Explore their response** How do you feel about that? How does that sit with you?

#### **MI for change: processes**

- 1. Engage: Shall we work together? Seek to build rapport with and understand the client.
- 2. Focus: *What to change*? What is the client concerned about? Ask permission to share your concerns too. Negotiate a mutual agenda.
- **3.** Evoke: *Why change?* Draw out the client's **own** reasons to change.
- 4. Plan: *How to change?* If they want to, support them to plan changes.

MI for change: ask – listen - reflect

- 1. **Engage:** How are you? How are things at home?
- 2. Focus: What concerns, if any, do you have about ....? What might you want to talk about? Is there anything else?
- **3.** Evoke: If you decided, how could you imagine doing it? Why might you want to make a change in handling finances? What are you ready to do?
- **4. Plan:** What are you going to do next? How will go you about it, in order to succeed?

#### **Communication techniques....**

#### **Motivational Interviewing**

- 1. Evoke their ideas (open questions) How do you feel about this, what do you want to do, what are your ideas?
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	<b>4. Plan:</b> <i>What are you going to do next?</i>					

How will go you about it, in order to succeed?

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#### **Communication techniques....(1)**

#### **MI** for change: processes

**1. Engage:** *Shall we work together?* Seek to **build rapport with** and **understand** the client.

**2. Focus:** *What to change?* What is the client concerned about? **Ask permission** to share your concerns too. Negotiate a mutual agenda.

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#### **Communication techniques....(2)**

MI for change: ask - listen - reflect

- **1. Engage:** How are you? How are things at home?
- **2. Focus:** What concerns, if any, do you have about ....? What might you want to talk about? Is there anything else?
- **3. Evoke**: If you decided, how could you imagine doing it? Why might you want to make a change in handling finances? What are you ready to do?
- **4. Plan:** What are you going to do next? How will go you about it, in order to succeed?



#### **Communication techniques....(3)**

#### MI advice giving: 3 stages

#### 1. Explore their ideas

What are your thoughts on ...? How are you managing this issue right now?

#### 2. Ask permission and provide information

I have some ideas about ....., would you be happy for me to share them? Would it be alright if we talked about.....?

#### 3. Explore their response

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How do you feel about that? How does that sit with you?

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### **Cancer exemplar**

- 1. Each group/table has one of the communication strategy squares
- 2. Discuss how this might apply to this scenario:

"A 58 year old man has been diagnosed with bowel cancer and needs to become more fit for surgery. During the peri-operative clinic, the anesthetist and clinic nurse mention enhanced preparation/prehab as part of the enhanced recovery programme."

Try out one communication strategy to engage patient in thinking about increasing levels of physical activity....

• 3. Discuss in group/feedback to general discussion



# Time for some discussion

Key factors? Techniques/models Communication style – motivation Change – who best to target Complexity of approaches – multiple strategies and flexibility Fidelity – delivery



# Thank you for your attention!

Any questions?

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