

# Moving Towards Change: Supporting Your Patients to Self-Manage

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# Why are we here?

Lack of motivation to follow through

Lack of family support

Lack of access to HCPs

Patients worried about side effects

Patients say:  
Just tell me what I should do!

Patients start ok but fall off

Patients get overwhelmed and depressed

Easier for patients to avoid

I get frustrated that patients don't seem to want to follow through

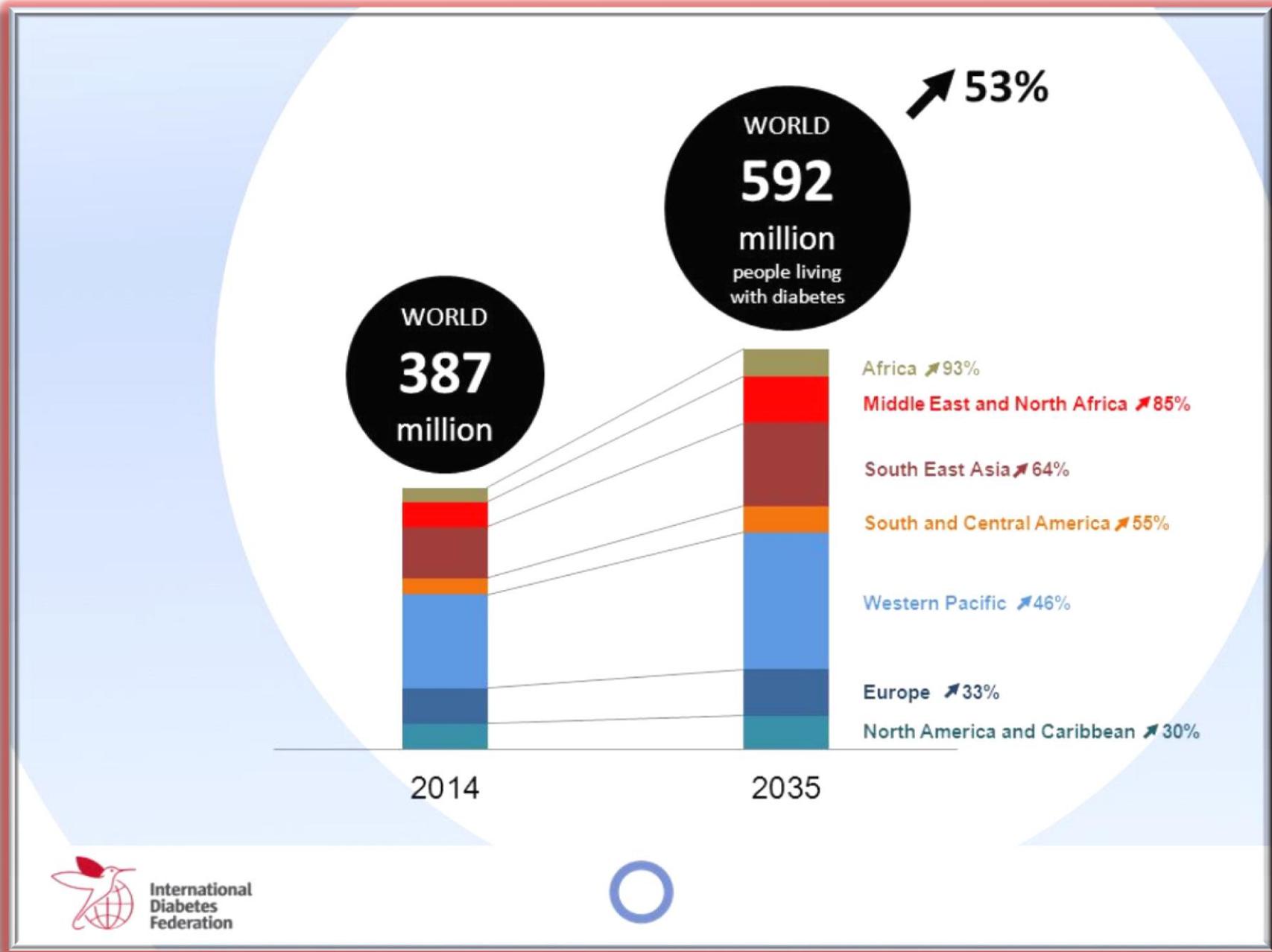


# Why we are here?

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- Health was advanced in the 19<sup>th</sup> century due to significant advances in **hygiene**.
- Health advancement in the 20<sup>th</sup> century is largely associated with advancements in **medicine**.
- Advancements in the 21<sup>st</sup> century are based on **behaviour change**.

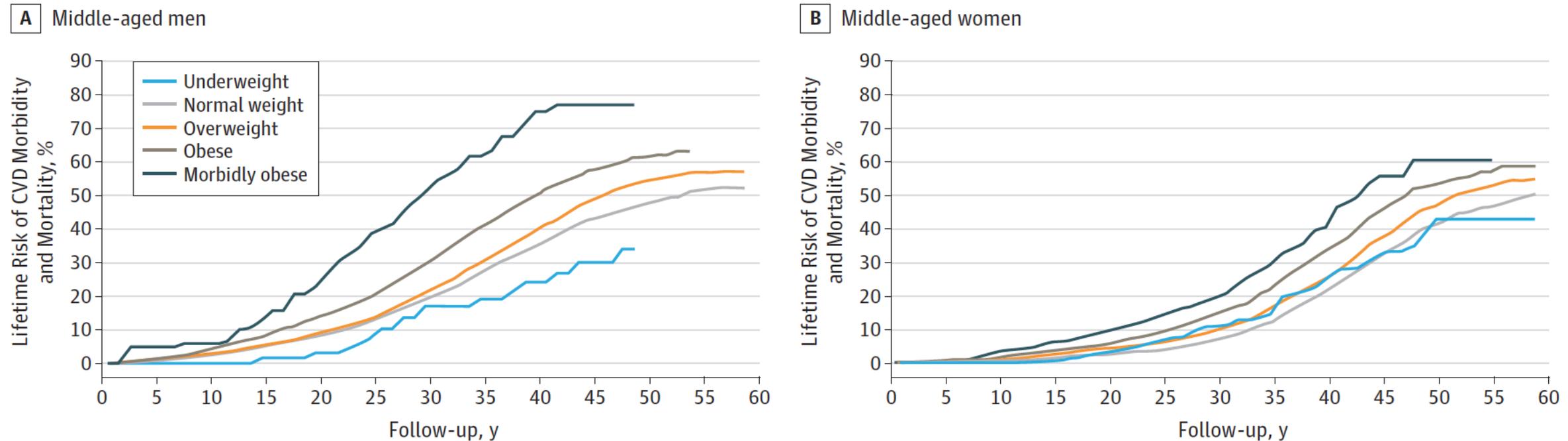




# Association of Body Mass Index With Lifetime Risk of Cardiovascular Disease and Compression of Morbidity

Sadiya S. Khan, MD, MS; Hongyan Ning, MD, MS; John T. Wilkins, MD, MS; Norrina Allen, PhD; Mercedes Carnethon, PhD; Jarett D. Berry, MD; Ranya N. Sweis, MD, MS; Donald M. Lloyd-Jones, MD, ScM

Figure 1. Lifetime Risk of Cardiovascular Disease (CVD) Morbidity and Mortality Among Middle-aged Individuals



# The State of US Health, 1990-2016

## Burden of Diseases, Injuries, and Risk Factors Among US States

The US Burden of Disease Collaborators

**INTRODUCTION** Several studies have measured health outcomes in the United States, but none have provided a comprehensive assessment of patterns of health by state.

**OBJECTIVE** To use the results of the Global Burden of Disease Study (GBD) to report trends in the burden of diseases, injuries, and risk factors at the state level from 1990 to 2016.

**DESIGN AND SETTING** A systematic analysis of published studies and available data sources estimates the burden of disease by age, sex, geography, and year.

**MAIN OUTCOMES AND MEASURES** Prevalence, incidence, mortality, life expectancy, healthy life expectancy (HALE), years of life lost (YLLs) due to premature mortality, years lived with disability (YLDs), and disability-adjusted life-years (DALYs) for 333 causes and 84 risk factors with 95% uncertainty intervals (UIs) were computed.

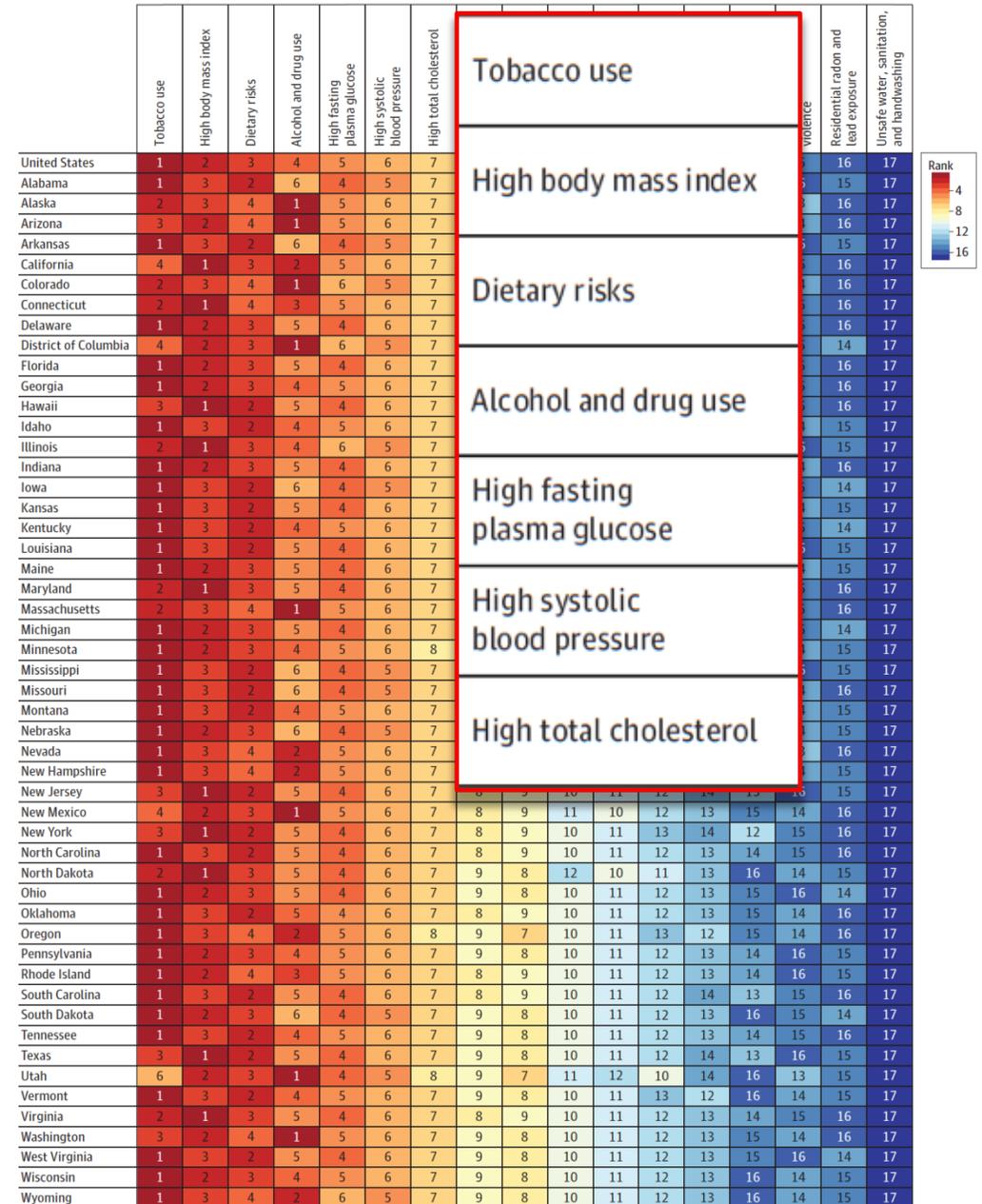
**RESULTS** Between 1990 and 2016, overall death rates in the United States declined from 745.2 (95% UI, 740.6 to 749.8) per 100 000 persons to 578.0 (95% UI, 569.4 to 587.1) per 100 000 persons. The probability of death among adults aged 20 to 55 years declined in 31 states and Washington, DC from 1990 to 2016. In 2016, Hawaii had the highest life expectancy at birth (81.3 years) and Mississippi had the lowest (74.7 years), a 6.6-year difference. Minnesota had the highest HALE at birth (70.3 years), and West Virginia had the lowest (63.8 years), a 6.5-year difference. The leading causes of DALYs in the United States for 1990 and 2016 were ischemic heart disease and lung cancer, while the third leading cause in 1990 was low back pain, and the third leading cause in 2016 was chronic obstructive pulmonary disease. Opioid use disorders moved from the 11th leading cause of DALYs in 1990 to the 7th leading cause in 2016, representing a 74.5% (95% UI, 42.8% to 93.9%) change. In 2016, each of the following 6 risks individually accounted for more than 5% of risk-attributable DALYs: tobacco consumption, high body mass index (BMI), poor diet, alcohol and drug use, high fasting plasma glucose, and high blood pressure. Across all US states, the top risk factors in terms of attributable DALYs were due to 1 of the 3 following causes: tobacco consumption (32 states), high BMI (10 states), or alcohol and drug use (8 states).

**CONCLUSIONS AND RELEVANCE** There are wide differences in the burden of disease at the state level. Specific diseases and risk factors, such as drug use disorders, high BMI, poor diet, high fasting plasma glucose level, and alcohol use disorders are increasing and warrant increased attention. These data can be used to inform national health priorities for research, clinical care, and policy.

- ← Editorial page 1438
- + Author Audio Interview
- + Supplemental content
- + CME Quiz at [jamanetwork.com/learning](http://jamanetwork.com/learning) and CME Questions page 1503

**Group Information:** The US Burden of Disease Collaborators are listed at the end of this article.  
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Figure 10. Ranking of Risk Factors in 2016 for the United States Overall, the 50 States, and the District of Columbia According to the Number of Disability-Adjusted Life-Years Related to Each Risk Factor

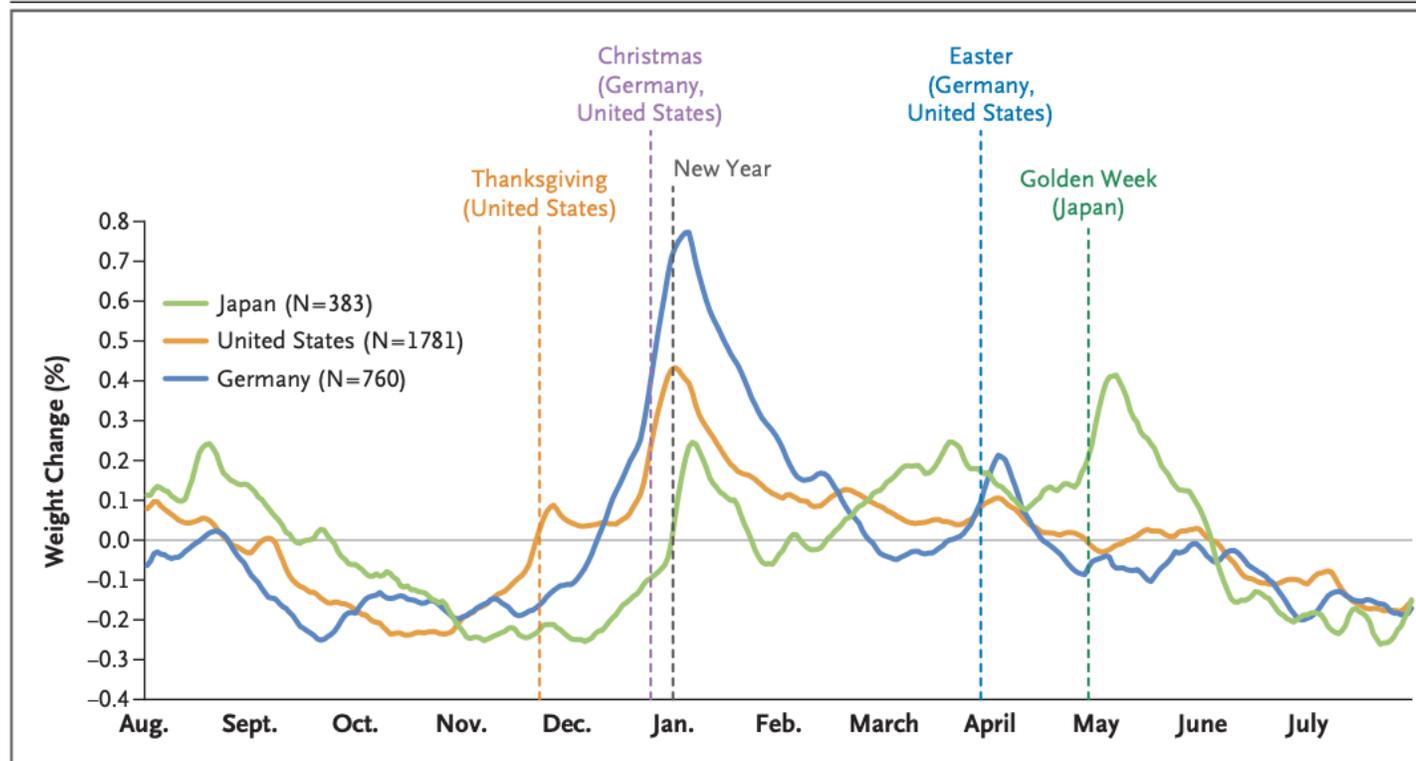


# Weight Gain over the Holidays in Three Countries

**TO THE EDITOR:** Different countries celebrate different holidays, but many such celebration periods have one thing in common: an increased intake of favorite foods. How do holidays — such as Thanksgiving in the United States, Christmas in Germany, and Golden Week in Japan — affect

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N ENGL J MED 375;12 NEJM.ORG SEPTEMBER 22, 2016



**Figure 1.** Yearly Holiday Weight Gain.

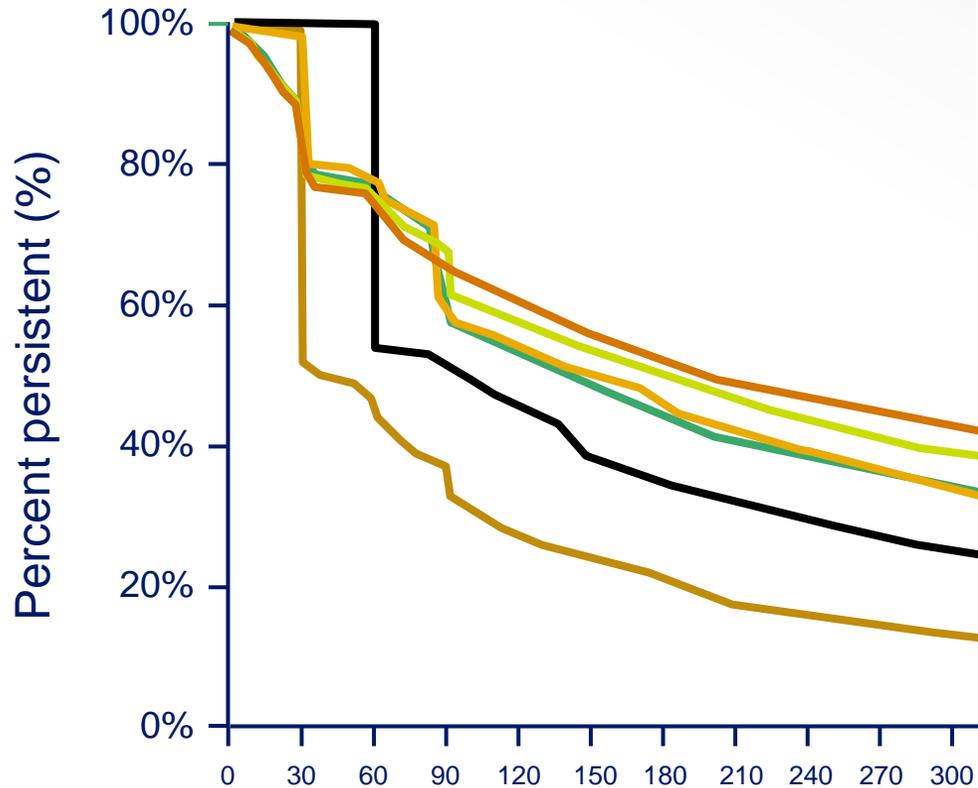
Owing to the subtraction of the annual linear trend for each participant, the starting-weight values are not at the zero mark.

**Table 3. Frequency of Incident Prescriptions and Primary Nonadherence Rate, by Pharmacologic Class**

Prescriptions	Primary Nonadherence Rate, <i>n</i> (%)		
	Overall	Switch to New Drug in Pharmacologic Class	New Indication
<b>Central nervous system agents</b>	9035 (30.1)	1082 (10.2)	7953 (32.8)
Analgesics and antipyretics	3248 (27.8)	444 (14.0)	2804 (30.0)
Psychotherapeutic agents	2762 (32.5)	168 (11.3)	2594 (33.9)
<b>Cardiovascular drugs</b>	7718 (34.7)	1567 (6.8)	6151 (41.8)
Hypotensive agents	3108 (32.2)	862 (5.9)	2246 (42.3)
Antilipemic	2794 (33.6)	590 (8.0)	2204 (40.5)
<b>Anti-infectives</b>	5087 (24.2)	361 (11.9)	4726 (25.1)
Antibacterials	4179 (23.3)	344 (10.8)	3835 (24.5)
Antivirals	271 (35.4)	13 (46.2)	258 (34.9)
<b>Hormones and synthetics</b>	3919 (36.3)	376 (17.3)	3543 (38.3)
Antidiabetic agents	979 (29.1)	7 (42.9)	972 (29.0)
Thyroid/antithyroid agents	614 (49.4)	0 (NA)	614 (49.4)
<b>Skin and mucous membrane drugs</b>	3221 (27.6)	523 (18.2)	2698 (29.4)
Anti-inflammatory agents	1046 (27.4)	500 (18.2)	546 (30.2)
<b>Gastrointestinal drugs</b>	2410 (33.1)	434 (12.0)	1976 (37.7)
Antiulcer agents	2244 (33.0)	428 (12.2)	1816 (37.9)
<b>Ear, nose, and throat preparations</b>	1752 (34.2)	185 (20.9)	1567 (35.9)
Anti-inflammatory agents	1442 (36.3)	161 (21.7)	1281 (38.1)
<b>Autonomic drugs</b>	1311 (27.1)	276 (15.2)	1035 (30.2)
<b>Diuretics</b>	981 (33.4)	7 (28.6)	974 (33.5)
<b>Other pharmacologic classes</b>	2072 (34.3)	181 (12.2)	1891 (36.4)
<b>Total</b>	<b>37 506 (31.3)</b>	<b>4992 (11.6)</b>	<b>32 514 (34.3)</b>

0.

# Treatment persistence: a significant issue in chronic disease, including diabetes



Diabetes Ther (2016) 7:537–549  
DOI 10.1007/s13300-016-0185-8



## ORIGINAL RESEARCH

### Persistence with Insulin Therapy in Patients with Type 2 Diabetes in France: An Insurance Claims Study

Ronan Roussel · Bernard Charbonnel · Mourad Behar · Julie Gourmelen · Corinne Emery · Bruno Detournay

**Table 3** Discontinuation rates with initial insulin therapy (% patients still treated with insulin)

	All subjects (N = 1969) (%)	Basal insulin only (N = 1199) (%)	Basal-fast-acting insulin (N = 259) (%)	Other regimens (N = 511) (%)
Insulin discontinuation defined by a 6 months interruption				
Including deaths				
After 6 months	24.0	19.0	23.4	37.2
After 12 months	33.4	27.5	35.5	46.9
Excluding deaths				
After 6 months	24.6	19.1	24.6	39.3
After 12 months	33.8	28.7	35.4	48.5
Insulin discontinuation defined by a 12 months interruption				
Including deaths				
After 6 months	18.3	13.1	19.0	30.9
After 12 months	24.9	18.4	17.7	39.6

Yeaw et al. J Manag Care Pharm 2009;15:728–40; Roussel et al. Diabetes Ther 2016;7:537–49.

# Needs and concerns analysis

Assess the patient's view of the needs for medication

Assess their concerns about the potential side-effects

		Concerns	
		High	Low
Needs	High	Ambivalent	Accepting
	Low	Sceptical	Indifferent

# Your Turn to Practice

Break into pairs:

- To what extent do you think you need this medication to benefit your health?
- To what extent do you have concerns about taking this medication?

		Concerns	
		High	Low
Needs	High	Ambivalent	Accepting
	Low	Sceptical	Indifferent

# Decision aid: SURE test

Yes equals 1 point No equals 0 point	If the total score is less than 4, the patient is experiencing decisional conflict	Yes [1]	No [0]
<b>S</b> ure of myself	Do you feel <b>SURE</b> about the best choice for you?	<input type="checkbox"/>	<input type="checkbox"/>
<b>U</b> nderstanding information	Do you know the benefits and risks of each option?	<input type="checkbox"/>	<input type="checkbox"/>
<b>R</b> isk-benefit ratio	Are you clear about which benefits and risks matter most to you?	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b> ncouragement	Do you have enough support and advice to make a choice?	<input type="checkbox"/>	<input type="checkbox"/>

# What Needs to Change?

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not exposed, but there were no significant differences in clinical measures of health, health care spending and utilization, and employment outcomes after 18 months. Although limited by incomplete data on some outcomes, these findings may temper expectations about the financial return on investment that wellness programs can deliver in the short term.

**TRIAL REGISTRATION** ClinicalTrials.gov Identifier: NCT03167658

JAMA. 2019;321(15):1491-1501. doi:10.1001/jama.2019.3307  
Corrected on April 16, 2019.

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# ***What is the difference between Inspiration and Motivation?***

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- Most of the time motivation is only shortlived. Why?

# ***What is the difference between Reinforcement and Cheerleading?***

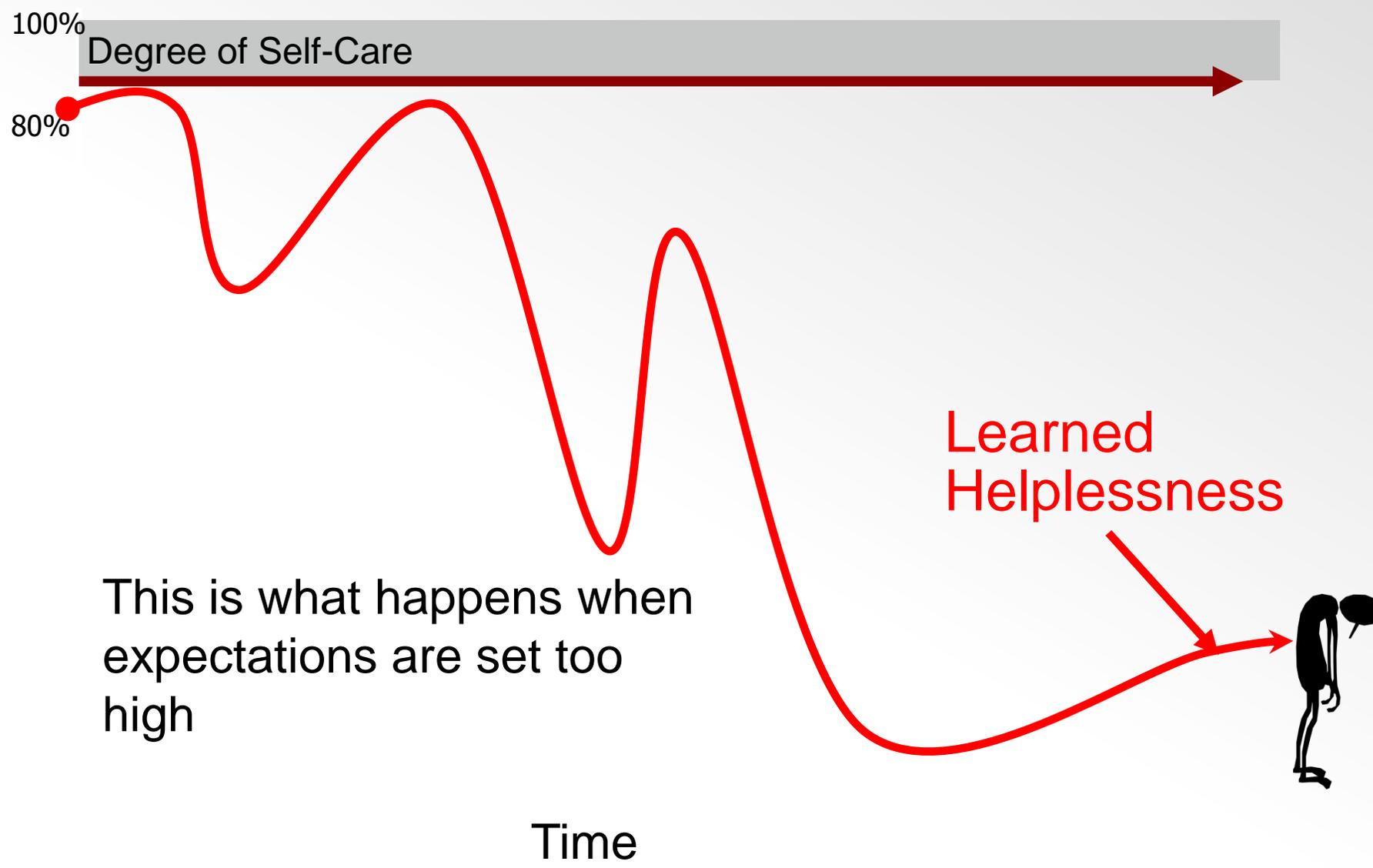
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- Why are clinicians so focused on getting to behaviour so quickly?

# *I think, I probably should, stop smoking*

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- What are the typical clinician responses to statements such as this?
- If you had to wager \$1000 of your own money, would you predict this person will be successful or unsuccessful?
- If the person were unsuccessful what is the most likely word that they would use to describe this unsuccessful outcome?
- How many times can a person have a failure experience before they conclude that they are incapable – the opposite of self-efficacy



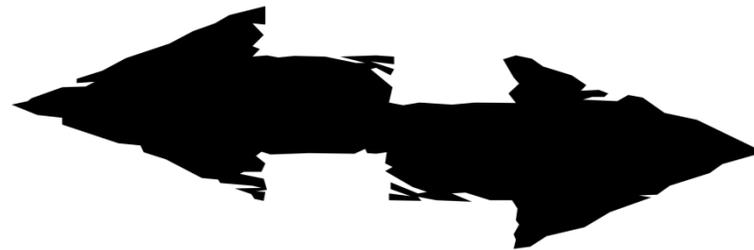
How old is a child when they first declare:  
***YOU ARE NOT THE BOSS OF ME!***

What are amongst a  
child's first words:  
NO!  
ME DO!

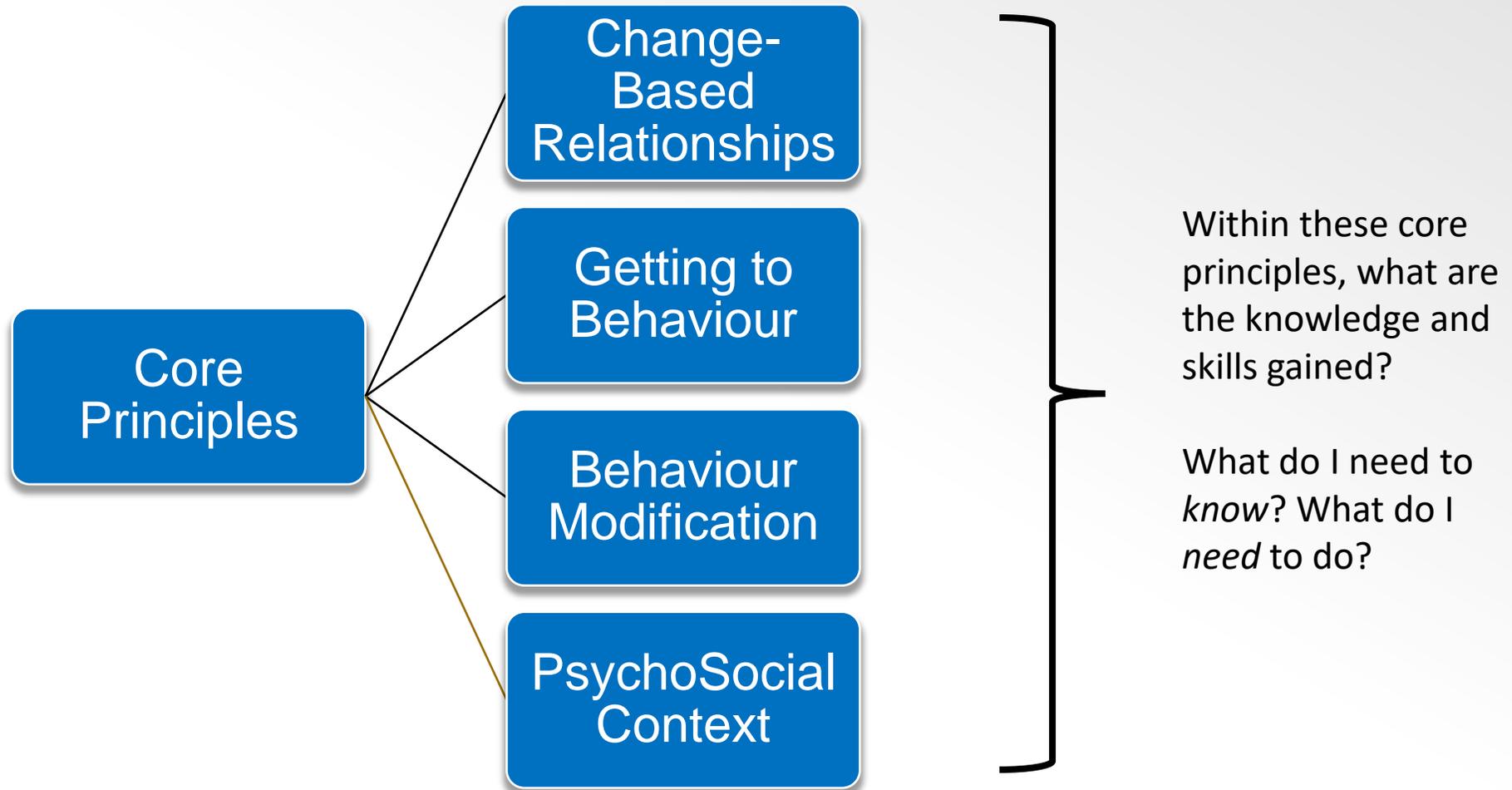
The more you tell  
someone what to do,  
the more they  
.....

# Psychological Reactance

- The tendency to act the opposite to what one is asked to do
- Reactance is related to the issue of control and self-determination
- If a person feels that control is being taken away from them, or free will is limited it is **NORMAL** to resist

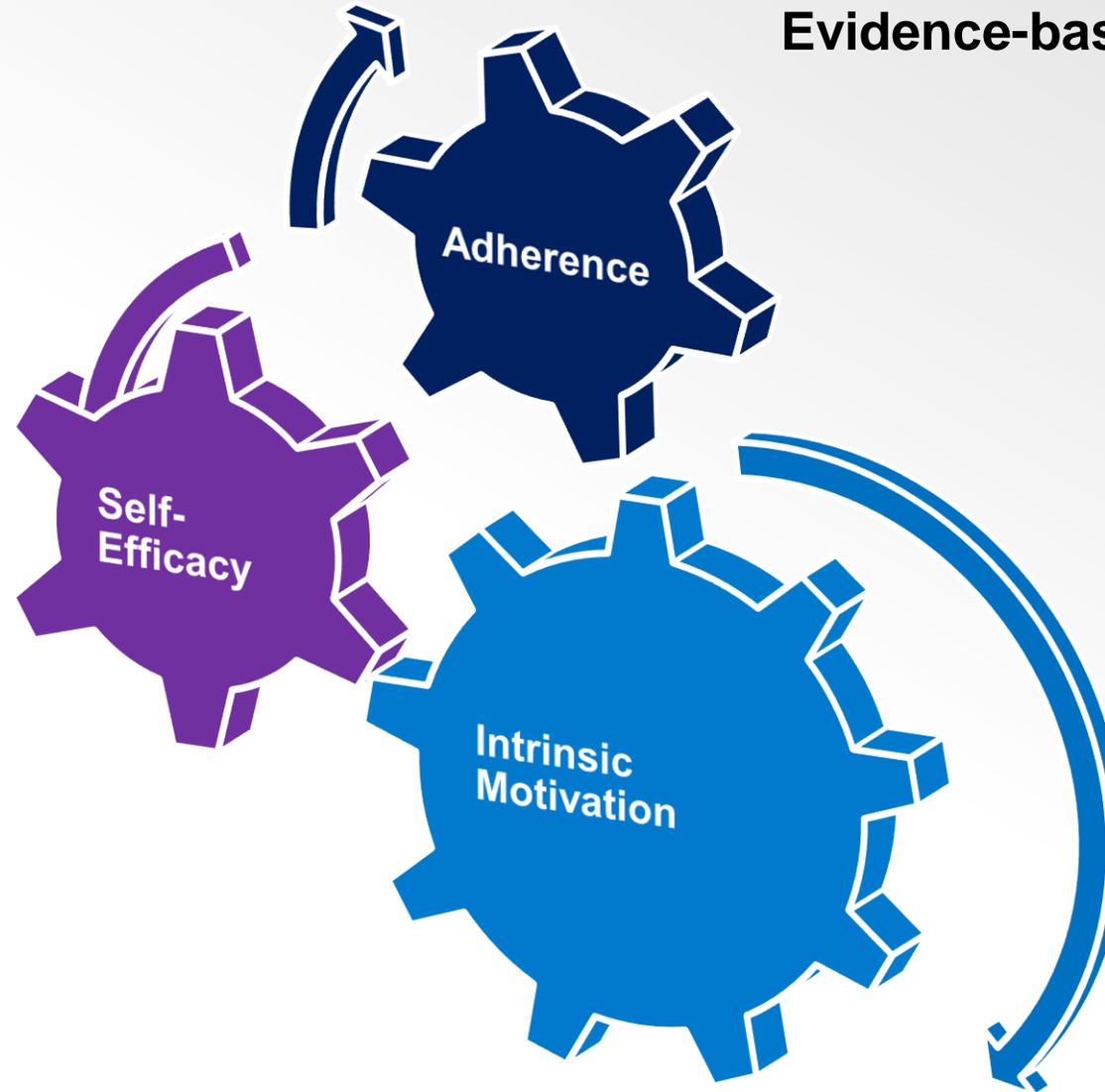


# Core Principles of Behaviour Change Counselling



# The HOW of behaviour change: pathway to success

Evidence-based pathway<sup>1,2,3</sup>



1. Olander et al. *Int J Behav Nutr Phys Act.* 2013;10:29; 2. Teixeira et al. *BMC Medicine.* 2015;13:84; 3. Burgess et al. *Clinical Obesity.* 2017;7:105–114

# Impact of Healthy Lifestyle Factors on Life Expectancies in the US Population

**BACKGROUND:** Americans have a shorter life expectancy compared with residents of almost all other high-income countries. We aim to estimate the impact of lifestyle factors on premature mortality and life expectancy in the US population.

**METHODS:** Using data from the Nurses' Health Study (1980–2014; n=78 865) and the Health Professionals Follow-up Study (1986–2014, n=44 354), we defined 5 low-risk lifestyle factors as never smoking, body mass index of 18.5 to 24.9 kg/m<sup>2</sup>, ≥30 min/d of moderate to vigorous physical activity, moderate alcohol intake, and a high diet quality score (upper 40%), and estimated hazard ratios for the association of total lifestyle score (0–5 scale) with mortality. We used data from the NHANES (National Health and Nutrition Examination Surveys; 2013–2014) to estimate the distribution of the lifestyle score and the US Centers for Disease Control and Prevention WONDER database to derive the age-specific death rates of Americans. We applied the life table method to estimate life expectancy by levels of the lifestyle score.

**RESULTS:** During up to 34 years of follow-up, we documented 42 167 deaths. The multivariable-adjusted hazard ratios for mortality in adults with 5 compared with zero low-risk factors were 0.26 (95% confidence interval [CI], 0.22–0.31) for all-cause mortality, 0.35 (95% CI, 0.27–0.45) for cancer mortality, and 0.18 (95% CI, 0.12–0.26) for cardiovascular disease mortality. The population-attributable risk of nonadherence to 5 low-risk factors was 60.7% (95% CI, 53.6–66.7) for all-cause mortality, 51.7% (95% CI, 37.1–62.9) for cancer mortality, and 71.7% (95% CI, 58.1–81.0) for cardiovascular disease mortality. We estimated that the life expectancy at age 50 years was 29.0 years (95% CI, 28.3–29.8) for women and 25.5 years (95% CI, 24.7–26.2) for men who adopted zero low-risk lifestyle factors. In contrast, for those who adopted all 5 low-risk factors, we projected a life expectancy at age 50 years of 43.1 years (95% CI, 41.3–44.9) for women and 37.6 years (95% CI, 35.8–39.4) for men. The projected life expectancy at age 50 years was on average 14.0 years (95% CI, 11.8–16.2) longer among female Americans with 5 low-risk factors compared with those with zero low-risk factors; for men, the difference was 12.2 years (95% CI, 10.1–14.2).

**CONCLUSIONS:** Adopting a healthy lifestyle could substantially reduce premature mortality and prolong life expectancy in US adults.

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\* Drs Li and Pan contributed equally.

**Key Words:** healthy lifestyle ■ life expectancy ■ mortality, premature

Sources of Funding, see page XXX

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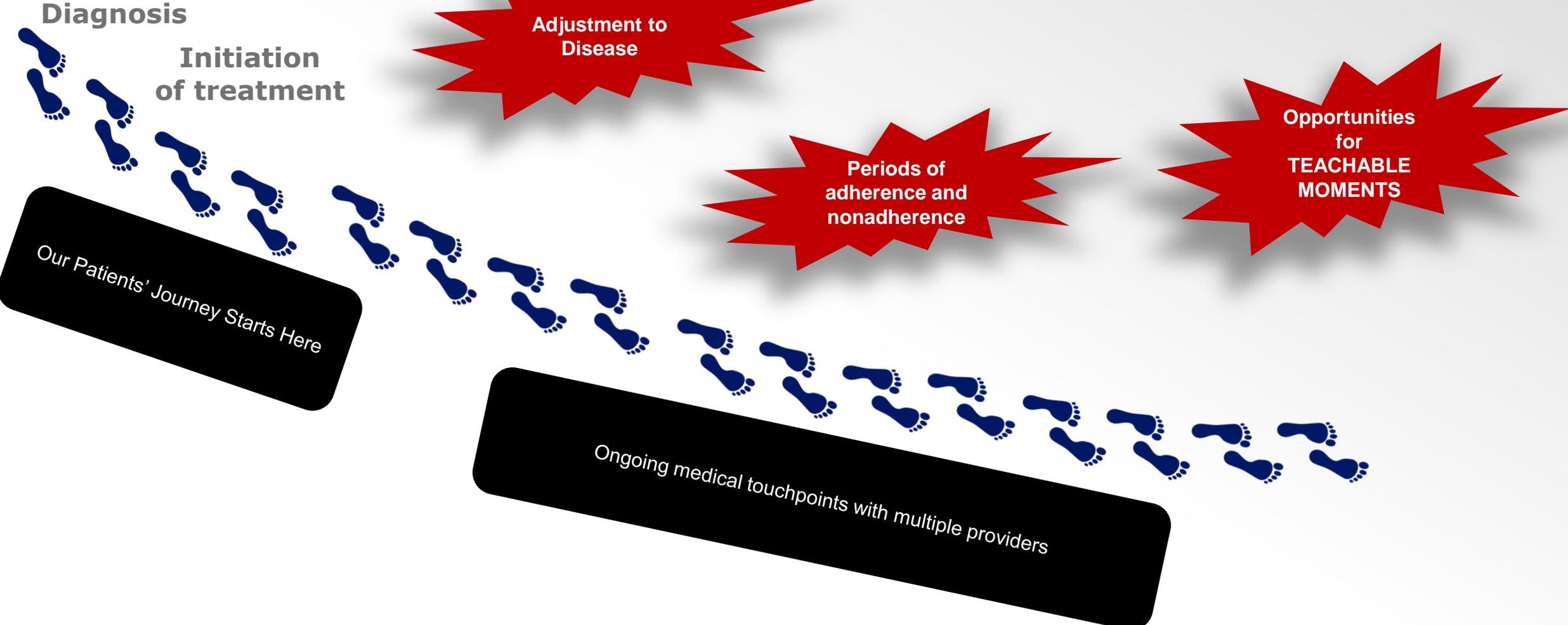
http://circ.ahajournals.org

## Low-Risk Lifestyle Score

We included 5 lifestyle-related factors: diet, smoking, physical activity, alcohol consumption, and BMI. Because this study was focused on modifiable lifestyle factors, we did not include clinical risk factors such as hypertension, hypercholesterolemia, or medication use in the score.

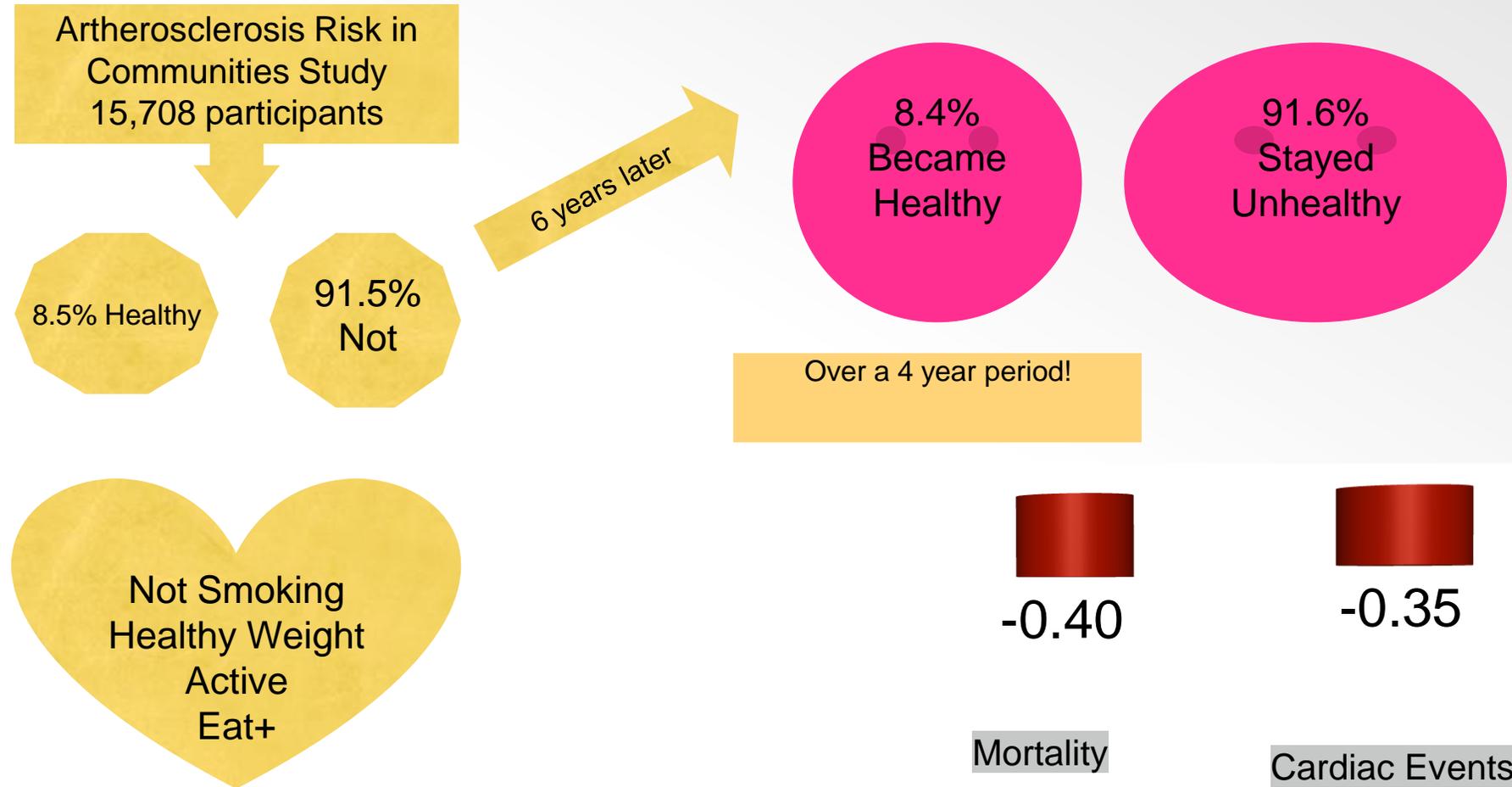
	Person-Years	Deaths Resulting From Any Cause		Cancer Deaths		CVD Deaths	
		Cases	HR (95% CI)	Cases	HR (95% CI)	Cases	HR (95% CI)
Body mass index, kg/m <sup>2</sup>							
18.5–22.9	624 140	5337	1.06 (1.02–1.09)	1868	0.96 (0.91–1.02)	1077	1.02 (0.94–1.10)
23–24.9	677 848	7289	1.0 (Referent)	2588	1.0 (Referent)	1716	1.0 (Referent)
25–29.9	1 381 081	17 903	1.05 (1.02–1.08)	5935	1.01 (0.96–1.06)	4738	1.16 (1.10–1.23)
30–34.9	518 621	7427	1.25 (1.21–1.29)	2371	1.12 (1.05–1.18)	2006	1.66 (1.56–1.78)
≥35	250 013	4211	1.67 (1.61–1.74)	1191	1.24 (1.16–1.33)	1152	2.58 (2.39–2.79)
No. of 5 low-risk factors†							
0	458 169	9286	1.0 (Referent)	2785	1.0 (Referent)	2430	1.0 (Referent)
1	1 101 853	16 329	0.79 (0.77–0.81)	5227	0.83 (0.79–0.87)	4143	0.75 (0.71–0.79)
2	1 053 250	10 908	0.61 (0.59–0.62)	3821	0.68 (0.65–0.71)	2719	0.54 (0.51–0.57)
3	596 784	4408	0.47 (0.45–0.49)	1607	0.53 (0.50–0.57)	1101	0.40 (0.38–0.43)
4	208 683	1113	0.35 (0.33–0.37)	458	0.44 (0.40–0.49)	270	0.28 (0.25–0.32)
5	32 964	123	0.26 (0.22–0.31)	55	0.35 (0.27–0.45)	26	0.18 (0.12–0.26)

# The Patient Journey



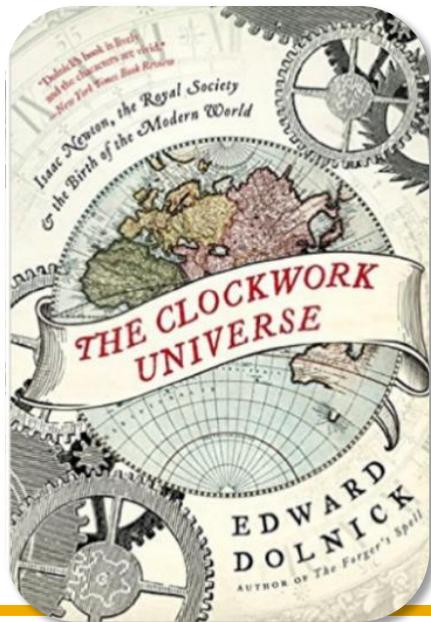
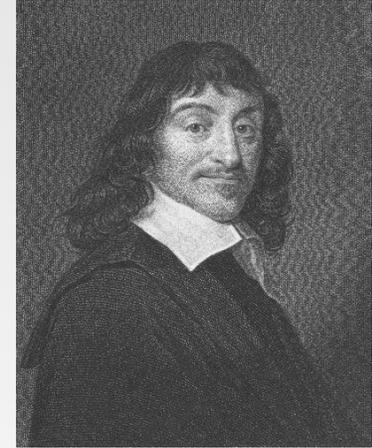
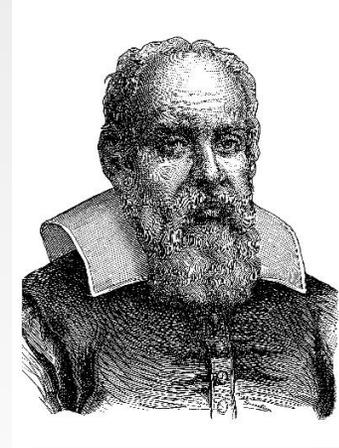
# Turning Back the Clock: Adopting a Healthy Lifestyle in Middle Age

King, Mainous & Geesy, American Journal of Medicine, 2007, 120,598-603



# Who Needs to Change?

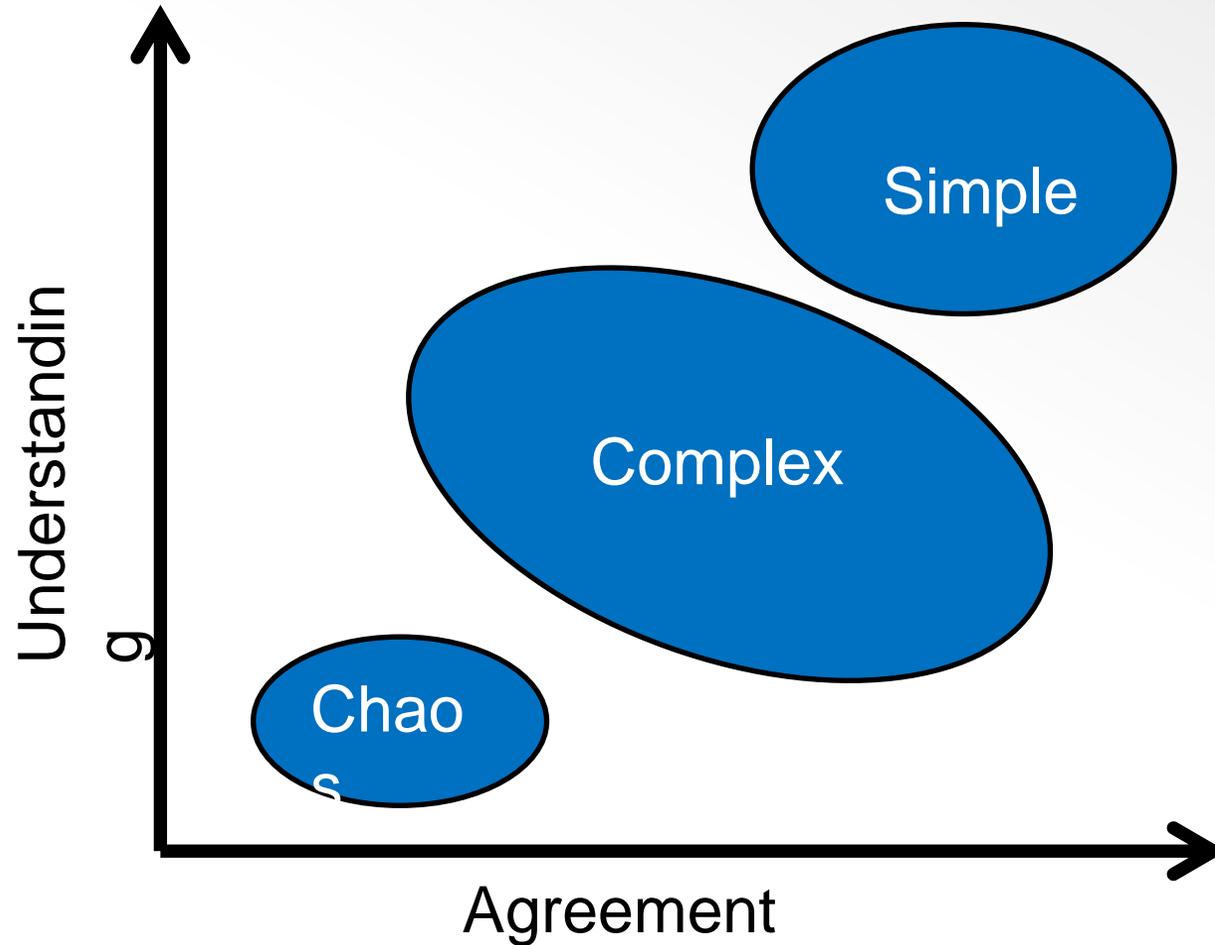
# The scientific method



As clinical medicine developed, this led to the clinician taking the role of the expert.

The expert clinician with the uninformed help-seeker

# Complexity



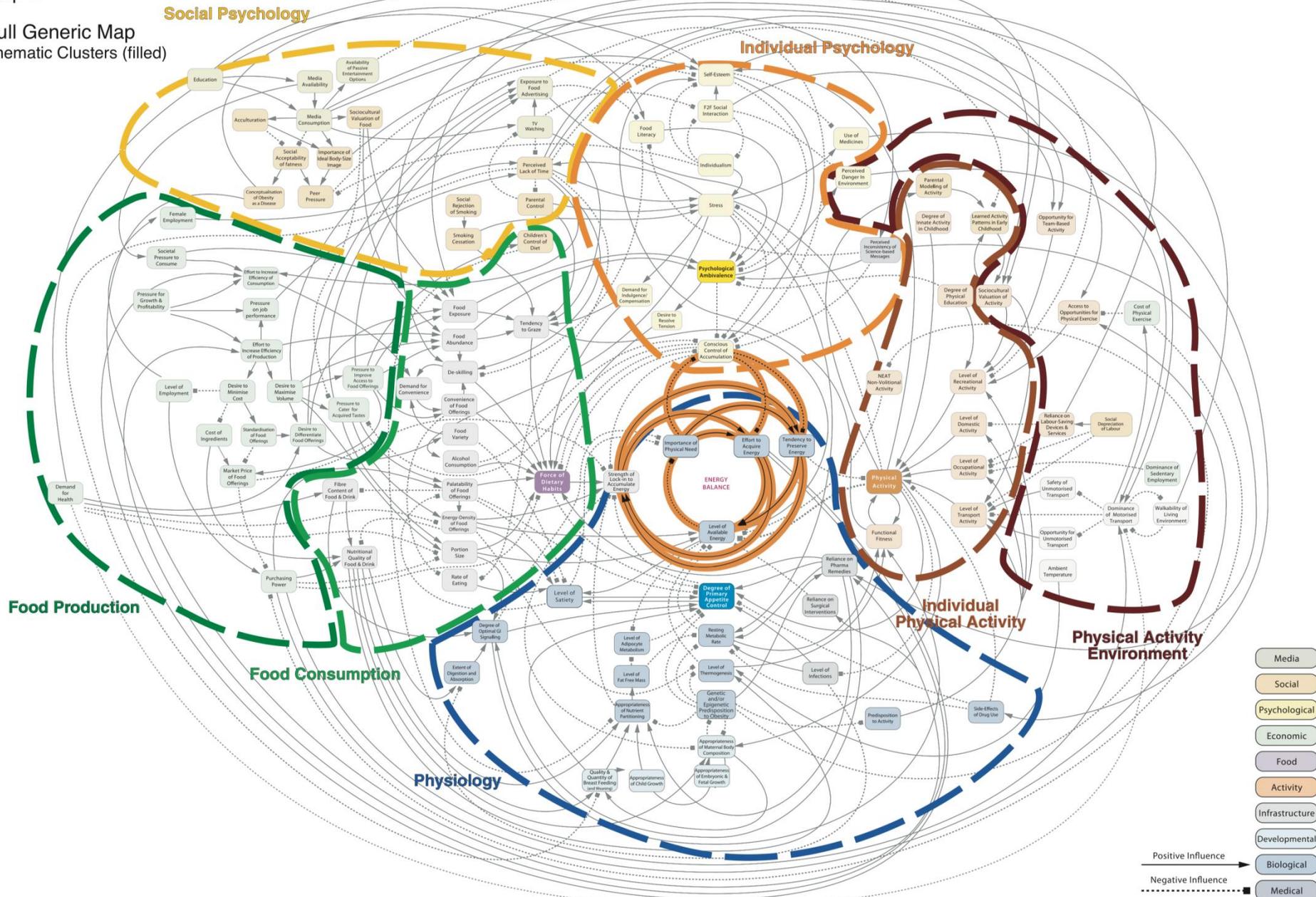
## • Complex systems

- Fuzzy boundaries
- Internalized rules
- Adaptive systems embedded in other systems
- Tension/paradox natural not resolvable
- Interaction leads to continually emerging novel behaviour
- Plsek & Greenhalgh. BMJ. 2003;323:625-628

# Testimony to Complexity: Foresight Obesity System Atlas

Map 5

Full Generic Map  
Thematic Clusters (filled)





## From Medical management...

Diagnosis/  
assessment

Treatment/  
intervention

Outcomes

Outcomes are  
dependent on  
how good  
you are

## ...To Clinical management



Description

Prediction

Choice

## REVIEW

## Physician weight loss advice and patient weight loss behavior change: a literature review and meta-analysis of survey data

SA Rose<sup>1,2</sup>, PS Poynter<sup>1</sup>, JW Anderson<sup>1</sup>, SM Noar<sup>3</sup> and J Conigliaro<sup>4</sup>

Primary care providers (PCPs) can empower their patients to make health-promoting behavior changes. Many guidelines recommend that PCPs counsel overweight and obese patients about weight loss, yet few studies examine the impact of provider weight loss counseling on actual changes in patient behavior. We performed a systematic review and meta-analysis of published studies of survey data examining provider weight loss counseling and its association with changes in patient weight loss behavior. We reviewed the published literature using keywords related to weight loss advice. We used meta-analytic techniques to compute and aggregate effect sizes for the meta-analysis. We also tested variables that had the potential to moderate the responses. A total of 32 studies met criteria for the literature review. Of these, 12 were appropriate for the meta-analysis. Most studies demonstrated a positive effect of provider weight loss advice on patient weight loss behavior. In random effects meta-analysis, the overall mean weighted effect size for patient weight loss efforts was odds ratio (OR) = 3.85 (95% confidence interval (CI) 2.71, 5.49;  $P < 0.01$ ), indicating a statistically significant impact of weight loss advice. There was no significant difference in the effectiveness of advice in studies using obese patients alone versus mixed samples (obese alone OR = 3.44, 95% CI 2.37, 5.00; mixed sample OR = 3.98, 95% CI 2.53, 6.26,  $P = 0.63$ ). PCP advice on weight loss appears to have a significant impact on patient attempts to change behaviors related to their weight. Providers should address weight loss with their overweight and obese patients.

*International Journal of Obesity* (2013) 37, 118–128; doi:10.1038/ijo.2012.24; published online 27 March 2012

**Keywords:** physician; counseling; documentation; patient behavior; meta-analysis

## INTRODUCTION

Obesity is a major clinical and public health problem associated with an increased risk of morbidity and mortality and is related to many comorbidities treated by primary care providers (PCPs).<sup>1,2</sup> Intentional weight loss can potentially mitigate this increased risk.<sup>3,4</sup> Studies on tobacco and alcohol use counseling in the clinical setting demonstrate that physicians can have a positive impact on changing patient behaviors, even with brief counseling.<sup>5,6</sup> Advocating similar methods, multiple organizations recommend physician screening and counseling for overweight and obesity, but most physicians do not appear to be advising their patients to lose weight.<sup>7–12</sup>

Lack of physician counseling may be related to controversy regarding the effectiveness and realistic nature of weight counseling. The United States Preventive Services Task Force (USPSTF) found good evidence to recommend that clinicians screen all patients for obesity through measurement of body mass index. However, they found fair to good evidence that only 'high-intensity counseling and behavioral interventions', defined as more than one person-to-person session during at least the first 3 months, were effective for treatment purposes, and that evidence for less-intensive interventions that may be more feasible in the clinical setting was insufficient.<sup>8</sup> The few studies that address health care provider self-efficacy on the topic of weight find that providers face challenges with weight counseling, including a lack of tools, training, reimbursement, staffing and time, and relay a lack of confidence in their own abilities and in the effectiveness of weight loss strategies in general.<sup>10,13–17</sup>

The purpose of this study was to examine whether PCP counseling enhances patient engagement in weight reduction efforts. We aimed to systematically review the survey literature regarding the effectiveness of PCP-provided advice related to patient weight loss behaviors, followed by a meta-analysis examining the hypothesis that PCP counseling would enhance patient participation in weight loss efforts.

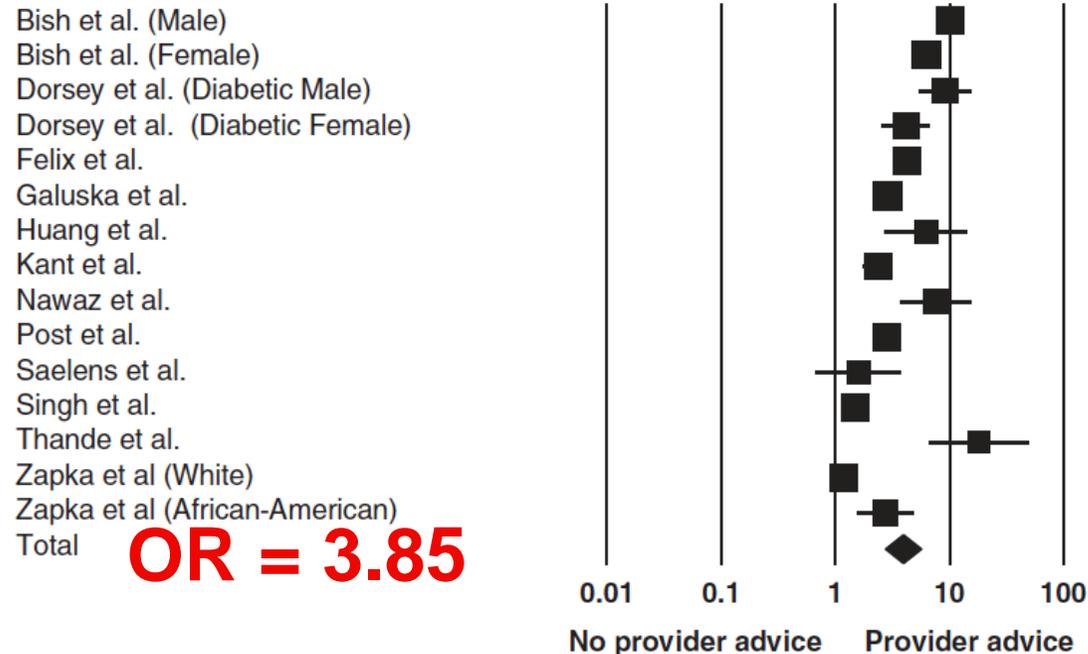
## MATERIALS AND METHODS

## Literature review search strategy

We performed an extensive search related to the effect of provider weight loss advice on patient behavior. We conducted a review of published literature in the English language using numerous keywords in combination relating weight loss advice, including physician, counseling, overweight, obese, weight loss, advice, diagnosis, documentation, recording, recognition, screening and cardiovascular risk. We performed searches in PubMed, Web of Science, PsycINFO, Cochrane Library, ERIC, Dissertation and Theses and WorldCat, and used PubMed MeSH headings and analogous search strategies in other databases. No limitations were made upfront; however, one relevant non-English language article was excluded from the coding. Searches included articles published through November of 2011. An initial search using PubMed alone found five articles with the outcome appropriate for inclusion in the meta-analysis,<sup>18–22</sup> with one later removed in favor of an article using the same data set with a larger, more generalizable population.<sup>21</sup> The list of references for each of these articles was searched for additional potential articles.

## Study name

## Odds ratio and 95% CI



**Figure 2.** Odds ratios for the effect of provider advice on patient weight loss attempt for each study and overall in the meta-analysis.

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# Foundations of Behaviour

*Most Common Coping Strategy*



ywamFrontiers.com

# Foundations of Behaviour

## *Decisional Conflict*

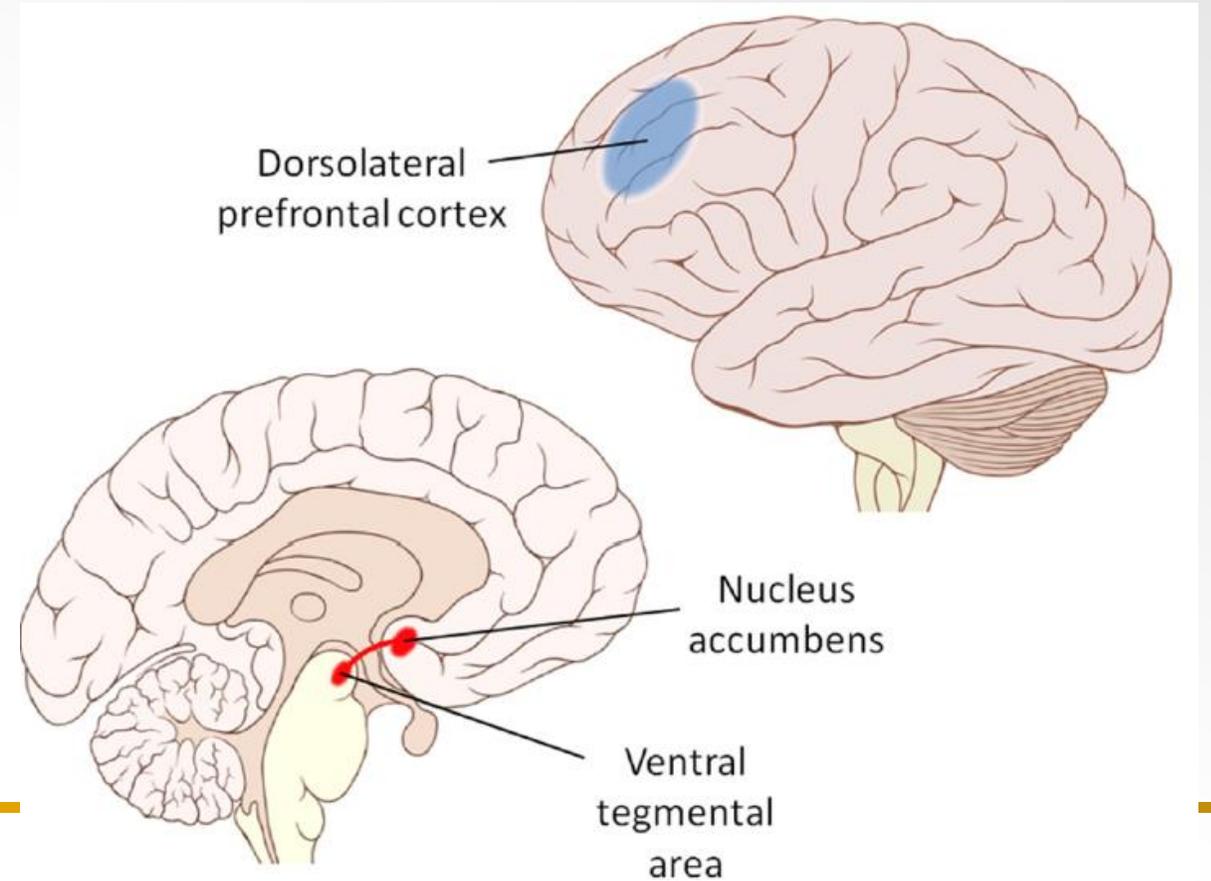


*The SAFEST thing to do.....NOTHING*

# Foundations of Behaviour

## *The Neurobiology of Behaviour*

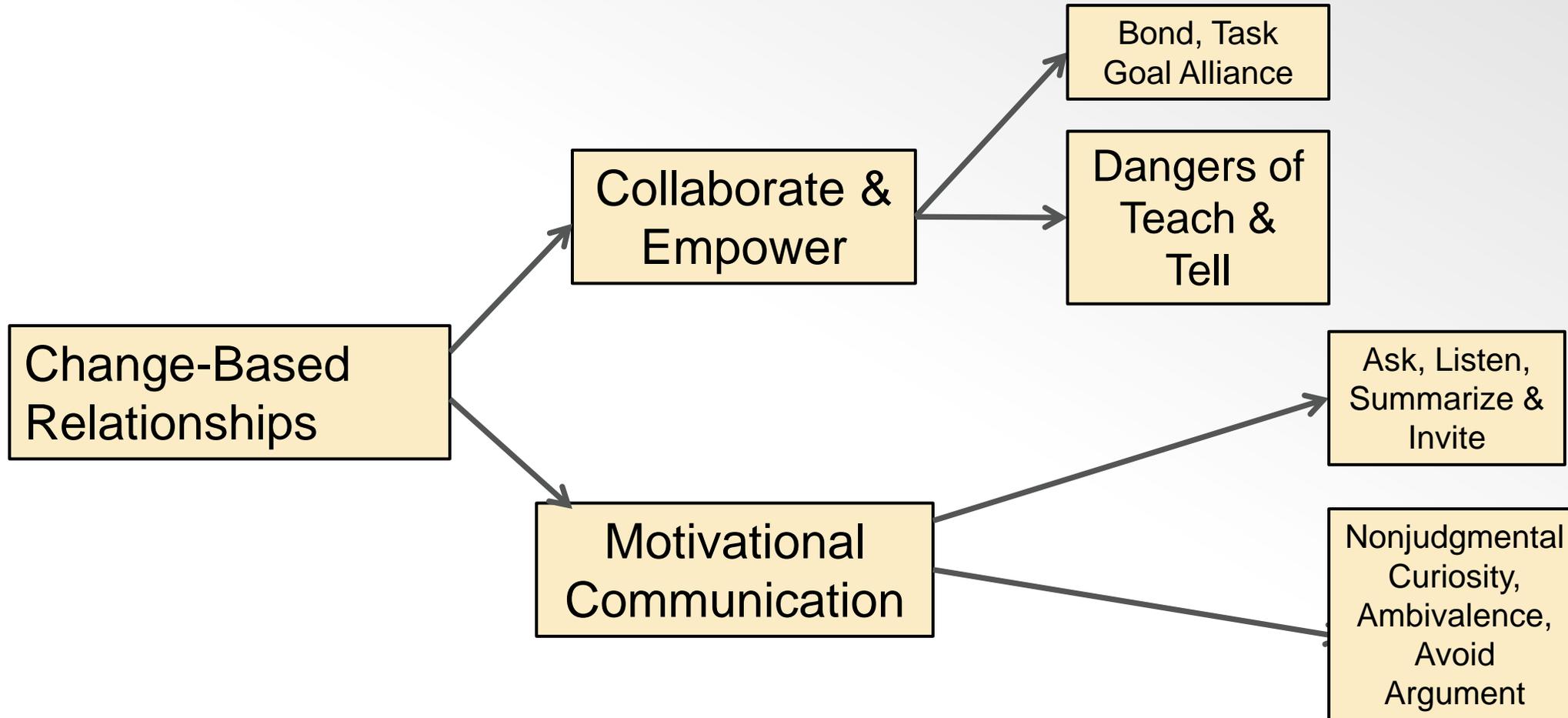
- Feeling and thinking: preferences need no inferences<sup>1</sup>
- Emotions dominate logic
- Communication is the bridge



1. Zajonc, R. *Am Psychologist* 1980;35:151-75

# Behaviour Change Counselling Competencies

---



# Collaborating with and empowering our patients

## **Bond alliance**

Professional, respectful,  
caring and supportive  
connections established  
with patients



## **Task alliance**

Distribution of tasks  
and activities to achieve  
a specific goal



## **Goal alliance**

Agreement on the  
specific outcome to be  
achieved



# Using the patient–provider relationship

**Ask**  
open-ended questions

**Listen**  
empathetically and reflectively

**Summarise**

**Invite**



**‘Communicate to negotiate’**

# Motivational Communication

---

While you ask, listen, summarize and invite, a change-based relationship is facilitated by:

- **Nonjudgmental Curiosity**
- **Expressing Empathy (Ask, listen, summarize invite)**
- **Avoiding Argument**
- **Sitting with Ambivalence**

# Your Turn To Practice – Back to Your Pairs

**Ask**  
open-ended questions

**Listen**  
empathetically and reflectively

**Summarise**

**Invite**

Your patient lives with type 2 diabetes and is maxed out on oral agents.

- The MD – recommend insulin
- The Pt – you see the idea of insulin as terrifying and a sign of failure; the last thing you are interested in

# READINESS TO CHANGE

# Defining Behaviour

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- Behaviour is:
  - Observable
  - Measureable
  - Something that the patient does.
- Patients and providers need to agree on a behaviour (i.e. exactly what the patient needs to do) that is highly specific (when, where, what, how) and in the context of the persons life.
- The behaviour should be meaningful to the patient rather than solely the provider.



# Assessing Readiness

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- Readiness for change is a state that fluctuates over time.
- The purpose of assessing readiness is to tell you how to get started.

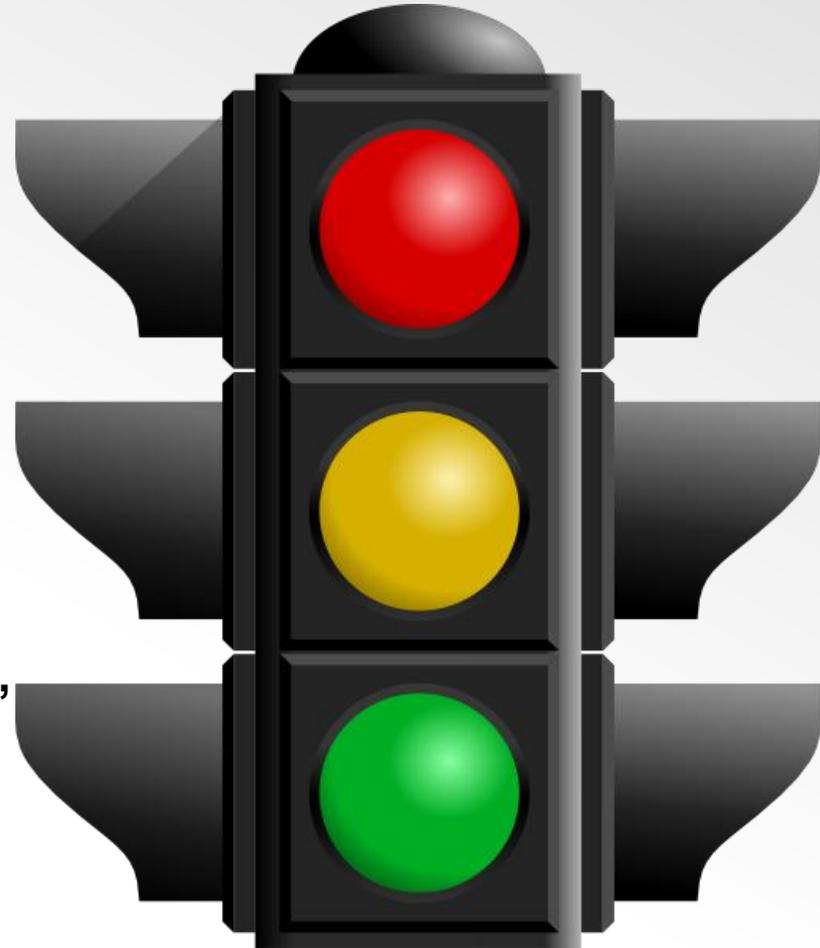


# Assessing Readiness

---

A person's readiness can be categorized as red light, yellow light or green light for a certain behaviour.

1. "Do you consider [the behaviour] a problem?"
2. "Are you bothered by [the behaviour]?"
3. "Are you interested in changing [the behaviour]?"
4. "Are you ready to change now?"

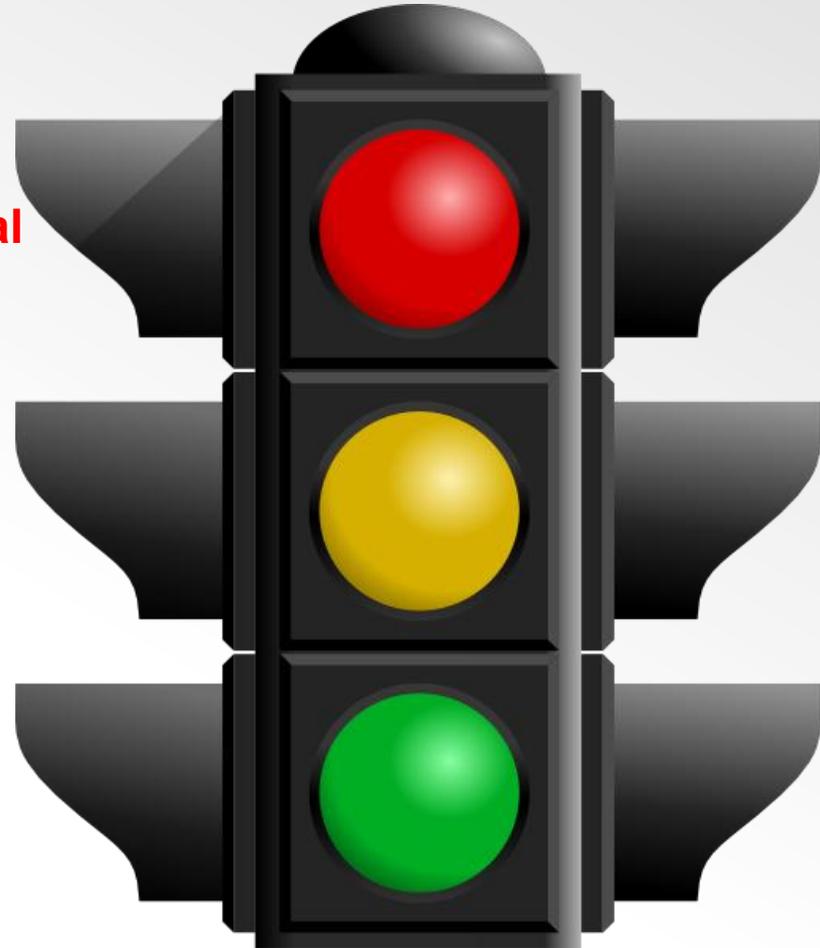


# Assessing Readiness

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Readiness is a state, not a trait.

1. “Do you consider [the behaviour] a problem?” – **Frontal lobe engagement**
  2. “Are you bothered by [the behaviour]?” – **Limbic system engagement**
  3. “Are you interested in changing [the behaviour]?” – **Identifying the goal**
  4. “Are you ready to change now?” – **Action**
- You are trying to be transparent with the process in order to give feedback to patients.
  - Aim is to obtain buy-in.



# Readiness assessment is the beginning, not the end



## Ready

Go right to behaviour modification

## Ambivalent

Begin working on behaviour and encourage a focus on personal meaningful reasons to change

## Not ready

Confirm that the person is not ready and ask permission to keep the conversation going

# Assessing Readiness

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## **Proceeding Under a Green Light:**

- **First step action plans/SMART goals.**
- **Next step goals (behaviour shaping).**
- **Personalized re-built environments (stimulus control).**
- **Turning external into internal motivation (reinforcement management).**

---

## Goal Setting:

### Create S.M.A.R.T. Goals



# Shaping

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- **Sequence SMART goals such that the person experiences:**
  - **Success...followed by**
  - **Success....followed by**
  - **Success....followed by**
  - **Success....followed by**
  - **Success....followed by**
- **Following sufficient successes (varies but commonly 5-7) the person develops self-efficacy.**
  - **This self-efficacy is based on past behaviour**

# Stimulus Control

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- **Stimulus Control** is about recognizing that a strong determinant of behaviour is environmental cues.
- Recognition that the **built environment** is an important determinant of behaviour.
- May want to focus on environmental factors that make it difficult to stay on track.
- Stimulus control is about identifying the cues that elicit unhealthy behaviour.

## Example:

- Despite being outrageously priced, many people eat food at a movie when they are not hungry

# Reinforcement Management

---

## Behaviour will be repeated when:

- It is reinforced or rewarded.
  - Something valued or desirable is added
  - Something negative is taken away
- It happens at the same time as other behaviour that is rewarded.

## Behaviour will extinguish (stop) when:

- A reinforcer or reward is taken away.
- The reward value ends or is faded out.
- A punishment is applied

# PROMOTING READINESS

**This is what we would do for  
red and yellow light behaviours**

# Assessing Readiness

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## Yellow Light:

- **The person is ambivalent. They can see the pros and cons of changing.**
- **They are pulled in two directions.**
- **You can have opposite opinions at the same time.**
- **You will hear “Yes,...But”**
- **“Yes,...But” actually means “No,...Because” (Avoiding argument).**

# Decisional Balance

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	Pros	Cons
Of staying the same		
Of changing		

# Assessing Readiness

---

## Red Light:

- **The clinician needs to communicate that the expectation of change is off the table.**
- **Keep the conversation going.**
- **The patient is not receptive to change and is resistant to what you have to say. This does not mean that the relationship stops.**

# Assessing Readiness

---

## **Proceeding Under a Red Light:**

- **This is the most challenging situation for us.**
- **Find a way to keep the dialogue going.**
- **Intervention is maintaining the relationship.**
- **Take the expectation of change off the table.**

# Assessing Readiness

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## Steps for Proceeding Under a Red Light:

- **Ask yourself if you notice an urge to fix the problem or set the patient straight.**
  - **If so, this involves you (as the provider) managing your own reaction so that it doesn't come off as judgmental). Maintaining the relationship at this point is critical.**
  - **Managing your own reaction (“righting reflex”).**
  - **Reminding yourself that patients have a right to make their own choices.**
  - **Trusting that understanding a patients current choice can be a pathway to discussing alternate choices.**

# Supporting Sustained Behaviour Change

- This is about emotional, psychological and social issues
  - Provider role and self-efficacy
    - Identify
    - Educate
    - Recommend
    - Support

# Supporting Sustained Behaviour Change

- **The 4 Ss**
  - Self-Image
  - Self-Efficacy
  - Social Support
  - Stress Management (discharge, calming, expression, connection)

# Replacing the Function

- Many unhealthy behaviours serve a purpose for the individual
  - Uncovering the purpose or function of the unhealthy behaviour is very important (nonjudgmental curiosity)
    - This function is a strong reason not to change
- Once the function of the behaviour has been understood
  - Focus on healthier alternative behaviours that provide a similar function
- Once a person has an alternative they can choose to give up the unhealthy behaviour

# Intrinsic Motivation

# Values

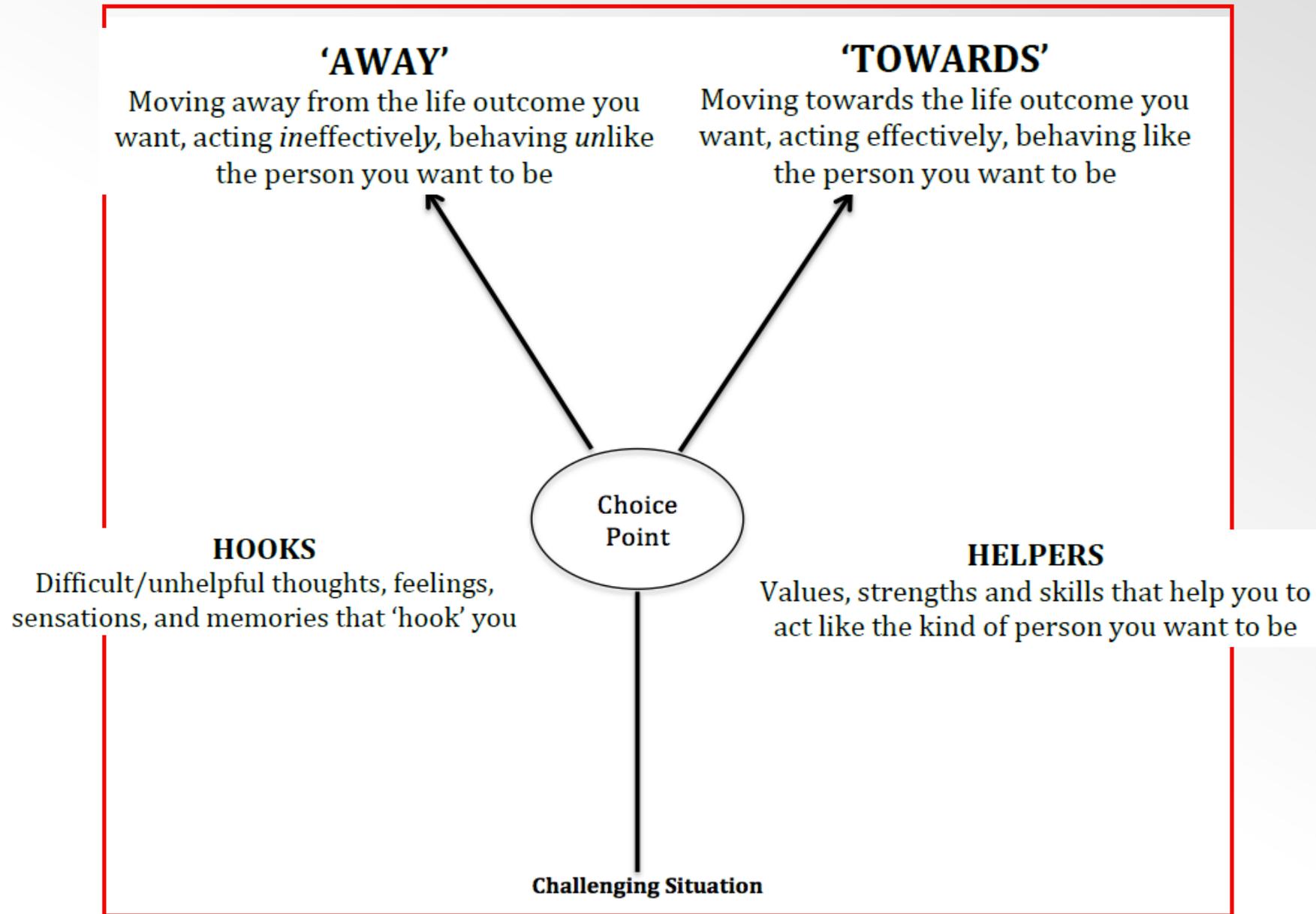
**The personal strengths or qualities a person most wants to express in his or her life and daily patterns of action.**

# Values-driven behaviour

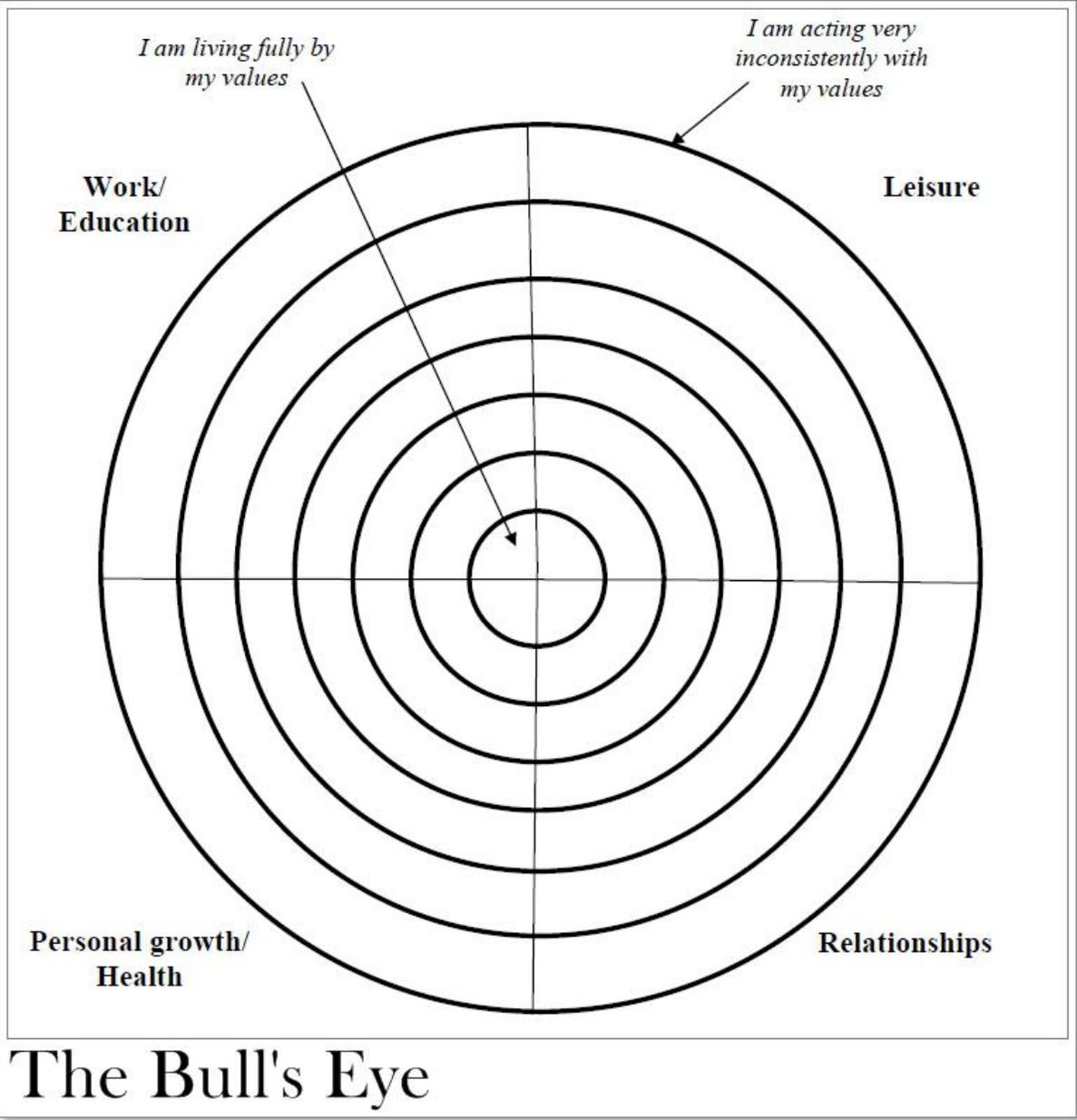
- The cookie example
  - Scene:
    - You are asked to choose between 2 cookies – freshly baked, warm and aromatic versus misshapen slightly burned 2-day-old cookies – which would you choose?



- Punch line
  - You are told your 3-year-old granddaughter came up with the idea and worked hard to make this cookie for you, insisting that your son bring it to you so it arrived in time for your dinner tonight. Which cookie would you choose?



# Committed Action



# Ask, Assess, Advise, Agree, Assist



**Clinical Review**

## Modified 5 As

*Minimal intervention for obesity counseling in primary care*

Michael Vallis MD MSc<sup>1</sup> Helena Piccinini-Vallis MD MSc CCFP<sup>2</sup> Arya M. Sharma MD PhD FRCPC<sup>3</sup> Yoni Freedhoff MD CCFP<sup>4</sup>

**Abstract**  
**Objective** To adapt the 5 As model in order to provide primary care practitioners with a framework for obesity counseling.  
**Sources of information** A systematic literature search of MEDLINE using the search terms 5 As (49 articles retrieved, all relevant) and 5 As and primary care (8 articles retrieved, all redundant) was conducted. The National Institute of Health and the World Health Organization websites were also searched.  
**Main message** The 5 As (ask, assess, advise, agree, and assist), developed for smoking cessation, can be adapted for obesity counseling. Ask permission to discuss weight; be nonjudgmental and explore the patient's readiness for change. Assess body mass index, waist circumference, and obesity stage; explore drivers and complications of excess weight. Advise the patient about the health risks of obesity, the benefits of modest weight loss, the need for a long-term strategy, and treatment options. Agree on realistic weight-loss expectations, targets, behavioural changes, and specific details of the treatment plan. Assist in identifying and addressing barriers; provide resources to assist in finding and consulting with appropriate providers, and arrange regular follow-up.  
**Conclusion** The 5 As comprise a manageable evidence-based behavioural intervention strategy that has the potential to improve the success of weight management within primary care.

*Mr Cortez is a 57-year-old man with type 2 diabetes and hypertension. He has been gaining weight since retiring from the military. His body mass index (BMI) is 37.4 kg/m<sup>2</sup>, and you are frustrated that he has not followed your recommendations to lose weight. During his most recent visit you told him that if he did not lose weight he faced a future of disability from diabetes. You are concerned about him but wonder if talking about weight is a good use of time. What should your approach be?*

**Sources of information**  
 A systematic literature search of MEDLINE using the search terms 5 As (49 articles retrieved, all relevant) and 5 As and primary care (8 articles retrieved, all redundant) was conducted. The National Institute of Health and the World Health Organization websites were also searched.

**Main message**  
 Primary care is an important setting for obesity management.<sup>1</sup> Yet many primary care providers feel ill-equipped or inadequately supported to address obesity.<sup>2-9</sup> This is in part because obesity outcomes depend more on patient behaviour than on physician recommendations and education. Behaviour change theories exist, as does evidence that behaviour change interventions are effective.<sup>10,11</sup> However, the time and support necessary to learn behavioural counseling are barriers. In this context, minimal intervention strategies such as the 5 As (ask, assess, advise, agree, and assist) can guide the process of counseling a patient about behaviour change.

The 5 As, developed for smoking cessation,<sup>12</sup> can be adapted for obesity counseling.<sup>13,14</sup> The 5 As are appealing, as they are rooted in assessment, behaviour modification, self-efficacy enhancement) and can be implemented in busy practice settings. However, recent studies show that they are only partially implemented: ask and advise are used

**KEY POINTS** Primary care is an important setting for obesity management, yet many primary care providers feel ill-equipped or inadequately supported to address obesity. Minimal intervention strategies such as the 5 As (ask, assess, advise, agree, and assist) can guide the process of counseling a patient about behaviour change. They are rooted in behaviour change theory and can be implemented in busy practice settings.

This article has been peer reviewed.  
 Can Fam Physician 2013;59:27-31

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# Persons with chronic disease spend only a small portion of their life with Healthcare Providers

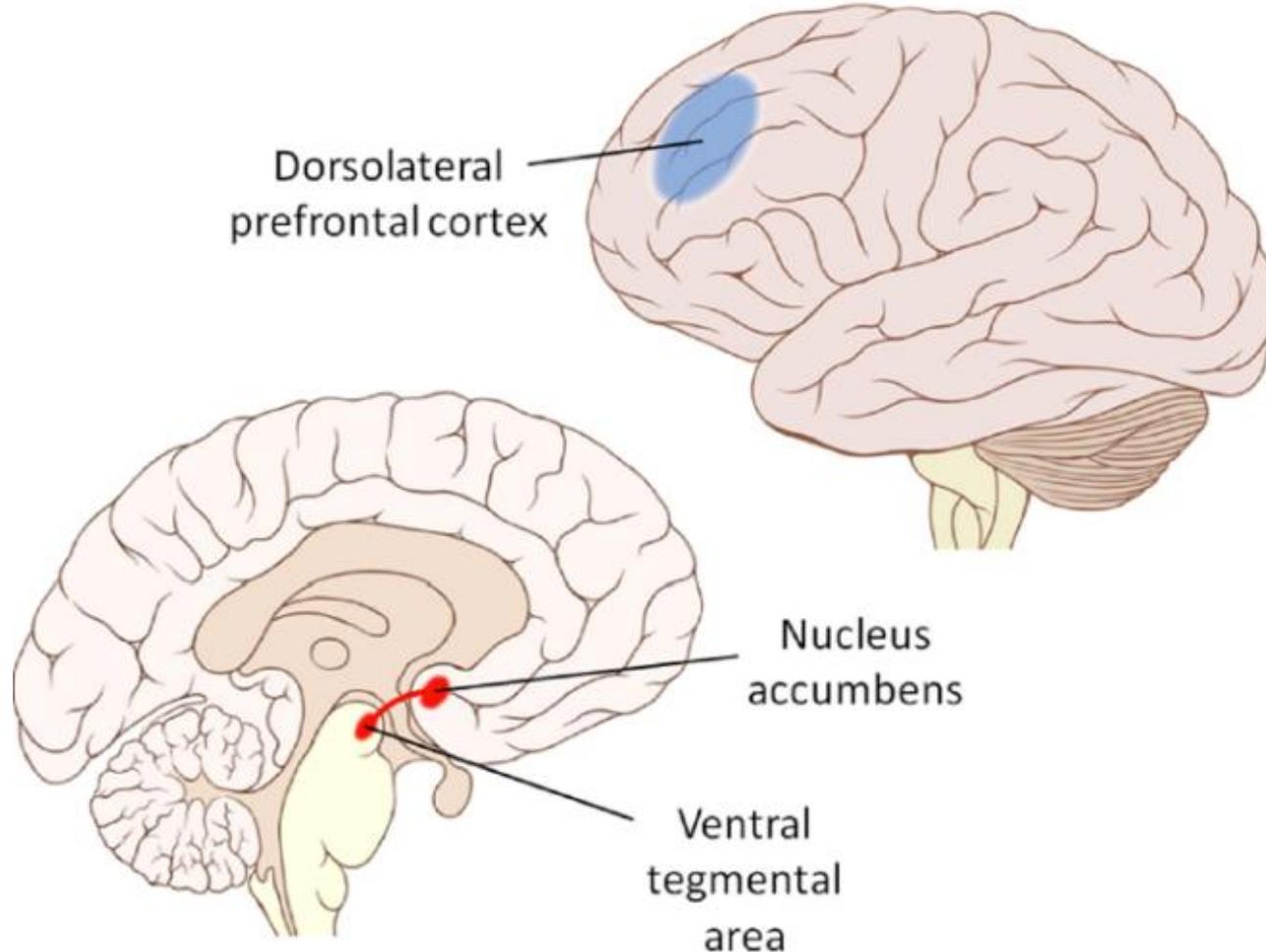


Without a health care provider: 525,480 minutes

With a health care provider: 120 minutes

With a health care provider in flare ups: 120 minutes

# Change is hard: Ambivalence is normal



The impulse to seek pleasure is tempered by human values:  
“Anything worth having is worth tolerating distress for”

Meaning can balance pleasure

# What Do We Know About Those With Chronic Conditions?

- Their symptoms are chronic!

They are ALWAYS ill!!!

- They function even when they have symptoms

- Healthy people don't show up when they are ill; those with chronic disease soldier on regardless of symptoms

You might as well  
dress the part even if  
you feel like  
S\*#t!

# Two Take-Aways

- Listen
- Allow flexibility

Why is it easier for a smoker to take smoke breaks in the workplace than it is for someone with, say diabetes, take care of their diabetes in the workplace??!!!!

# What do we know about Diabetes?

- Let's calculate how many years of experience in diabetes we have as a group
- How many times has a person come to your clinic to say:
- *“I don't have diabetes but I'd LOVE to test my blood glucose 4-6/day, take insulin and pills multiple times/day, monitor and record everything I eat and drink and do”?*

# What Do People With Diabetes Experience?

- The behavioural demands of self-care can be **OVERWHELMING**
  - Self-testing, healthy eating, exercise/activity, insulin/medication regimen, general health care (feet, eyes)
- Maintaining glucose control is enormously **COMPLEX**
  - Managing the behaviours is like thinking in 4-dimensional space - “you can't imagine”
- Diabetes self-care demands are **CONSTANT**
  - There are no weekends, summer vacations, retirement packages
- Diabetes can be **UNFORGIVING**
- Diabetes is plagued by **UNCERTAINTY**

# Healthy Behaviour is Abnormal Behaviour in the Current Environment We Live In

Apple pie or Apple?  
Elevator or Stairs?

- Approach pleasure and avoid pain
- Save energy for when we need it
- Make the most of the moment because the future is uncertain

How often did your  
great, great  
grandfather go to  
Goodlife?

A healthy old age  
requires working hard  
when you are well and  
younger

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