Adapting Programming in the New Landscape of Anti-Obesity Medications:

Biological, Behavioral, and Business Considerations

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KU MEDICAL CENTER
The University of Kansas

Professional Disclosure:

Consultant, Wondr Health, Inc.

IDEAL Strategy and Consulting

Personal Disclosure:

Obesity Treatment Advocate

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The University of Kansas


EXERCISE
BEHAVIOR
OBESITY
RELATED
DISEASES

BIOLOGICAL

BEHAVIORAL

HUMAN

LIVING WITH OBESITY

EXERCISE INTERVENTION

BEHAVIOR CHANGE STRATEGY

FIDELITY

ADAPTATION

Living with obesity isn’t easy

Treating obesity isn’t easy

Person-Centered

Not

Method-Centered

Objectives

To understand contemporary approaches for inclusion of and the effectiveness of, physical activity within the context of obesity medications.

To understand how lifestyle interventions, specifically physical activity, may need to be adapted and tailored, from the provider and the patient.

Highlight the need for building inclusive and collaborative spaces for patients/clients taking obesity medications and key considerations: method-centered → client-centered frameworks

But First…
Highlights from Part #1

Renee J. Rogers, PhD • You
Bio-behavioral healthy lifestyle strategist | Engagement + adher...
1mo • Edited •

PSA for #fitnessprofessionals regarding #antiobesity medications...

STOP: Calling anti-obesity medications, “weight loss” drugs.

STOP: Calling all anti-obesity medications, “Ozempic”

STOP: Making claims that resistance training and exercise programs will “stop lean mass and muscle mass loss”

DO: Read more (evidence) about what <u>we do and do not know</u> about the role of physical activity…

Renee J. Rogers, PhD • You
Bio-behavioral healthy lifestyle strategist | Engagement + adher...
1mo • Edited •

PSA for #fitnessprofessionals regarding #antiobesity medications...

STOP: Calling anti-obesity medications, “weight loss” drugs.

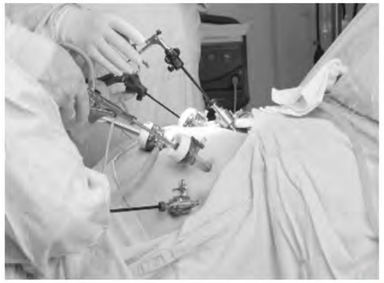
These medications are FDA approved for the treatment of **obesity***

Obesity is a chronic disease

American Medical Association, 2013

These medications are <u>not</u> for modest weight loss

Components of an Effective Obesity Management Program



Slide Image credit: Dr. Robert Kushner

Wadden TA, et al. *Med Clin North Am*. 2000;84(2):441-461; Stumbo P, et al. *Surg Clin North Am.* 2005;85(4):703-723.

Renee J. Rogers, PhD • You
Bio-behavioral healthy lifestyle strategist | Engagement + adher...
1mo • Edited •

PSA for #fitnessprofessionals regarding #antiobesity medications...

STOP: Calling all anti-obesity medications, “Ozempic”

WHAT'S IN A NAME?

- Not all "Ozempic"
  - 2nd or 3rd Generation Medications
  - Incretin-based Hormone Agonists
  - Nutrient Stimulated Hormone (NuSH) Therapies

- GLP-1 agonist receptor therapies have been around
  - Lirglutide ("Victoza/Saxenda")
  - Dulaglutide ("Trulicity")

SEMAGLUTIDE

"OZEMPIC"
TYPE 2 DIABETES

"WEGOVY"
OBESITY

~15%

FDA APPROVAL
2021

~22%

TIRZEPATIDE

"MOUNJARO"
TYPE 2 DIABETES

"ZEPBOUND"
OBESITY

FDA APPROVAL
2023

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100+

AGENTS IN DEVELOPMENT

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The University of Kansas

Blundell *et al*. *Obes Rev* 2010;11:251–270; van Can *et al*. *Int J Obes* 2014;38:784–93

↓ Hunger
Drive to consume

↑ Satiety
End state of satisfaction
(between-meal inhibition)

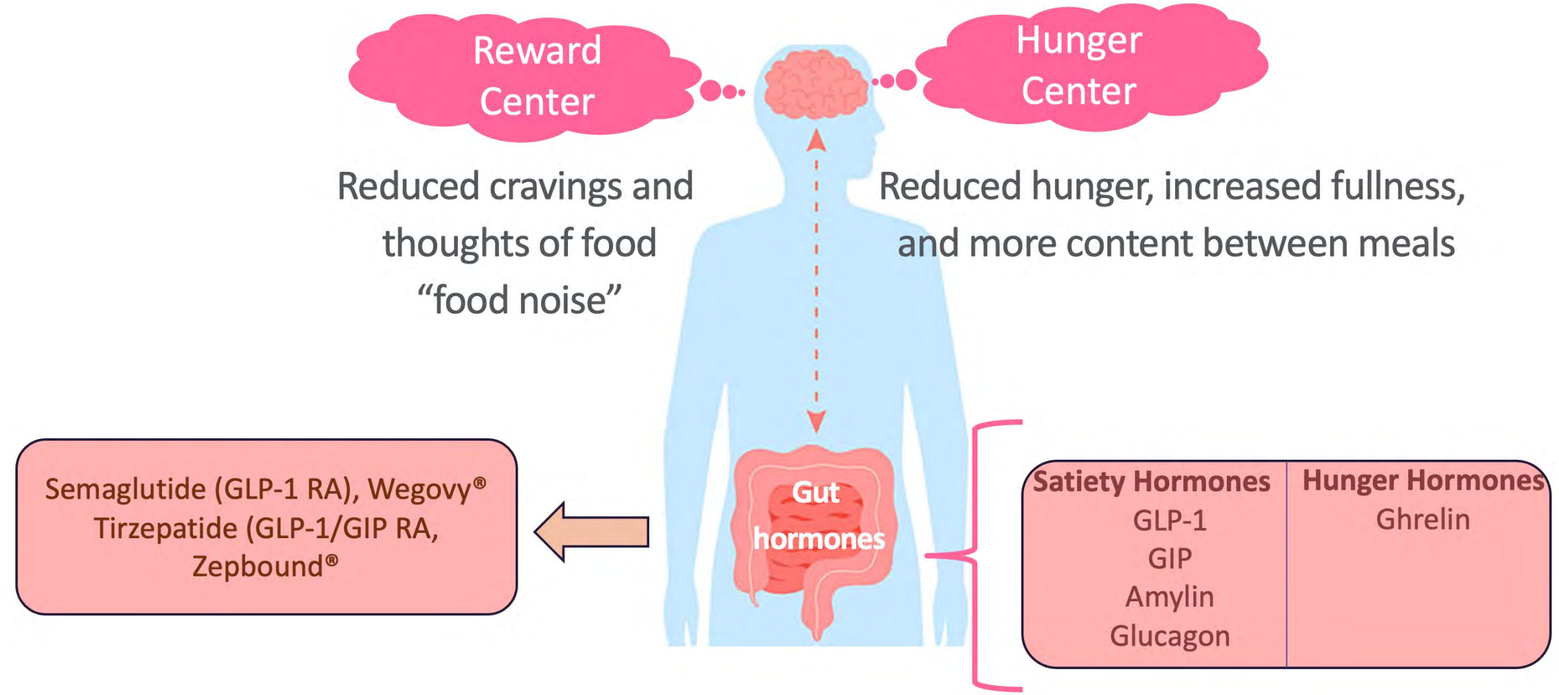
↑ Fullness
Physical feeling experienced in the gut

↓ Wanting
Motivation to consume a specific food (craving)

↑ Satiation
Negative feedback, leading to meal termination (within-meal inhibition)

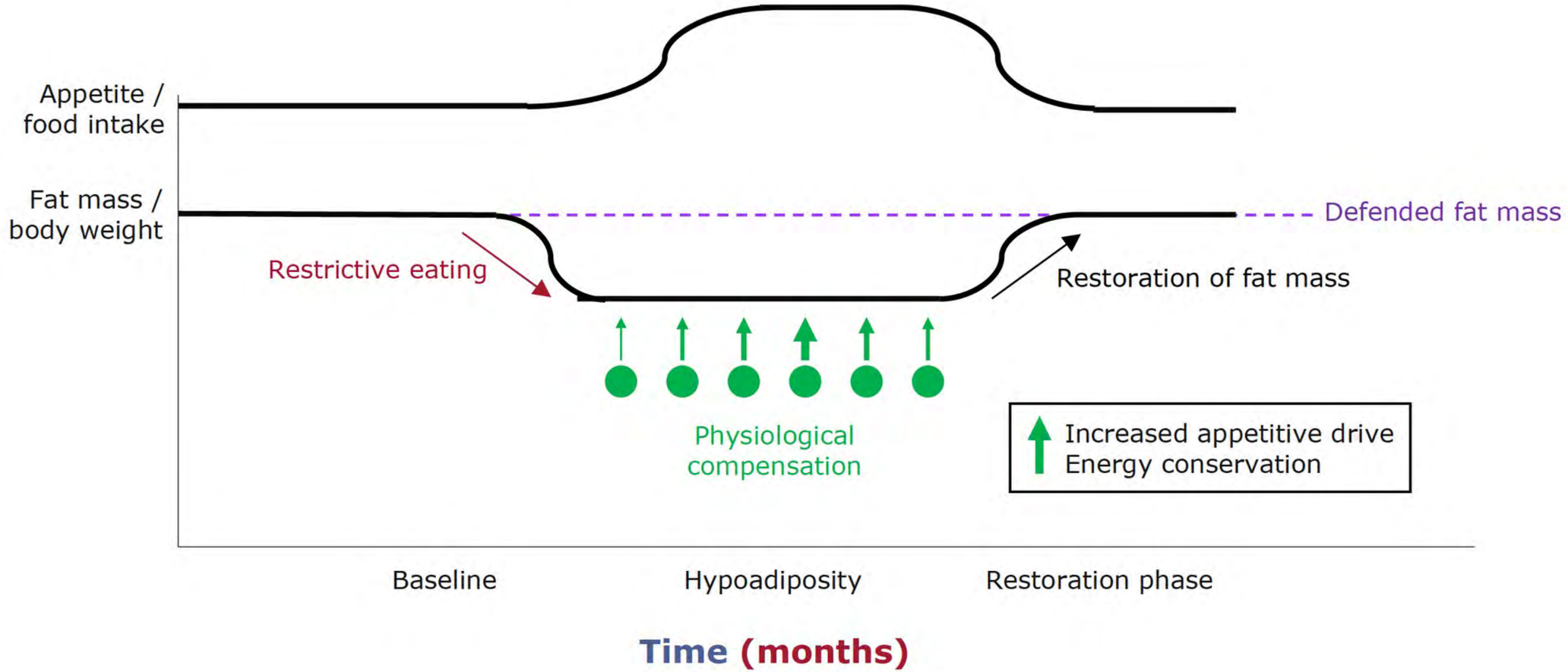
↓ Liking (hedonic)
Sensory pleasure elicited by contact with food

↓ Prospective food consumption
How much an individual feels they would like to eat



Slide Image credit: Dr. Robert Kushner

Metabolic compensatory mechanisms – calorie reduction



SLIDE CREDIT: KAPLAN, LM 2023
BOSTON COURSE ON OBESITY TREATMENT

Medical Management

- Indications
- Evaluation
- Administration
- Dosing – Escalation/De-Escalation
- Side Effects
- Dietary changes + increased Physical Activity

The Challenges:

On these agents, patients:

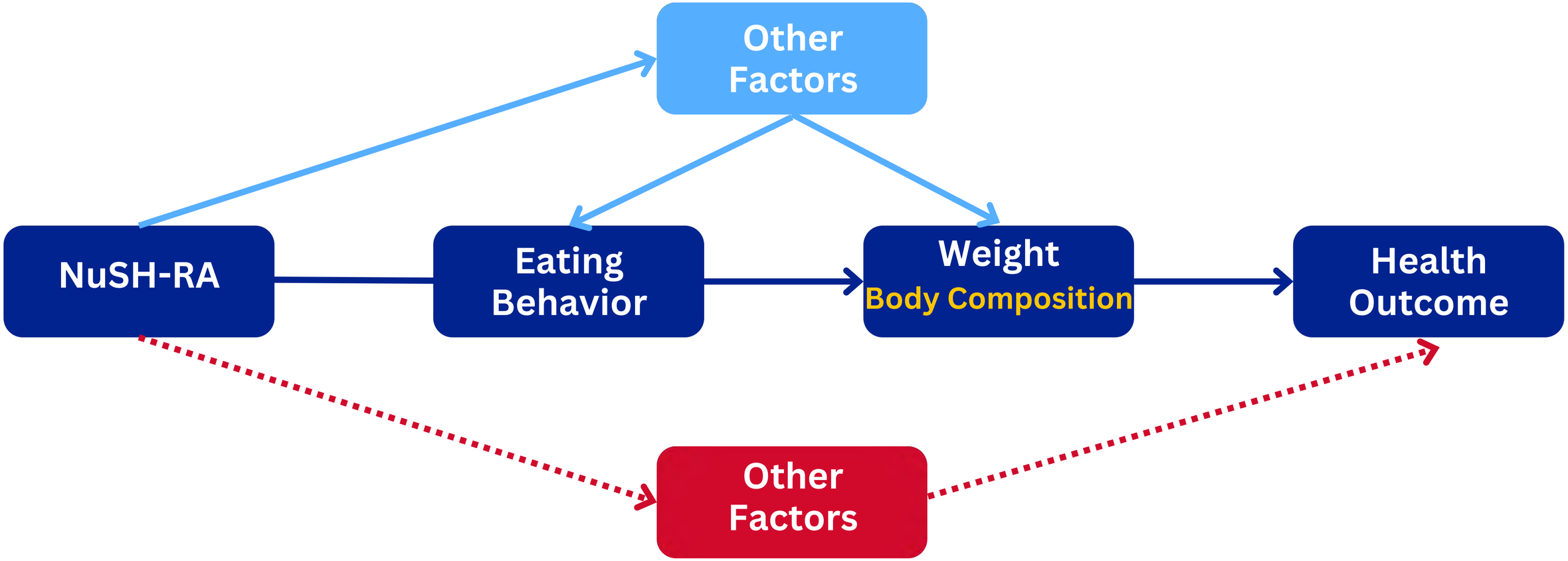
- Will lose significant weight without engaging in activity,
- Will improve many health parameters without engaging in activity, and
- May not see the value of activity specifically for weight loss.

Despite these challenges, this may open the door for new physical activity opportunities.

HOWEVER…

MORE RESEARCH IS NEEDED

STOP: Making claims that resistance training and exercise programs will “stop lean mass and muscle mass loss”



WHAT IS THE ROLE OF EXERCISE / PHYSICAL ACTIVITY?

Obesity A Research Journal

THE OBESITY SOCIETY

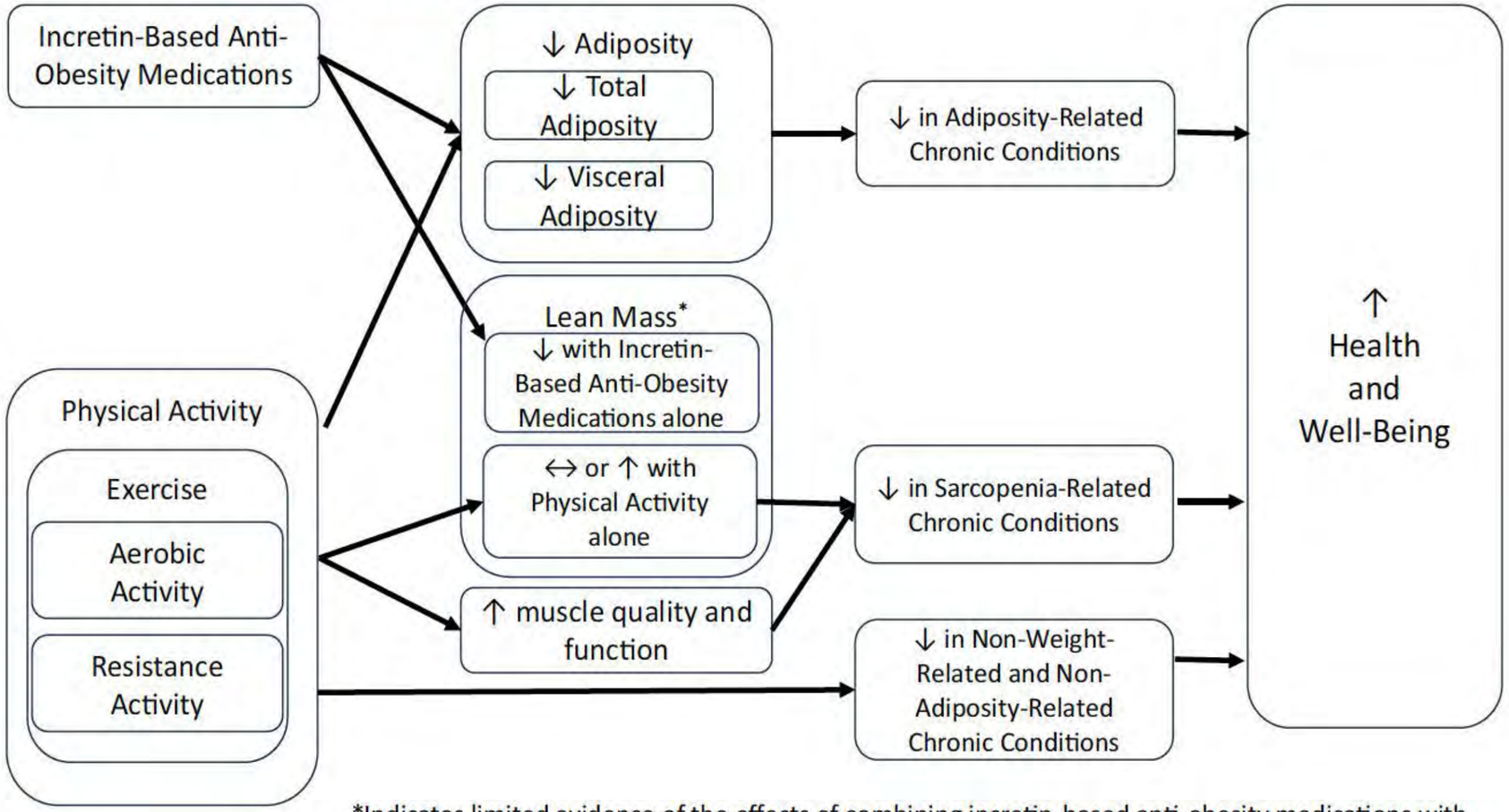
PERSPECTIVE

Physical activity in the new era of antiobesity medications

John M. Jakicic ✉, Renee J. Rogers, Timothy S. Church

First published: 17 October 2023 | https://doi.org/10.1002/oby.23930

KU MEDICAL CENTER Weight Management



*Indicates limited evidence of the effects of combining incretin-based anti-obesity medications with physical activity on the change in lean mass.

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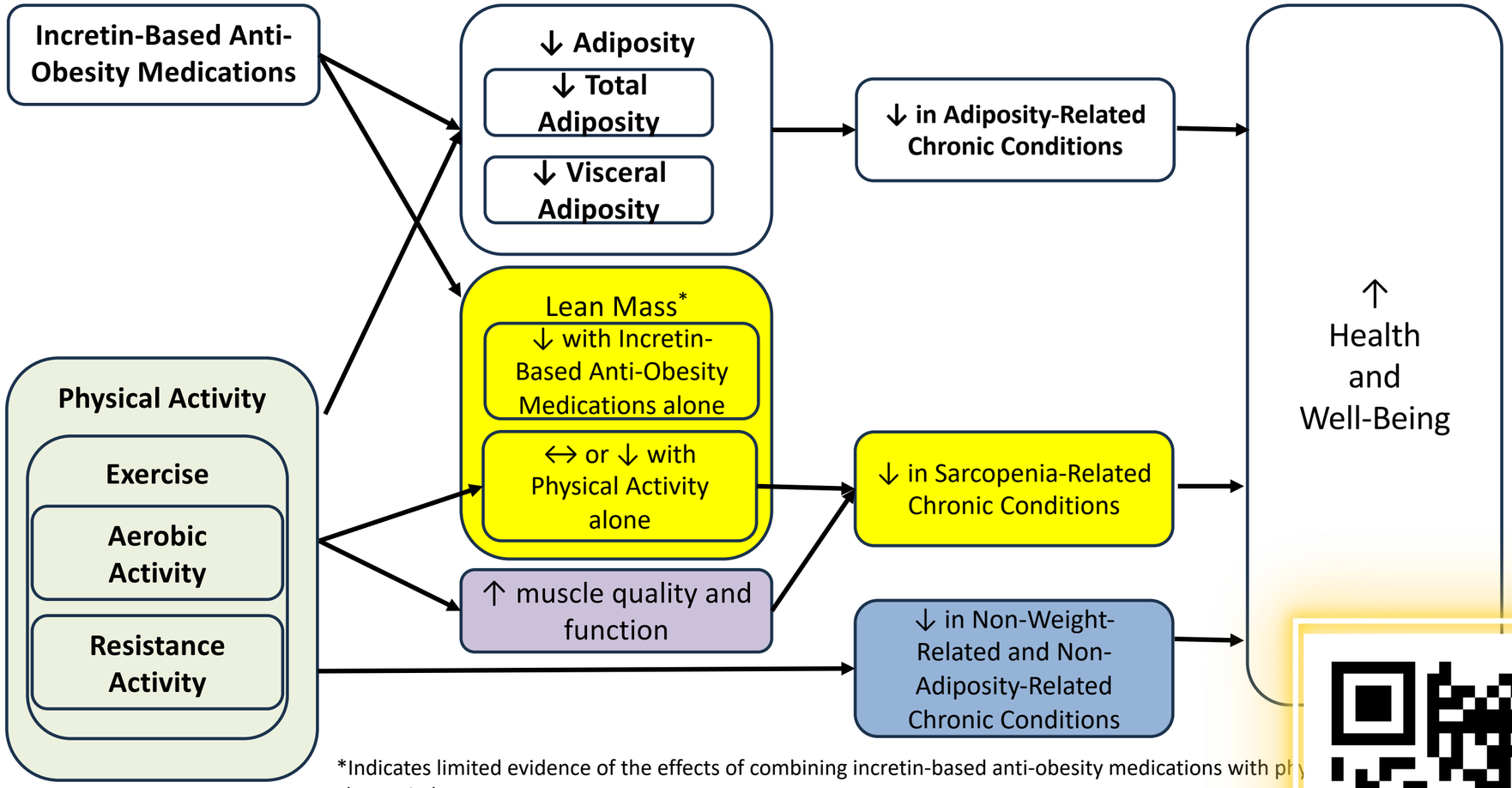
What do we know about Contemporary AOMs?

Weight Loss	
Better Control of Type 2 Diabetes	
Reductions in Cardiometabolic Risk	
Reductions in Adiposity	
Reductions in Lean Mass ⇩ ~25-40%	
Reductions in Muscle Mass	



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Move Away from: **Exercise to…**

“Preserve Muscle”

“Slow or Stop Muscle Loss”

Move to: **Exercise for…**

“Muscle Health”

“Quality of Life”

“Physical Function”

Obesity Medications

Patient Perspectives

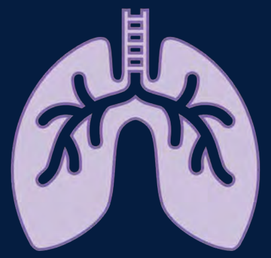
Body Composition, Muscle, Exercise

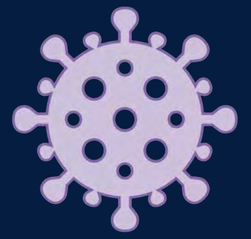
Muscle, Cognition, Aging

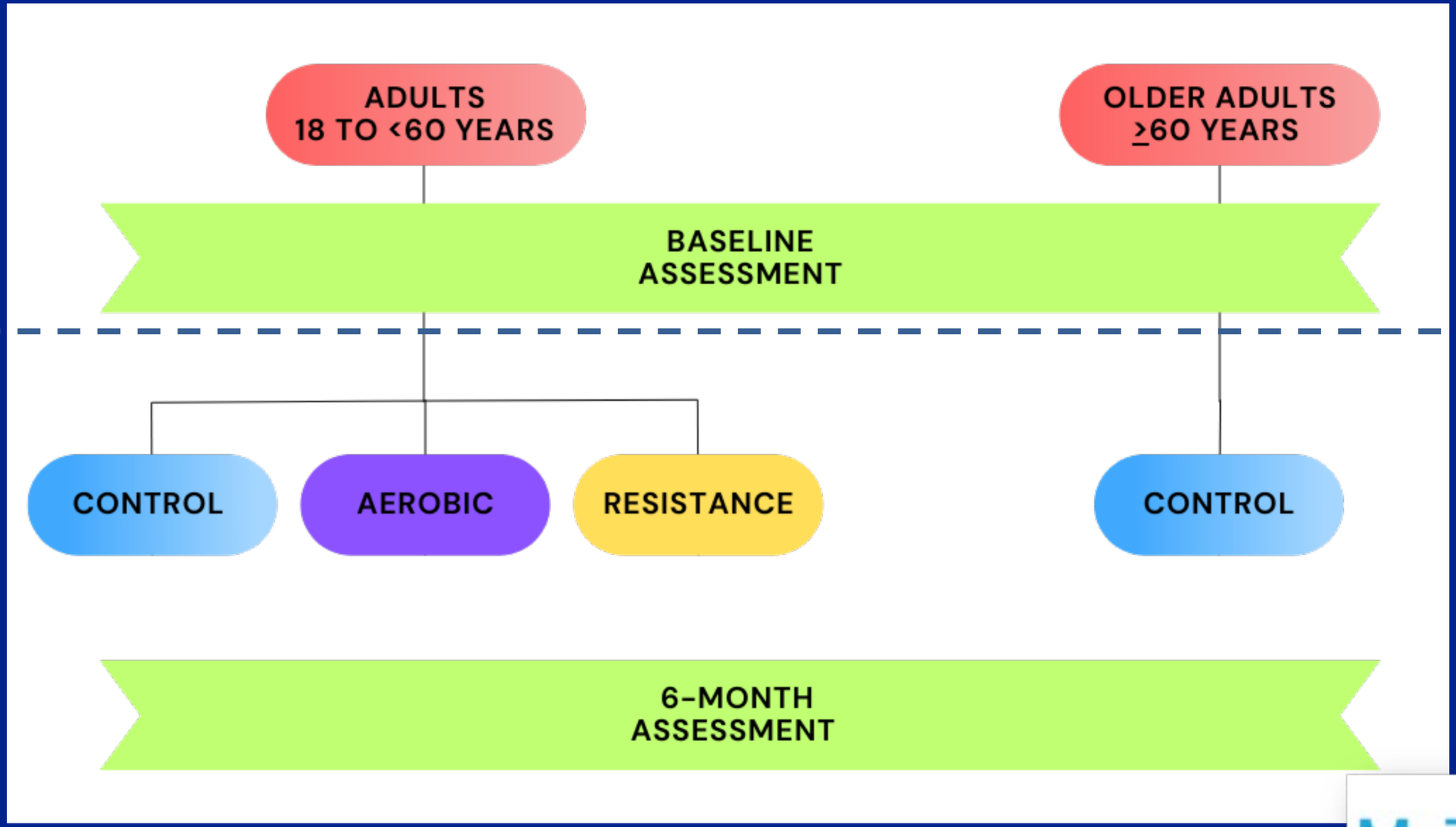
Breast Cancer

Body Composition, Muscle, Exercise

Body Composition, Behavior, T2D, Age







Rx

MoTrPAC
Discovering Exercise

- Body Composition
- Fitness
- Strength
- Function
- Quality of Life
- Qualitative Interviews

The Challenges:

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- Will lose significant weight without engaging in activity,
- Will improve many health parameters without engaging in activity, and
- May not see the value of activity specifically for weight loss.

Despite these challenges, this may open the door for new physical activity opportunities.

The Opportunities:

We can now:

- Pivot from doses and intensities of physical activity for weight loss and prescribe based on improving health in patients using AOMs.
- Target physical activity for the independent health benefits not realized with weight loss alone, and
- Support patients on their holistic weight loss journey as a part of an integrated team of healthcare professionals.

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☑ DOSE

☑ HEALTH

☑ SUPPORT TEAM

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To understand contemporary approaches for inclusion of and the effectiveness of, physical activity within the context of obesity medications.

To understand how lifestyle interventions, specifically physical activity, may need to be adapted and tailored, from the provider and the patient.

Highlight the need for building inclusive and collaborative spaces for patients/clients taking obesity medications and key considerations: method-centered → client-centered frameworks

Approach

BIOLOGICAL

BEHAVIORAL

BUSINESS

Approach

BIOLOGICAL

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☑ DOSE

☑ HEALTH

☑ SUPPORT TEAM

DOSE

KNOWN:

- Pivot from **Energy Expenditure** Intensities
- Focus on the **individual needs** of the client/patient

UNKNOWN:

- Is it all about **Resistance Training**?
- Can you attenuate **muscle mass loss**?
- *IF* you can, is the dose, intensity, frequency different? Do patients achieve the same benefits?
  - Consider:
    - Hypocaloric state
    - Intake
    - Independent mechanisms of agent
    - Magnitude of Loss
- Is it really about muscle **quantity** or muscle **quality**?
- What about **new agents**?

LEARNING:

- Exercise Tolerance
- Relationship between escalation/de-escalation medication with exercise

The Opportunities:

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☑ DOSE

☑ HEALTH

☑ SUPPORT TEAM

HEALTH

KNOWN:

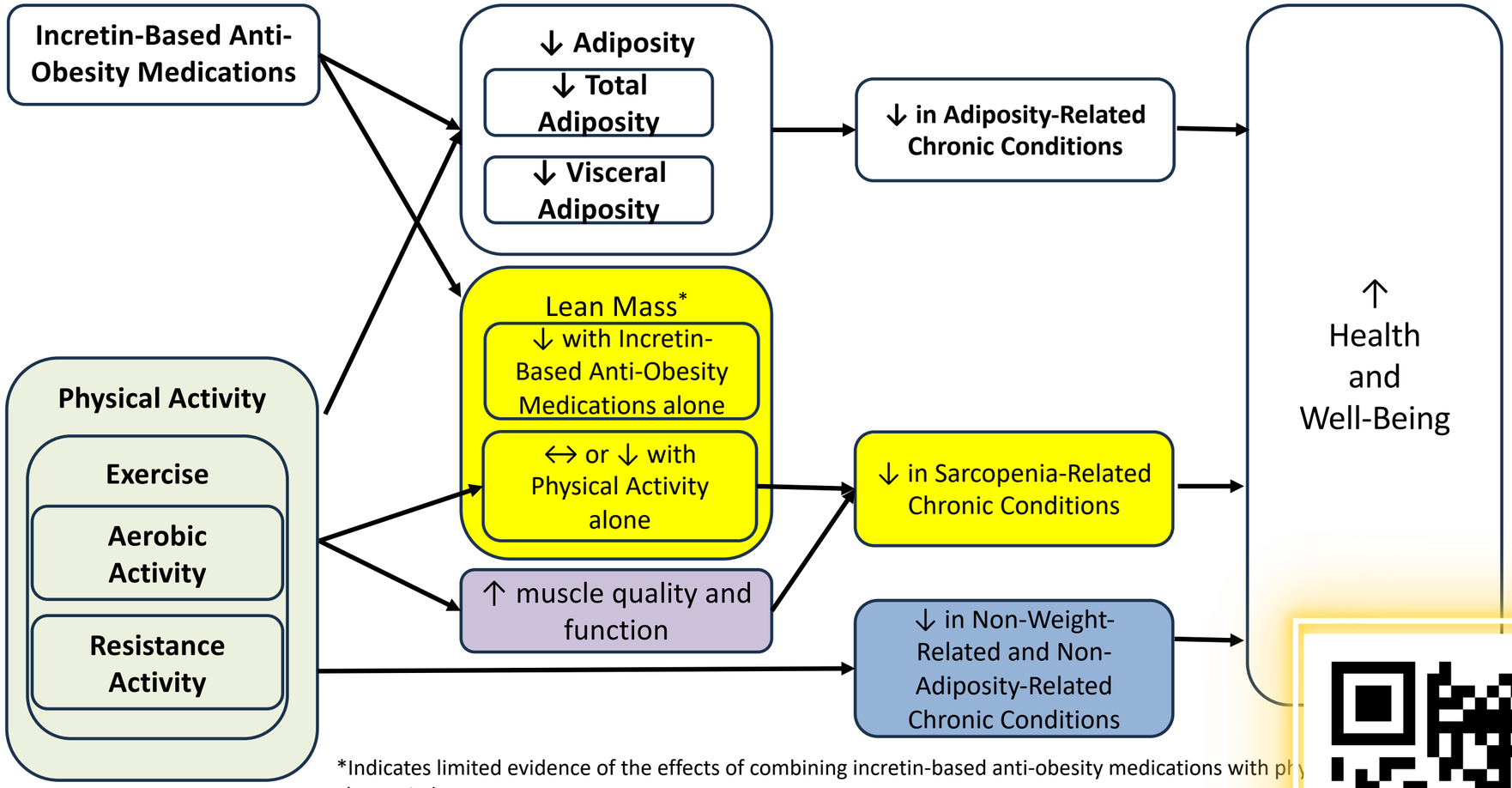
- Focus on the **individual needs** of the client/patient
- **Holistic Health** opportunity
- Beware of **outcome only** framing (i.e. muscle mass, metabolic changes)
- Target the **independent effects of exercise** on health beyond weight loss
- **Side Effects** are variable along with how patients feel

UNKNOWN:

- Is it all about **Resistance Training**?
- Is the dose, intensity, frequency different? Do patients achieve the same benefits?
  - <u>Consider:</u>
    - Hypocaloric state
    - Intake
    - Independent mechanisms of agent
    - Magnitude of Loss
- What about **new agents**?

LEARNING:

- Exercise Tolerance
- How patients/clients think and feel about exercise



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☑ DOSE

☑ HEALTH

☑ SUPPORT TEAM

SUPPORT TEAM

KNOWN:

- Exercise professionals are a **critical part** of the obesity care team
- **Collaboration** is critical
- **Scope of Practice**
  - Medical Management vs. Certificate Knowledge
- **Concerns over collaboration**
- **Method-centered** vs. **Person-centered**

UNKNOWN:

- Are we currently **building bridges** with our approaches or **creating a wider divide**?
- What is the appropriate **level of training**?
- Are we positioning the industry to be **appropriately responsive** to the fast-changing **landscape** AND **complete medical management** of obesity?

LEARNING:

- Reimbursement structures
- How to build meaningful connections with providers and fitness professionals
- Building trust with patients/clients

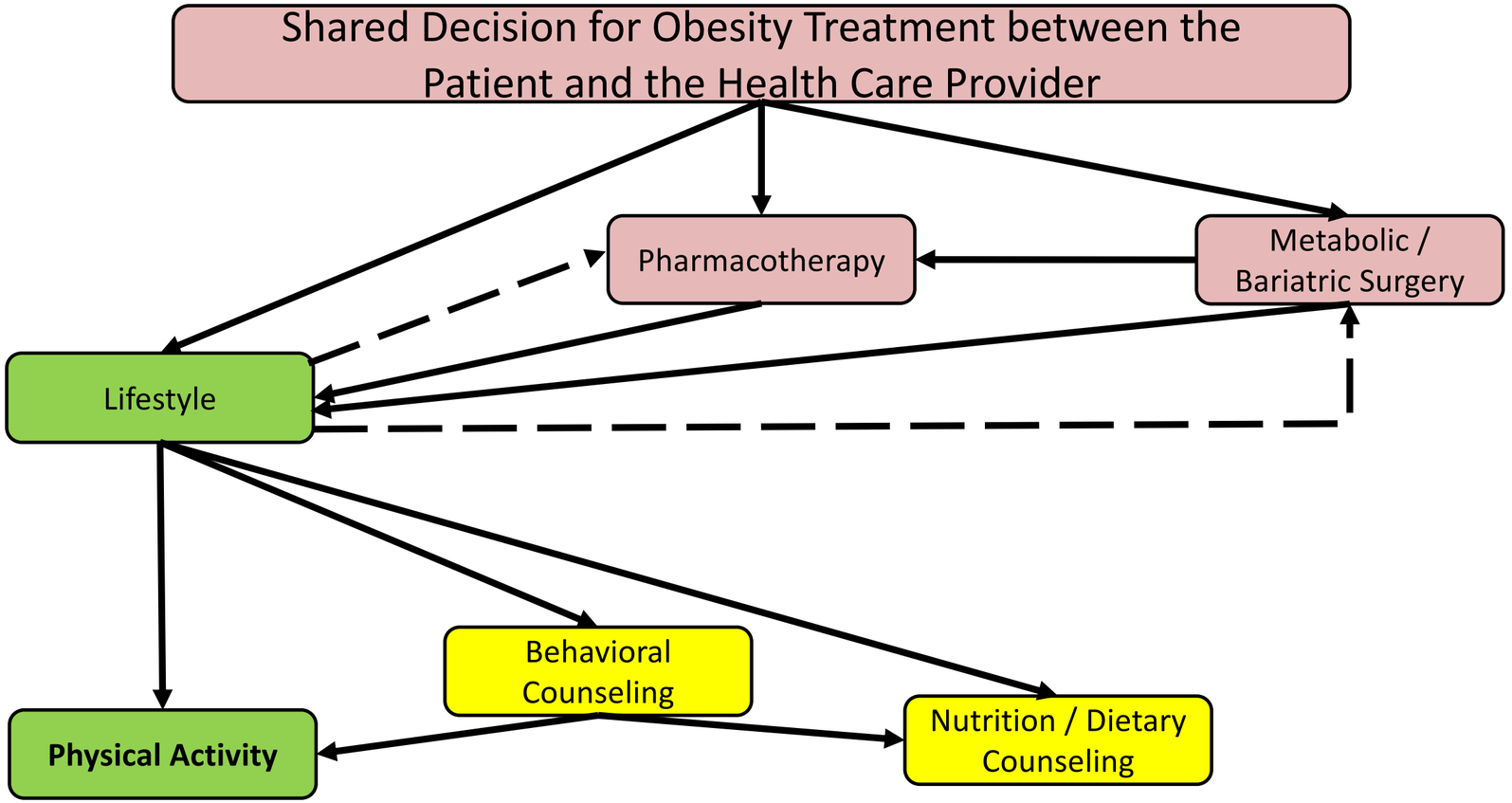
Translational Journal
OF THE AMERICAN COLLEGE OF SPORTS MEDICINE
AMERICAN COLLEGE of SPORTS MEDICINE
LEADING THE WAY

Contemporary Treatments for Obesity: Physical Activity in the Context of Antiobesity Medications

Jakicic, John M.[1]; Rogers, Renee J.[1]; Apovian, Caroline M.[2]

Author Information

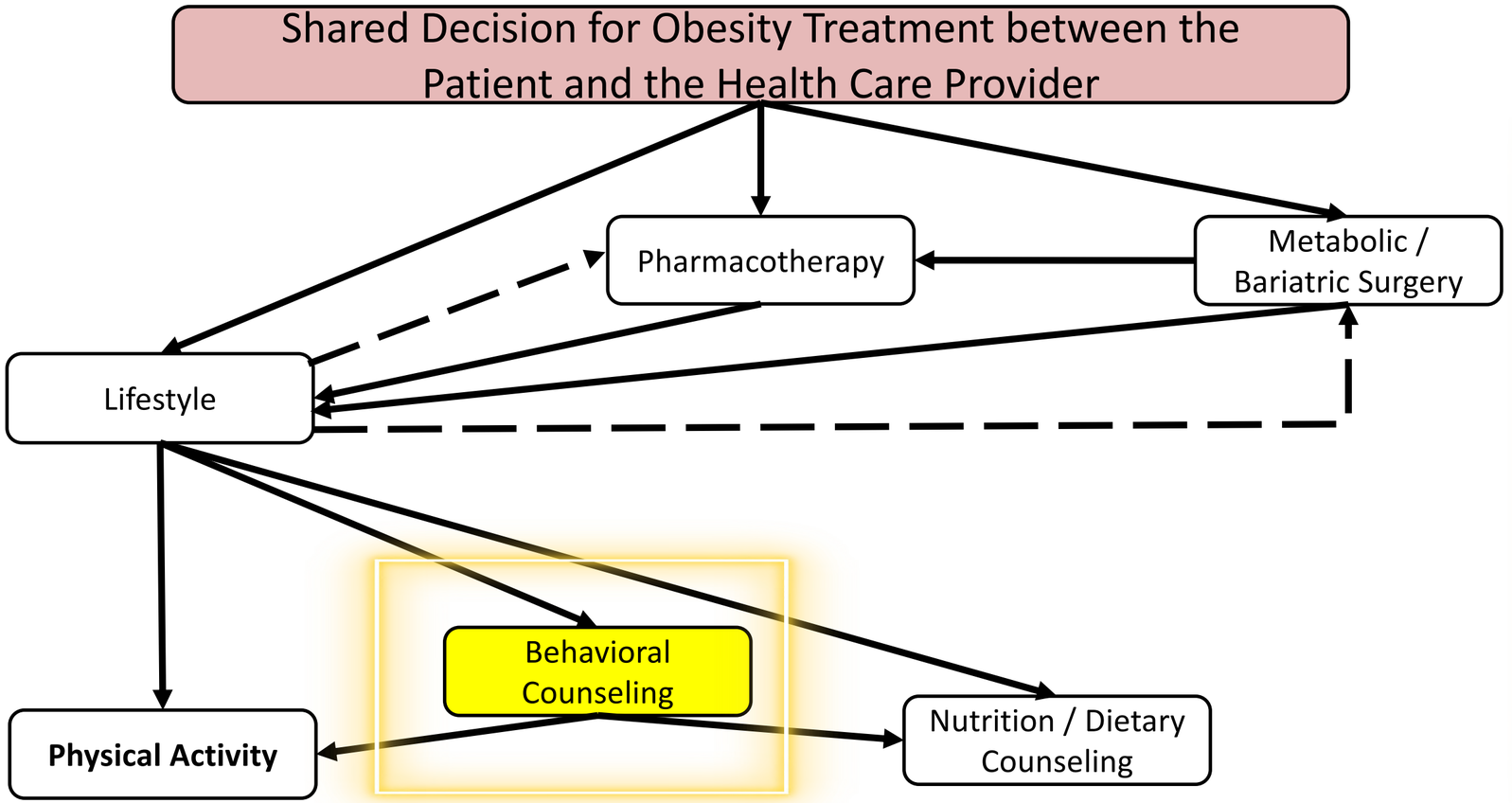
Translational Journal of the ACSM 9(2):e000253, Spring 2024. | *DOI:* 10.1249/TJX.0000000000000253



Jakicic JM, Rogers RJ, Apovian CM. Contemporary Treatments for Obesity: Physical Activity in the Context of Anti-Obesity Medications. In Press: Translational Journal of the American College of Sports Medicine

CRITICAL
REFERAL NETWORK

Medical Providers
Dietitians
Behavioral Health



Annals of Behavioral Medicine

JOURNAL ARTICLE

Relevance of Behavioral Research in the Evolving State of Anti-obesity Medications: Is the Glass Half Empty or Half Full?

Get access >

Michelle Y Martin, PhD, FACSM, FSBM ✉, Renee J Rogers, PhD, FACSM

Annals of Behavioral Medicine, kaae022, https://doi.org/10.1093/abm/kaae022

Published: 15 May 2024

Approach

BIOLOGICAL

BEHAVIORAL

BUSINESS

Approach

BEHAVIORAL

	Survey Preparation
	Survey Distribution
	Semi-Structured Interviews
	Data Analysis Interview Coding

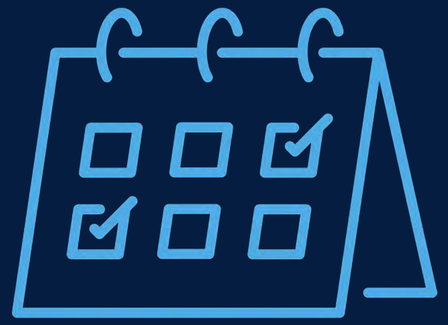
KU MEDICAL CENTER
Weight Management

Variable	Total	Males	Females
N (%)	190	41 (21.6%)	149 (78.4%)
Age (years)	55.7±12.3	57.2±12.0	55.2±12.4
Weight (kg)	97.8±22.8	121.6±33.0	92.5±22.5
Weight Loss (kg)	18.7±14.0	22.6±16.8	17.6±13.0

Mid-50s

↓ -19 kg

Days / Week	
Sample Average	2.8 ± 1.7
Report ≥1	84.3%
Minutes / Week	
Report ≥ 150 (34%)	238 ±104
Report ≤ 150 (66%)	63 ± 46
Mode of Activity	
Aerobic	42.2%
Resistance	2.4%
Mind Body	2.4%
Other	1.2%
Aerobic + Resistance	15.7%
Aerobic + Resistance + Mind Body	12%
Resistance + Mind Body	1.2%

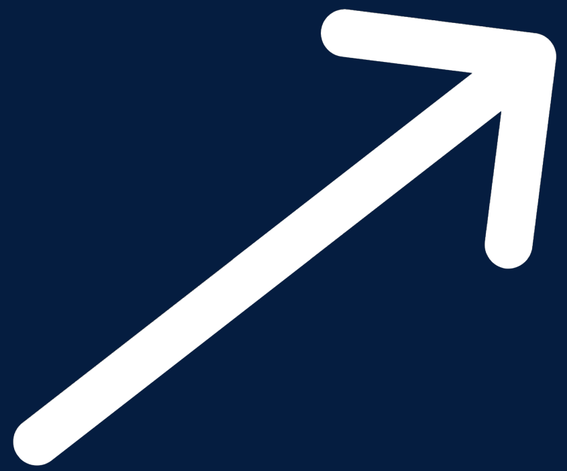


2.8

66%

aerobic

Variable	Category of Current importance			p-value
	Low	Moderate	High	
N (% of total sample)	21 (11.1%)	50 (26.3%)	119 (62.6%)	-----
Physical Activity (min/wk)	45.7±82.9	95.5±148.1	156.0±131.1	0.002
Physical Activity (days/wk)	1.1±1.6	1.9±1.7	3.3±1.7	<0.001
% (within category) meeting ≥150 min/wk	4.8%	18.0%	47.1%	<0.001*



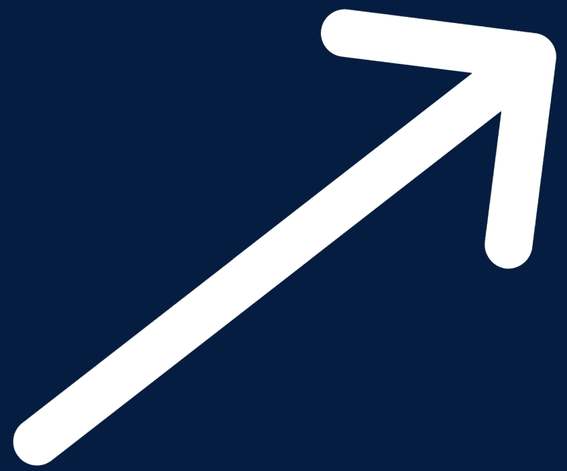
importance

days

minutes

≥ 150

Variable	Category of Confidence			p-value
	Low	Moderate	High	
N (% of total sample)	42 (11.9%)	60 (31.6%)	88 (46.3%)	-----
Physical Activity (min/wk)	67.4±82.3	125.7±152.3	158.3±137.5	0.002
Physical Activity (days/wk)	1.6±1.5	2.6±1.9	3.3±1.8	<0.001
% (within category) meeting ≥150 min/wk	11.9%	23.3%	53.4%	<0.001*



confidence

days

minutes

≥ 150

SEMI-STRUCTURED INTERVIEWS

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Weight Management

DISCOMFORT

With way look and feel during exercise

ENERGY

Primary reason for exercising

SELF-EFFICACY

Lack of knowledge and skills to exercise

Never been an "Exercise Person"

Negative Past Experience

Safety concerns

STIGMA SUPPORT

Feels judged for "Taking Easy Way Out"

Feels size / co-morbidities influence activity counseling

LOSS OF STRENGTH / MUSCLE

Primary concern related to AOM therapy that exercise may impact

DISCOMFORT

With way look and feel during exercise

KU MEDICAL CENTER
Weight Management

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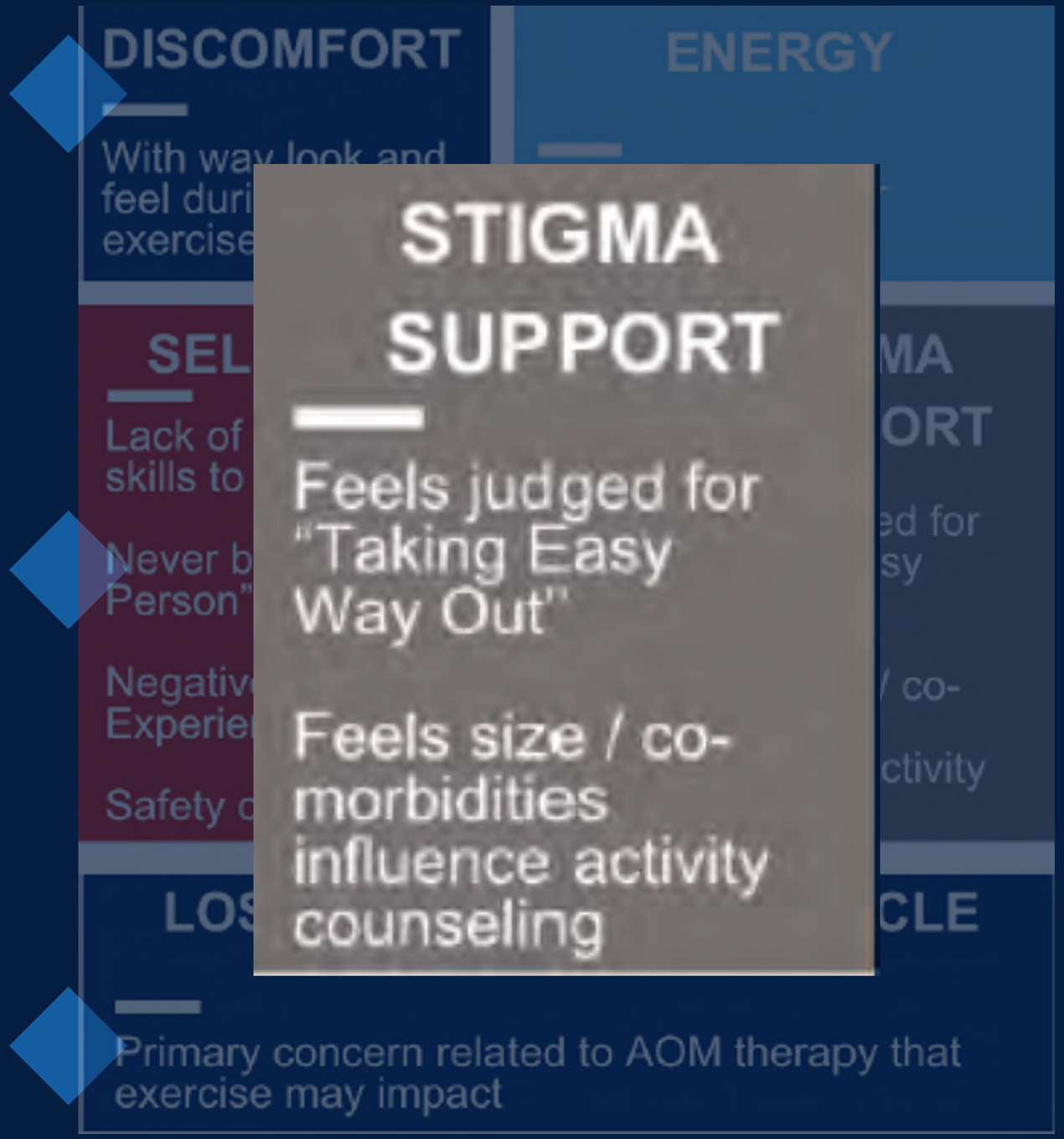
Weight Management



WEIGHT BIAS

INTELLECTUAL BIAS

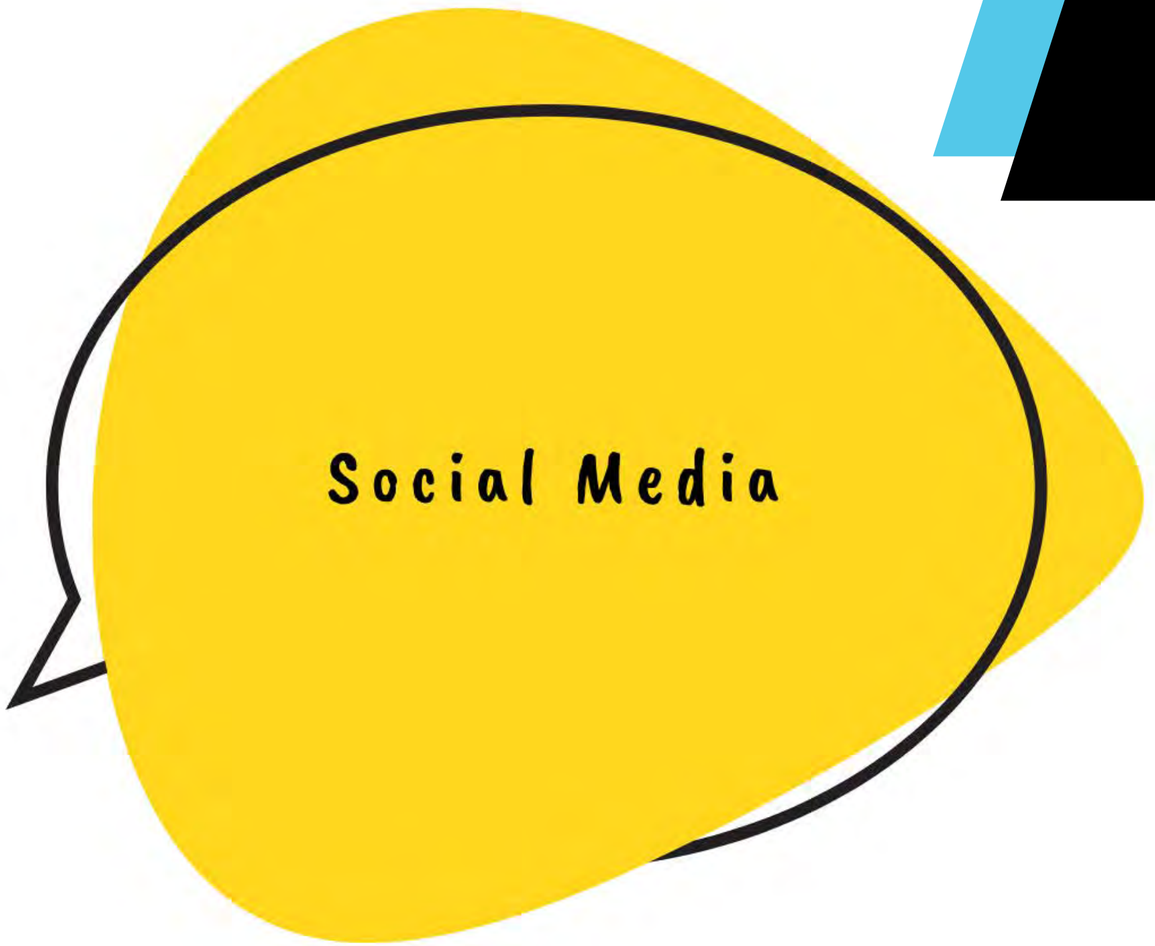
KU MEDICAL CENTER
Weight Management

WHY?

If I knew you were an "Exercise Person" I wouldn't have talked to you.

People that act like everyone can do it alone don't understand life long obesity well.

HELP ME UNDERSTAND WHY YOU FEEL THIS WAY?

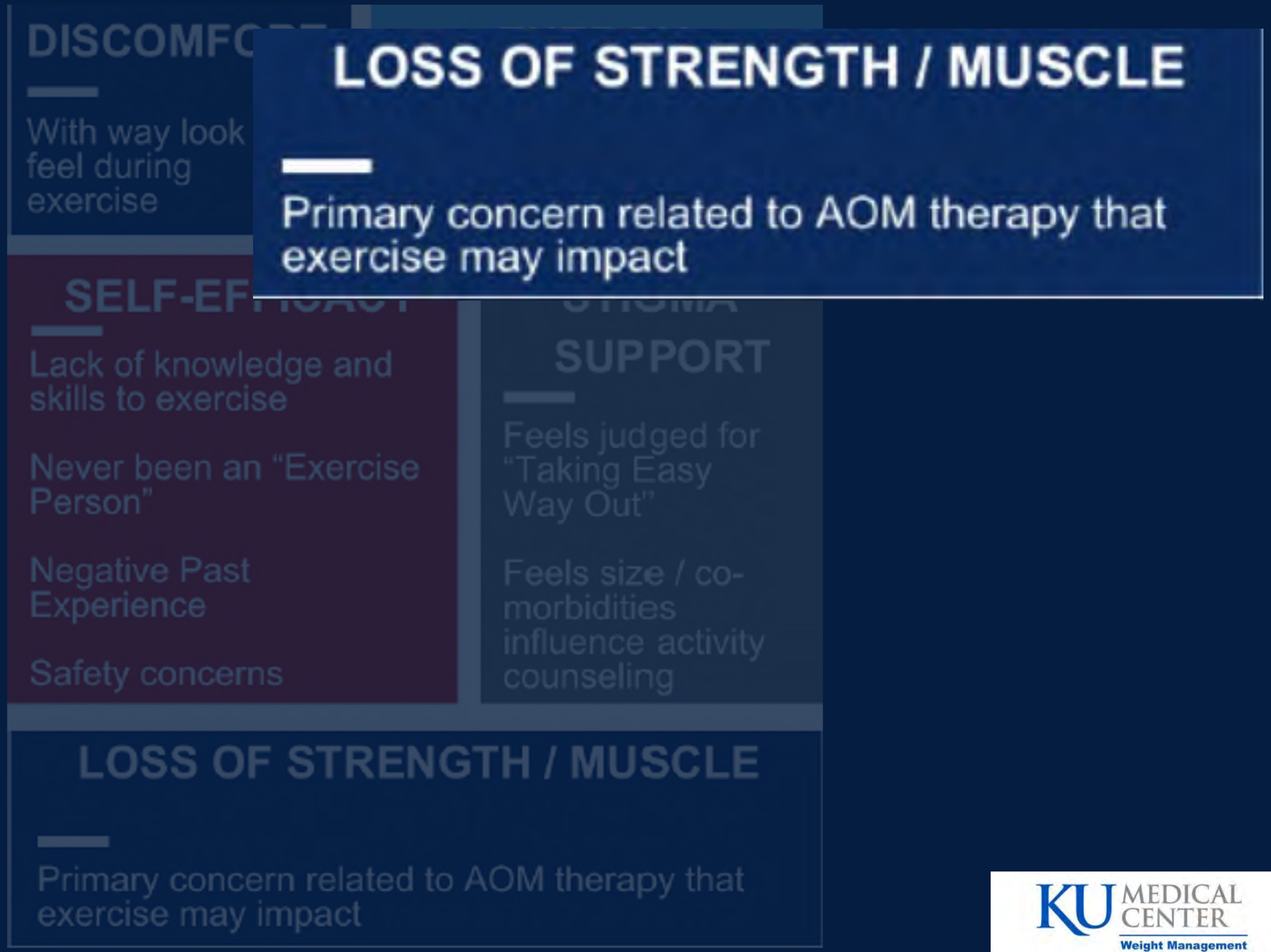


Can you help me get access to an exercise person that knows weight loss and is empathetic?

3 trainers told me... You don't need <u>those</u> drugs - my method works better.

I never went back.

KU MEDICAL CENTER
Weight Management



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Weight Management

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Weight Management

RELEVANT TARGETS

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Weight Management

21%

weakness
loss strength

35%

fatigue
low energy

Low Levels PA

ACSM's HEALTH & FITNESS JOURNAL
AMERICAN COLLEGE of SPORTS MEDICINE
LEADING THE WAY

ENHANCING YOUR BEHAVIORAL TOOLKIT

Anti-Obesity Medications

Targeting Exercise Engagement

by Renee J. Rogers, Ph.D., FACSM


PREVIOUS EXPERIENCES
BIOLOGY
ENVIRONMENT
OTHER MEDICAL CONDITIONS
EXERCISE
OTHER HEALTH BEHAVIORS
BIOLOGY
ENVIRONMENT
PREVIOUS EXPERIENCES

Less Chance:

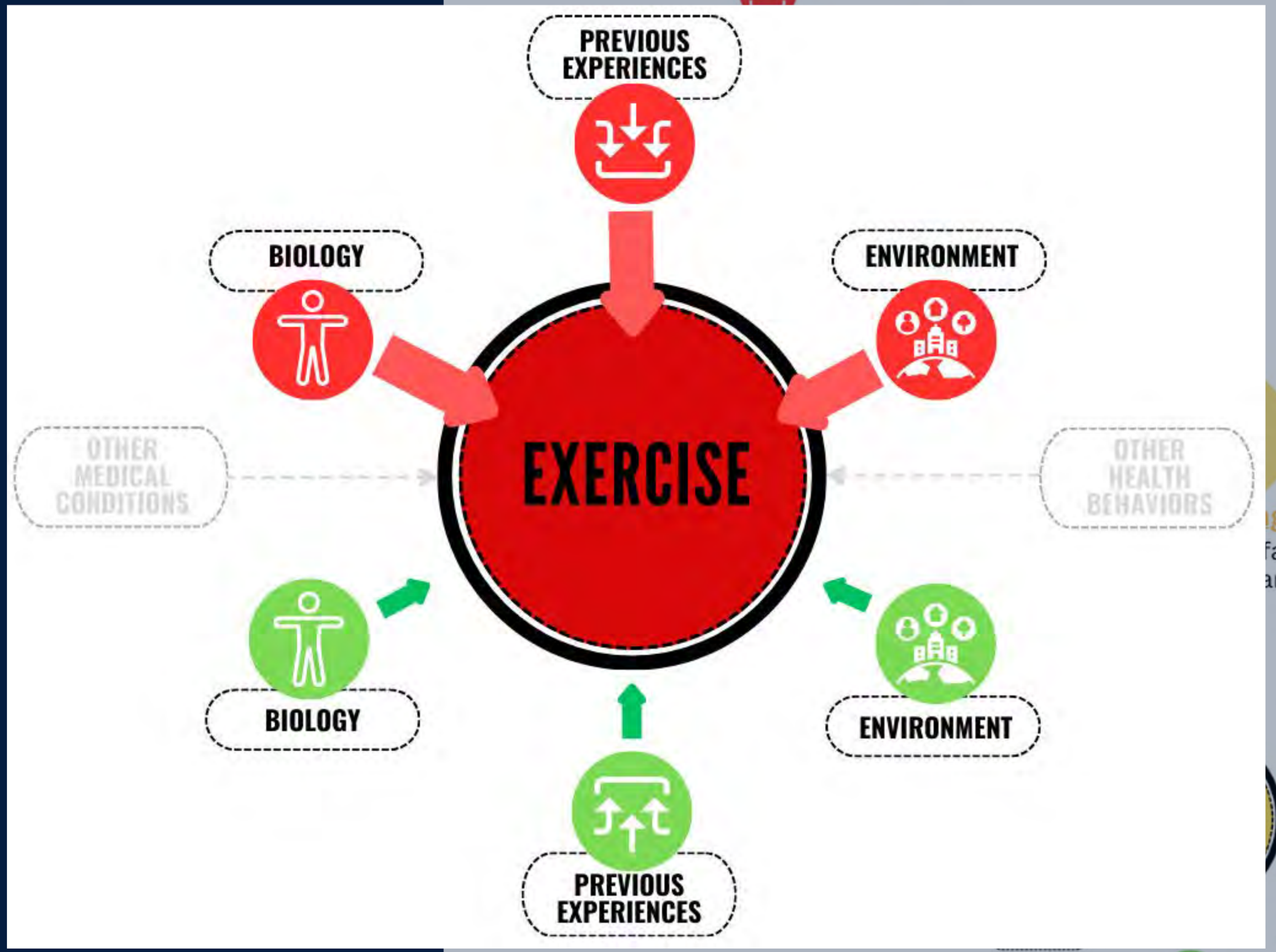
Negative factors to exercise engagement are greater than positive factors

More Chance:

Positive factors to exercise engagement are greater than negative factors

Likely No Change:

Positive and negative factors to exercise engagement are equal



More Chance:

Positive factors to exercise engagement are greater than negative factors

ge:

factors to
are equal

Less Chance:

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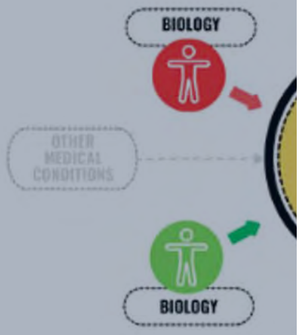
Like

Positive a
exercise e



More Chance:
Positive factors to exercise engagement are greater than negative factors

Likely No Change:
Positive and negative factors to exercise engagement are equal

Approach

BIOLOGICAL

BEHAVIORAL

BUSINESS

Approach

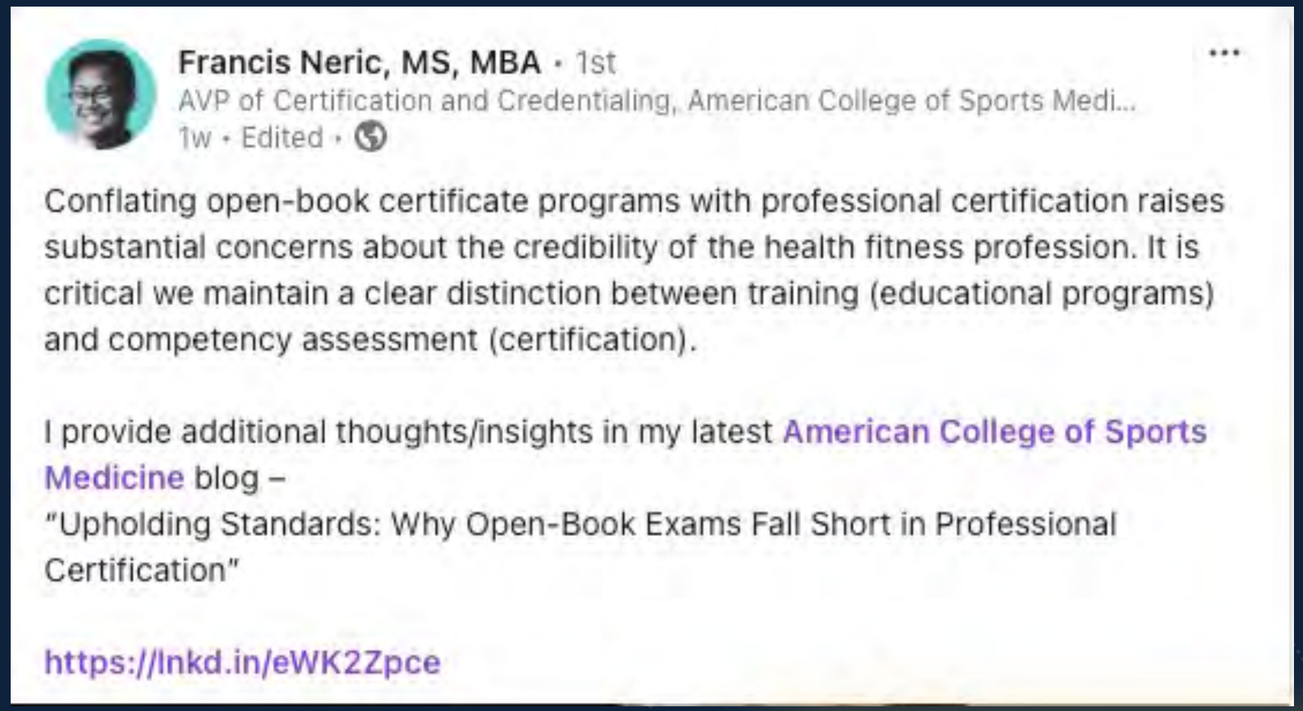
BUSINESS

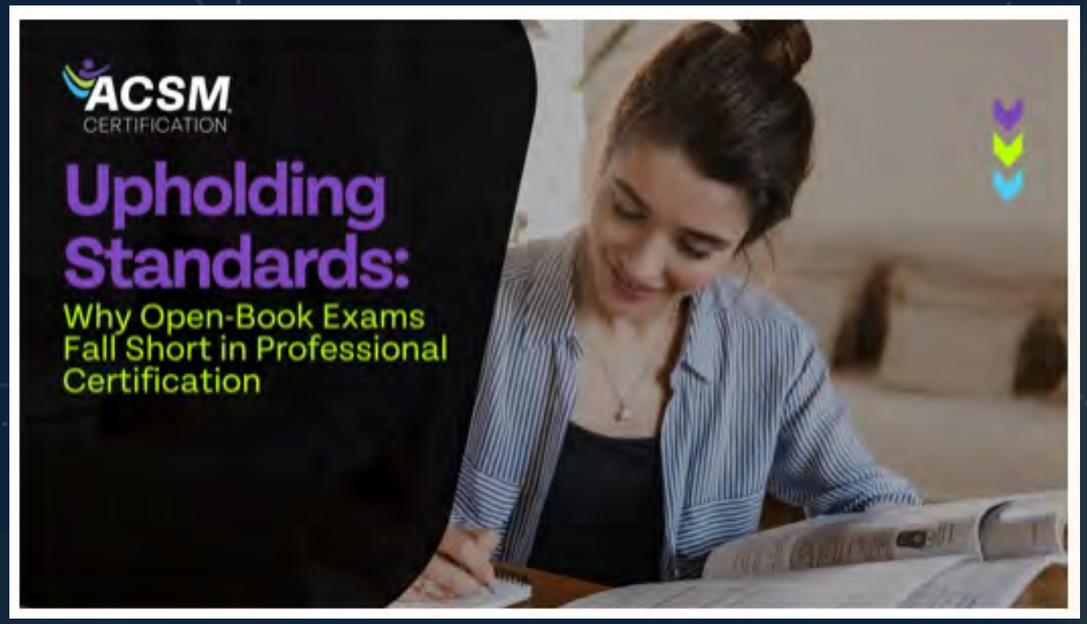
Person-Centered

Not

Method-Centered

Credentialing





Key Questions

BUSINESS

- How are medications being obtained?
- Is appropriate medical management in place?
- Is the approach method-centered or person-centered?
- Scope of Practice
- Business is Business but… is it more about PROFIT over PERSON?
- Is the method based on true clinical trial evidence?
  - Consider what we have covered
- LIABILITY

Thank You!

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