

Health & Wellness Coaching: Evidence, Challenges and Opportunities



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Disclosures

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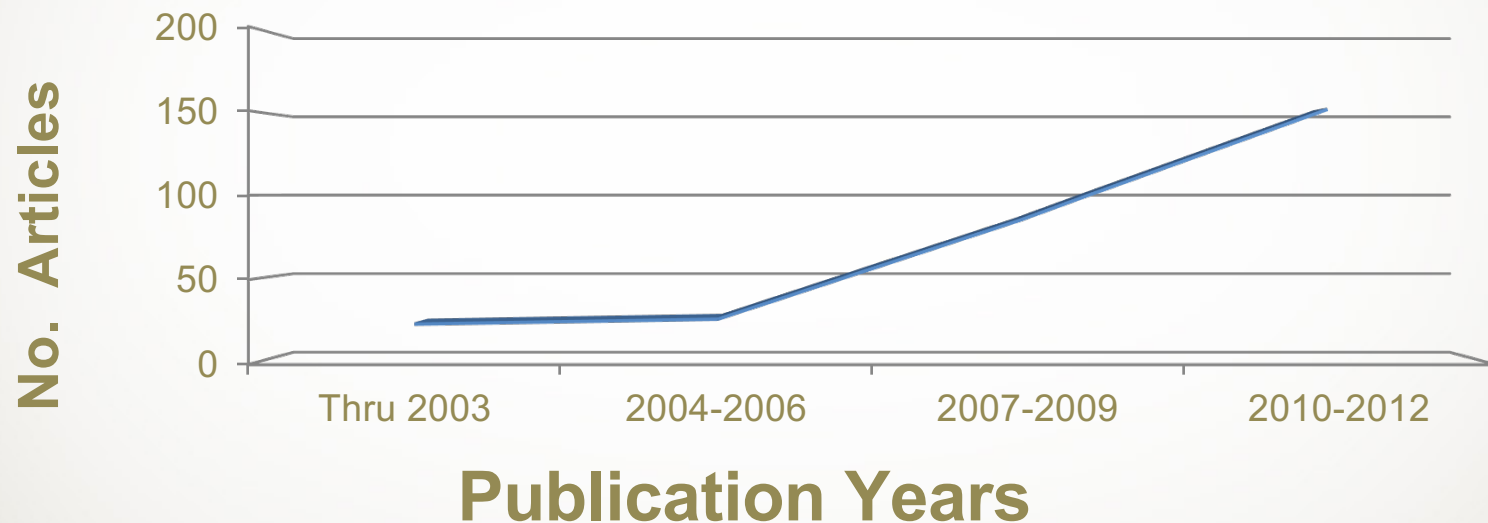
Executive Committee for NCCHWC

Objectives

1. Overview current state of evidence for health and wellness coaching (HWC)
2. Understand challenges to building more rigorous evidence base
3. Recognize potential solutions for these challenges

Background

- Pressing need to manage burgeoning chronic disease has led to the emergence of job roles such as HWC



Wolever, Simmons, Sforzo, et al (2013). *Global Advances in Health and Medicine*, 2(4), 34-53.

Palmer et al, 2003

*“the practice of **health education** and **health promotion** within a coaching context, to enhance the **well-being** of individuals and to facilitate the achievement of their **health-related goals**”*

Butterworth, Linden et al, 2006

*“a service in which providers **facilitate** participants in changing **lifestyle-related behaviors** for improved health and quality of life, or establishing and attaining health promoting goals”*

Lindner et al., 2003

*“interactive role undertaken by peer or professional individual to support a **patient** to be an active participant in the **self-management of chronic illness**”*

National Consortium for Credentialing Health & Wellness Coaches (NCCCHWC), 2013

“professionals from diverse backgrounds and education who work with individuals and groups in a client-centered process to facilitate and empower the client to achieve self-determined goals related to health and wellness. Successful coaching takes place when coaches apply clearly defined knowledge and skills so that clients mobilize internal strengths and external resources for sustainable change.”

Over past 7 years, 9 attempts to systematically
synthesize the literature on HWC

What is a systematic review?

Overview of primary studies to answer an a priori research question by collecting and summarizing all empirical evidence that fits pre-specified eligibility criteria. Intent is transparency so can be reproduced.

- clearly **stated objectives** with **pre-defined eligibility criteria** for studies
- a systematic search that attempts to identify **all potentially relevant studies**
- assessment of the **validity of the findings** (e.g., risk of bias)
- systematic process to **cull and synthesize** the characteristics and findings of the included studies

A little about the reviews.....



First Systematic Review: Lindner, et al., 2003

**Coaching for Behaviour Change in Chronic Disease:
A Review of the Literature and the Implications for Coaching as a
Self-management Intervention**

Helen Lindner¹, David Menzies², Jill Kelly², Sonya Taylor², and Marianne Shearer²

La Trobe University¹ and Whitehorse Division of General Practice²

Methods

- 25 studies of “coaching” or a healthcare professional supporting self-management for chronic illness
- Included RCTs, quasi-experimental and non-experimental controlled trials
- HC defined as “interactive role undertaken by peer or professional individual to support a **patient** to be an active participant in the **self-management of chronic illness**”

- Lindner et al., 2003

Findings

- Education has significant role in self-management, but not sufficient; need behavior-change focused coaching
- Interventions generally covered at least one of three domains:
 - disease-related education
 - behavior change strategies
 - psychosocial support
- Not everyone ready for change: Need to move patient to action, and need to consider emotional state of patient

- Lindner et al., 2003

Annotated Bibliography: Newnham-Kanas et al., 2009

- Purpose:
 - 1) Summarize critically appraised life coaching studies related to health research; and
 - 2) To outline possible avenues for future health-related coaching research.
- Review of 14 literature databases (1806 – current)

Newnham-Kanas, C., Gorczynski, P., Morrow, D. & Irwin, J. (2009). Annotated Bibliography of Life Coaching and Health Research. *International Journal of Evidence Based Coaching and Mentoring*, 7(1), 39 - 103.

Annotated Bibliography

- Of 209 studies found, 72 met inclusion criteria (English; the intervention was a form of coaching, group coaching, life coaching, or derived from coaching; and outcome was health related)
- Grouped by health outcomes with implications for future research noted
- Only 34 RCTs, 20 of which were educational approaches rather than professional coaching and 12 did not define “coaching”

Annotated Bib: State of Research

- Most studies did not offer operational definition
- Randomization & control grps were lacking
- Lack of treatment consistency (e.g., different numbers of sessions, different, different program durations)
- Authors suggest use of more heterogeneous samples to increase generalizability (e.g., differences in age, sex, race, etc.) for same outcome

Integrative Review: Olsen & Nesbitt, 2010

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THE **S** CIENCE OF HEALTH PROMOTION

Literature Review: Behavior Change

Health Coaching to Improve Healthy Lifestyle Behaviors: An Integrative Review

Jeanette M. Olsen, BSN, RN; Bonnie J. Nesbitt, PhD, RN

Methodology

- Integrative review of 15 studies, lit from 1999-2008
- Not “systematic review” since includes studies of various methodologies - both quantitative and qualitative studies
- Health professionals functioning as coaches (nurses most common, 6/15 studies)
- Research questions:
 - 1) How effective are health coaching interventions for improving healthy lifestyle behaviors?
 - 2) What are the key features of an effective health coaching program?

Take-home

- 6 studies showed significant improvements in nutrition, physical activity, weight management or medication adherence
- Common features of effective programs:
 - goal setting (73% of studies)
 - motivational interviewing (27%)
 - collaboration with health care providers (20%)
- Health coaching programs should be designed to last 6-12 months for optimal health behavior change outcomes

Next Steps

- Studies need more detail describing specific conceptual designs, tools, or skill sets
- Qualitative research is perhaps more appropriate and meaningful for health coaching
- Studies comparing various methods of delivery, program duration and session frequency will better inform design of health coaching programs

Systematic Review: Ammentorp et al., 2013

Ammentorp et al. *BMC Health Services Research* 2013, **13**:428
<http://www.biomedcentral.com/1472-6963/13/428>



RESEARCH ARTICLE

Open Access

Can life coaching improve health outcomes? – A systematic review of intervention studies

Jette Ammentorp^{1*}, Lisbeth Uhrenfeldt², Flemming Angel¹, Martin Ehrensverd³, Ebbe B Carlsen¹
and Poul-Erik Kofoed⁴

Methodology

- Systematic review of 5 studies
- Focus on "life coaching" (authors defined "health coaching" as having a fixed agenda and pre-defined goals vs "life coaching" where between clients come to sessions with whatever issues they want to address)
- Inclusion criteria: Intervention studies using quantitative or qualitative methods, random assignment, control group, validated outcomes measure
- Professional coaches or healthcare professionals with coach training
- Of n=4,359 studies, 25 titles relevant, 136 abstracts relevant, 5 met inclusion criteria
- Diabetes pts were focus of 3 of 5 studies

Take-home (1 of 2)

- Conclusions re: methodology
 - Due to differences in terminology, methods, and quality of studies, it is difficult to draw conclusions
 - Range of terms used in these studies: “life coaching,” “integrative health coaching,” “wellness coaching,” “co-active coaching”
 - Main challenge was distinguishing life coaching vs. health coaching

Take-home (2 of 2)

- Conclusions re: patient outcomes
 - Two studies measuring diabetes glycemic control (HbA1c) show promising results
 - Disadvantaged pts may especially benefit from another approach and different type of communication than typical
 - Coaching improves self-efficacy and self-empowerment
 - Results support improved goal attainment, self-reported adherence, improved health status and self-esteem

Next Steps

- Future studies must comprehensively describe coaching methods
- Coaching research should be supplemented by qualitative approach investigating content, communication process and interaction

Systematic Review: Kivela et al 2014

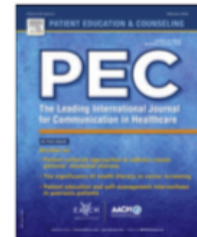
Patient Education and Counseling 97 (2014) 147–157



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Review

The effects of health coaching on adult patients with chronic diseases: A systematic review



Kirsi Kivelä^{a,*}, Satu Elo^b, Helvi Kyngäs^b, Maria Kääriäinen^b

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Methodology

- Systematic review of 13 studies
- Database search on lit from 2009-2013 for “coaching” AND another descriptive word (“lifestyle,” “motivation,” “health education,” “support,” etc.)
- Inclusion criteria: coaching by health care professional, adults with chronic disease, biopsychosocial outcomes, RCT or quasi-experimental design
- Of 1,276 studies, 20 met inclusion criteria, 13 met quality assessment

Take-home

- Health coaching improves management of chronic diseases
- Positive effects on patients' physiological, behavioral and psychological conditions and on their social life
- Better weight management, increased physical activity, and improved physical and mental health status
- Telephone coaching most popular

Next Steps

- Health promotion programs need to be scientifically researched to explain how behavioral lifestyle changes occur
- Evaluate long-term effectiveness (positive effects after the intervention)
- Study cost-effectiveness for chronic care management
- “Health coaching” is ambiguously defined, terminology differs among interventions

Rapid Review, NHS 2014



THE
Evidence
Centre



Health Education East of England

Does health coaching work?

Summary of key themes from a rapid review of empirical evidence

Rapid Review for NHS: 2014

- Assess impact of HC for pts and NHS (more specific questions could not be well addressed)
- Initiative in East of England begun in 2010
- 3 week review of 10 data bases (> 7000 studies), 275 met inclusion criteria (published or grey literature, labeled as “health coaching”)
- 7 % reviews, 40% RCTS, 53% other
- HC as “umbrella term” describing many interventions

Findings

- 75% of RCTs & 92% other studies found positive impact on motivation to change health behaviors and self-confidence to do so
- 59% of RCTS & 89% other studies found positive effect on behaviors (alcohol intake, tobacco use, fruits & vegetables, exercising)
- Mixed evidence on physical outcomes such as BP, BG, cholesterol, weight (33% reviews, 37% RCTS, 84% other)
- Insufficient evidence about cost reduction (25% of 4 reviews, 30% RCTs, 70% other studies note positive impact)

-NHS Evidence Centre, 2014

Systematic Review: Hill et al, 2015

THE **S**CIENCE OF LIFESTYLE CHANGE

Literature Review: Behavior Change

Do We Know How to Design Effective Health Coaching Interventions: A Systematic Review of the State of the Literature

Briony Hill, BAppSci(Hons); Ben Richardson, PhD; Helen Skouteris, PhD

Methods

- RCTS that used health coaching to influence health-related outcomes; had to report outcome
- HC, health behavior change facilitation, health behavior management AND chronic disease,
- English, peer-reviewed, pub Jan 2000 – Oct 2012
- 94 studies reduced to 16
- Applied taxonomy of behavior change techniques as described by Michie et al., 2011 CALO-RE
- Goal to assess effectiveness as well as specific ?s

Findings

- Interventions details lacking, unclear or too heterogeneous to synthesize (e.g., 9 of 16 did not define HC)
- Use of many behavior change techniques (25 of 40) across all 16 studies
- 3-15 techniques noted, with mean = 6.8
- Diversity of outcomes
- 94% reported at least one positive outcome
- Overall study quality fair

Systematic Review to Characterize HWC: Wolever Simmons, Sforzo et al., 2013

GLOBAL ADVANCES IN HEALTH AND MEDICINE

SYSTEMATIC REVIEW



A Systematic Review of the Literature on Health and Wellness Coaching: Defining a Key Behavioral Intervention in Healthcare

医疗与健康辅导文献的系统性审查：界定医疗护理领域中的主要行为干预

Revisión sistemática de la literatura médica sobre la formación de salud y bienestar:
definiendo una intervención conductual clave en la atención sanitaria

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How is HWC operationalized in the literature?

Wolever, Simmons, Sforzo, et al (2013). A Systematic Review of the Literature on Health and Wellness Coaching: Defining a Key Behavioral Intervention in Healthcare, *Global Advances in Health and Medicine*, 2(4), 34-53.

Purpose

- to establish a consensus definition of HWC through systematic review of related lit
- 3 intentions:
- answer repeated calls for evidence-based identification of conceptual and interventional components of HWC
 - with a standardized def, components of approach can be used to clarify the professional skills needed to appropriately train
 - Allow for more rigorous evaluation of HWC

PICO

Primary Research Question

“How are interventions described as health or wellness coaching defined and operationalized in the peer-reviewed medical literature?”

1. What type of literature has been published on health and wellness coaching?
2. What approaches, practices, strategies, and methodologies constitute health coaching as described?
3. Who delivers the service that is referred to as “health or wellness coaching?”

Methods

- International guidelines established by PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analyses)
- Search on PubMed by professional librarian
 - MeSH term “human”, language English or Spanish, date through January 2013
 - Index terms: *health, wellness, coach*; subterms *educator, mentor, navigator, teacher, training, feedback, mentoring*.
 - Articles screened for eligibility: coaching in the context of professional development ineligible

PRISMA Flow

- Records identified thru initial database search (n = 800)
 - Irrelevant abstracts removed (n=506)
- Full-text articles assessed for eligibility (n = 294)
 - Additional papers identified through authors' collections and review articles (n = 55)
- Total full-text articles assessed (n = 349)
 - Full-text articles excluded (n = 65)
- Studies included in quantitative synthesis (n = 284)

What approaches, practices, strategies, and methodologies constitute HWC?

- Was the coaching patient-centered?
- Were the patients' goals self-determined vs recommended by a provider or the coach?
- Was a self-discovery process used to find solutions vs advice-giving?
- Did the coaching process encourage pt accountability in behavior toward the stated goal?
- Was content education provided as part of the defined “coaching”?
- What was the typical coaching “dose” (length of session, frequency of sessions, and duration of process)?
- Did the pt develop a relationship with the same coach over time?

Systematic Review Showed Key Aspects of Definition of HC

(n = # articles with adequate info to rate this)	Yes/partially
Patient-centered (n=228)	196 (85.9%)
Patient-determined Goals (n=217)	153 (70.5%)
Self-discovery (n=188)	119 (63.3%)
Accountability (n=196)	168 (85.7%)
Content education (n=233)	212 (91.0%)
Consistent Relationship (n=154)	120 (78.0%)

Wolever, Simmons, Sforzo, et al (2013). *Global Advances in Health and Medicine*, 2(4), 34-53.

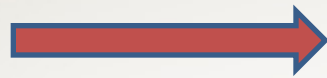
What was the coaching “dose”?

- Dose data were often not provided:
 - Over 75% of articles did not specify length of session
 - 52% did not specify # of sessions
 - 64% did not specify duration of series of sessions

Duration	All articles (N = 184)
1 session – 1 month	22 (12.0%)
5 weeks – 3 months	43 (23.4%)
3.5 months – 6 months	46 (25.0%)
6.5 months – 9 months	9 (4.9%)
10 months - 12.5 months	41 (22.3%)
15 months – 2 years	19 (10.3%)
3 years – 6 years	4 (2.2%)

3. Who delivers the service referred to as HWC?

- Are these individuals professionally trained?
- If so, what type of professionals were the coaches? Specifically, were they health professionals or not? If so, what type?
- In addition, what type of training have they received, if any, in the specifics of the coaching process and the content of the coaching they are delivering?



Who delivers it?

General Category	Specific Background	All Papers (N = 234)
Medical Professionals	Physicians	14 (6.0%)
	Nurses	98 (41.9%)
	Pharmacists	10 (4.3%)
	Physician Assistants	1 (0.4%)
	Medical Staff	1 (0.4%)
Allied Health Professionals	Dieticians or nutritionists	26 (11.1%)
	Psychologists (doctorate level)	25 (10.7%)
	Social Workers, psychotherapists, Counselors (masters level)	23 (9.8%)
	All mental health providers	48 (20.5%)
	Physio- and physical therapists	10 (4.3%)
	Medical assistants	8 (3.4%)
	Occupational therapists	3 (1.3%)
	Exercise physiologists and Exercise specialists	15 (6.4%)
	Unspecified or other Allied Health Professionals	10 (4.3%)
Other Health Professionals	Unspecified Health Professionals	18 (7.7%)
	Health Educators/Promotion	19 (8.1%)
	Research Assistants	5 (2.1%)
	Medical or Nursing Students	5 (2.1%)
	Allied Health Students	12 (5.1%)
	Other Students	1 (0.4%)
Professional Coaches	Health/Wellness	15 (6.4%)
	Life/Lifestyle	2 (0.9%)
	Personal vitality	2 (0.9%)
	Professional coach	4 (1.7%)

Figure 3. Frequency of articles describing given amount of coach-specific training (n = 57)

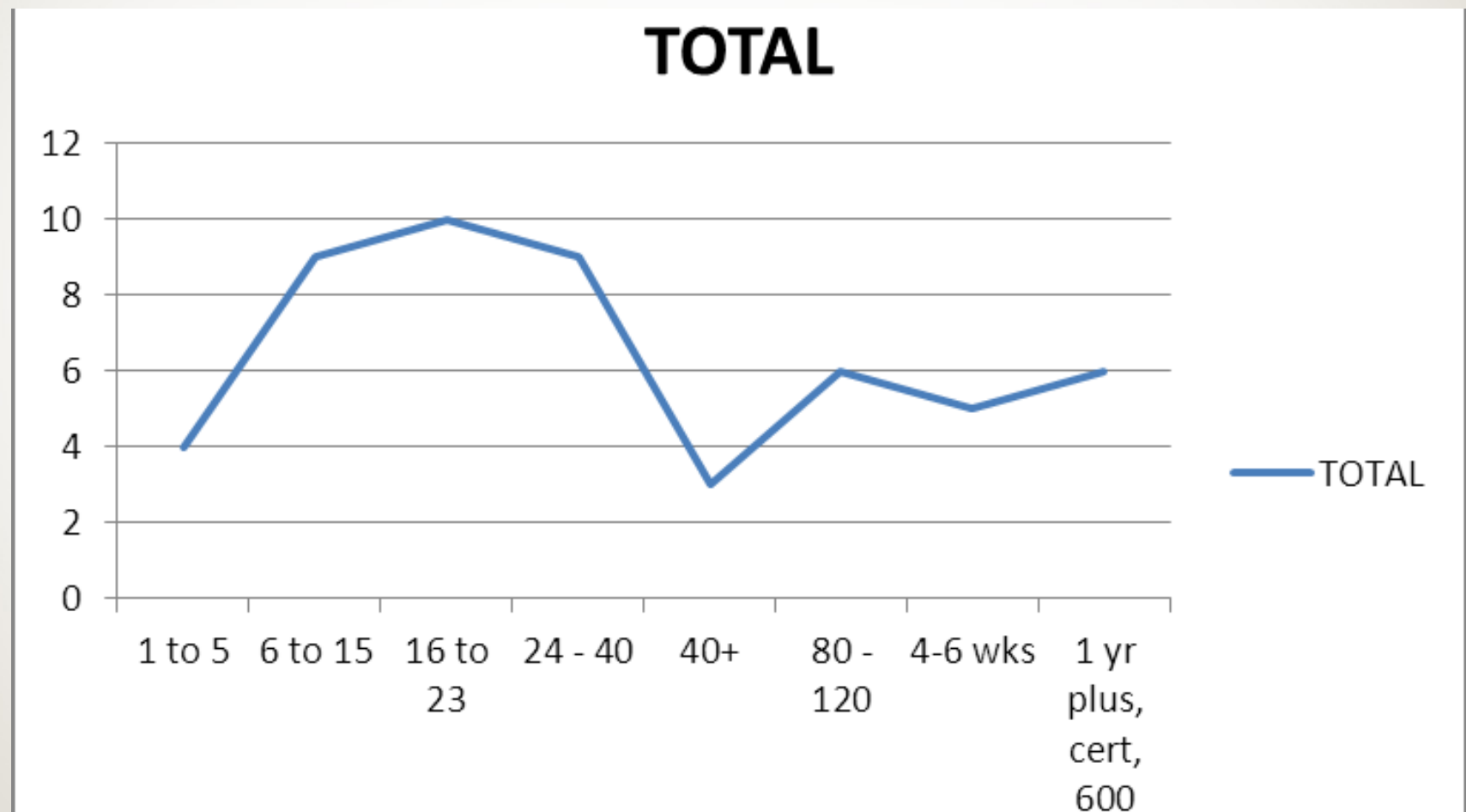
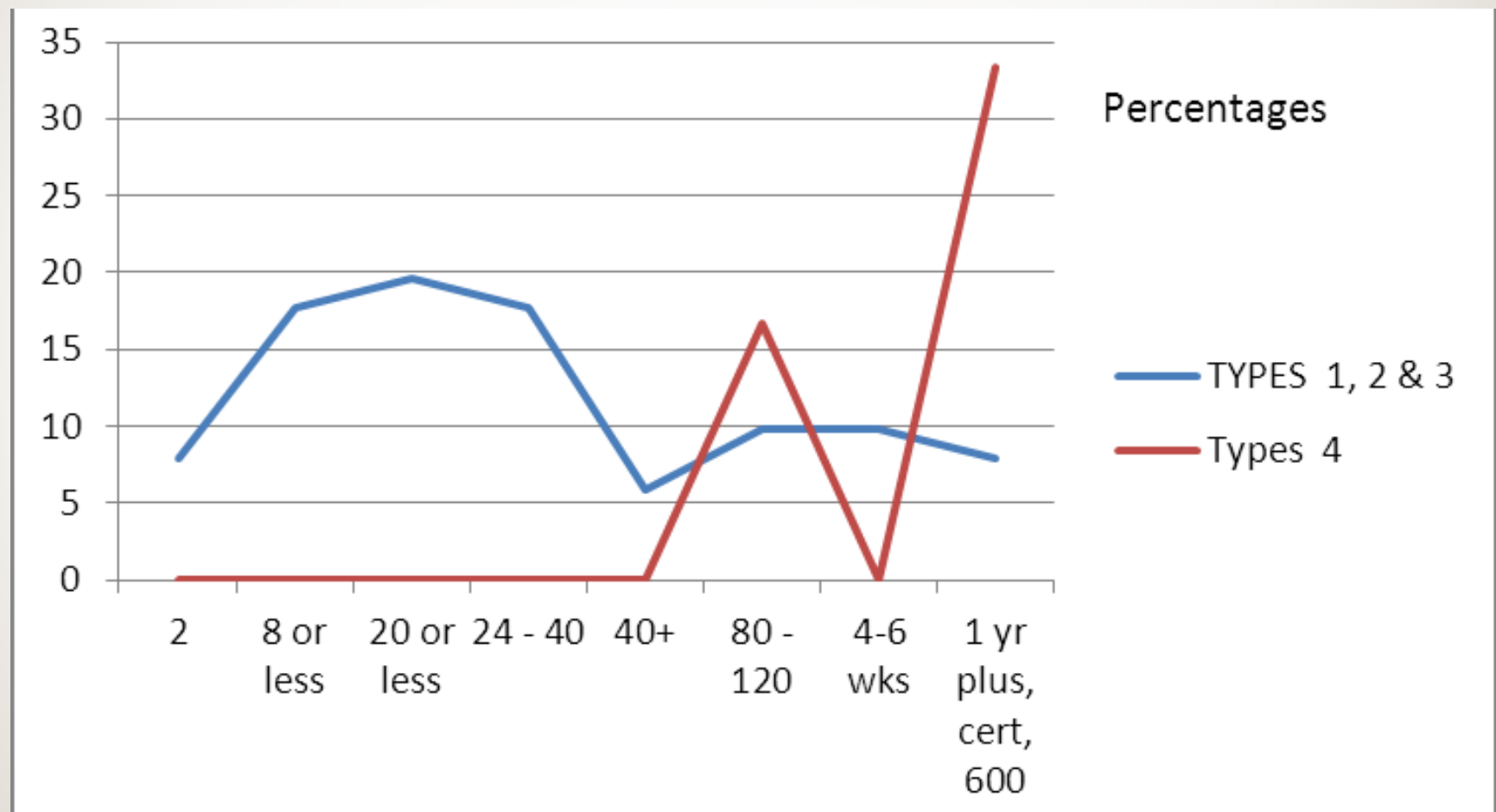


Figure 3b. Percentage of articles describing coach-specific training by type of article



Lack of agreement on:

- what exactly health coaching entails (e.g., practices, strategies, delivery methods)
- what the role of the coach actually is (e.g., educator, navigator, facilitator, partner)
- what professional background is needed
- what training enables the coach to provide health coaching competently

Research Implications Thus Far

- Clear definition of HWC
- Must clearly describe methods used in intervention, as well as background & training of coaches
- Short-cut: Use NCCHWC- certified coaches ASAP (2017)



National Consortium for Credentialing Health & Wellness Coaches (ncchwc.org)

Standardizing the Definition & Training

- Creation of a non-profit to develop a national standard of coaching competencies, training and education, and credentialing of professional health and wellness coaches
- 75 organizations in healthcare, academia, industry and professional disciplines
- Completed Job Task Analysis, large validation study on definition of health and wellness coaching, and competencies needed to provide it



**NCCHWC partners with National Board
of Medical Examiners
First National Exam in 2017**

Research Implications

- Clear definition of HWC
- Must clearly describe methods used in intervention, as well as background & training of coaches
- Study Design: Effectiveness over efficacy
- Measurement of mediators
- Measurement of outcomes
- Consideration of Stakeholders

Potential Mediators

- Knowledge
- Skills acquisition/Behavioral implementation
- Self-efficacy
- Locus of Control/Health Control
- Stages of Change
- Patient Engagement
- Patient Activation
- Health Engagement

Patient Engagement

- (1) recognizing and understanding the importance of taking an active role in one's health and health care;
- (2) having the knowledge, skills, and confidence to manage health; and
- (3) using that knowledge, skills and confidence to engage in health-promoting behaviors to obtain the greatest health benefit.

Health Engagement (HE) defined by Long et al (JOEM, 2016) as:

- a personal commitment to optimize wellbeing and subsequent action demonstrating that commitment

Value Chain Proposition

- Precursor 1: Promotions & incentives for H&W
- Precursor 2: Participation in Intervention
- OD1: Motivation to Improve Health & Well-being
- OD2: Behavior (activity, diet, substance use)
- OD3: Emotion (stress, support, perceived health)
- OD4: Biometrics (e.g., BP, BMI, cholesterol, BG)
- OD5: Compliance (e.g., Rx adherence)
- OD6: Claims (Healthcare Utilization & Cost)
- OD7: Productivity at Work / Performance
- OD8: Employee Retention; Health Engagement

Long et al JOEM 2016

It starts with YOU



Your research will take us
forward!

Wolever et al (2011).
Explore, 7(1), 30-36.

Health Education & Counseling

Medical model (disease)

Diagnosable illness in paradigm
of pathology

Focus on fixing a problem
(motivated by fear)

Professional as expert

“Why” questions with present
and past focus

Restore client’s level
of functioning

Health Coaching

Learning/development model (health)

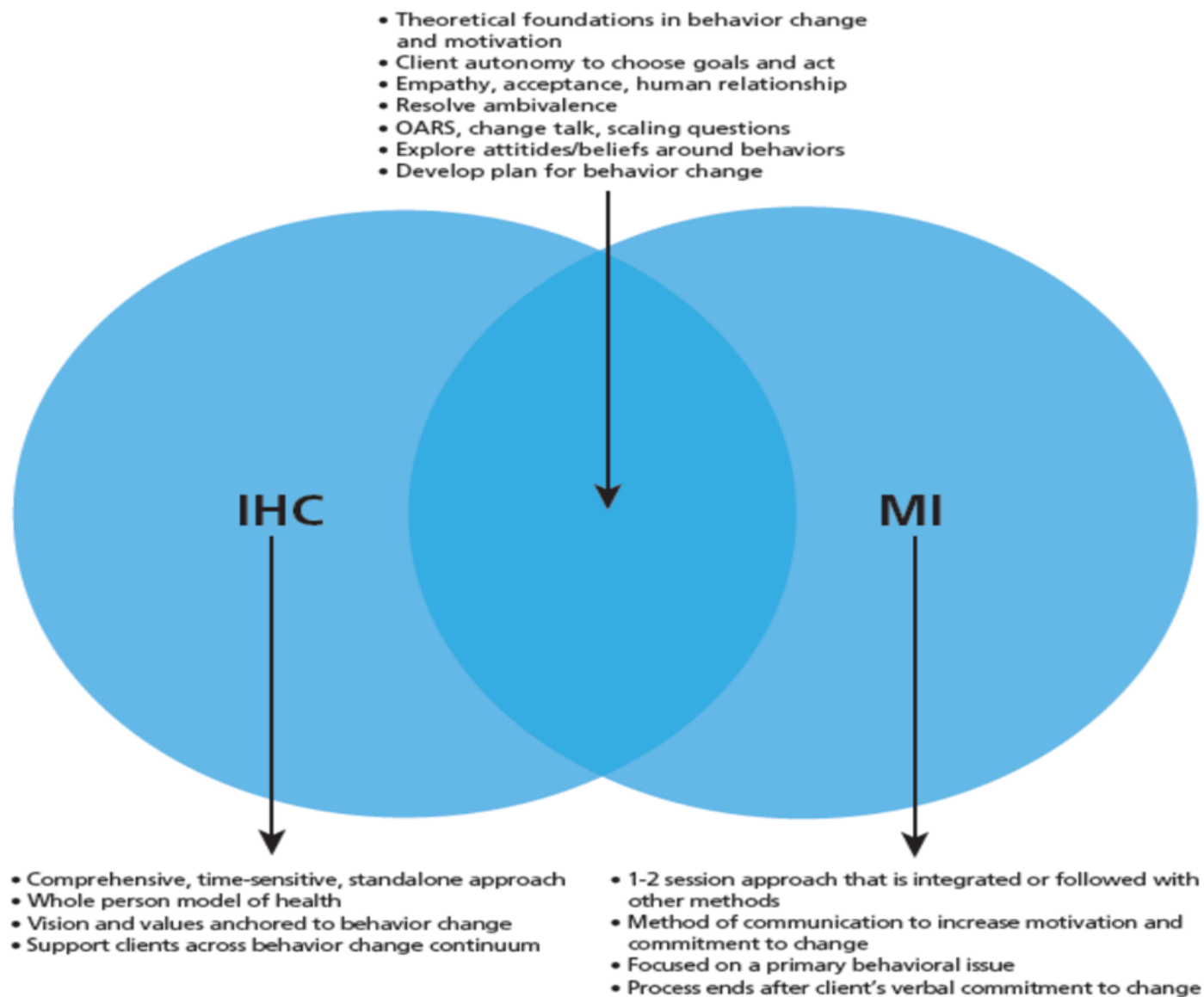
Desirable goals & achievement in
paradigm of possibility

Focus on optimal performance
(by happiness & growth)

Coach as non-judgmental partner/ally
of equal stature

“How” questions with present and
future focus

Move client to personal fulfillment or
optimal performance



Simmons & Wolever (2013). Integrative Health Coaching and Motivational Interviewing: Synergistic Approaches to Behavior Change in Health Care. GAHM, 2(4), 24-31.