LESS MEDICINE, MORE HEALTH: COACHING AS A KEY DRIVER IN MEDICAL FITNESS AND POPULATION HEALTH

Brad A. Roy, Ph.D., FACSM, FACHE, FMFA
The Summit Medical Fitness Center
Kalispell Regional Medical Center
Kalispell Montana
POPULATION HEALTH AND WELLNESS?
Yellow Emperor’s Book of Internal Medicine:
First described principal “human harmony with the world was the key to prevention & that prevention was the key to long life.

Principal grew into 6th century Taoism: Longevity through simple living”

200 BC: Tai chi chaun (Hua T’o) taught proper diet and physical activity are essential principals of daily living.
Adult Stress—
Frequently Asked Questions
How it affects your health and what you can do about it

Stress—just the word may be enough to set your nerves on edge. Everyone feels stressed from time to time. Some people may cope with stress more effectively or recover from stressful events quicker than others. It’s important to know your limits when it comes to stress to avoid more serious health effects.
“Ajur Veda”: elaborate collection of health & medical concepts; that around 3,000 B.C. developed into yoga.

Yoga’s roots may go even deeper, 5,000 B.C.

Yoga philosophies asserted that physical suppleness, proper breathing & diet were essential to control the mind & emotions & were pre-requisites for religious experience.

China’s and India’s linking of exercise & health are considered by some to be the root of “sports medicine”.

PHYSICAL ACTIVITY AND HEALTH
WORK ACTIVITY AND CORONARY HEART MORTALITY

RALPH S. PAFFENBARGER, JR., M.D., AND WAYNE E. HALE, A.B.

Abstract  To appraise the role of physical activity in reducing coronary mortality among longshoremen, 6351 men, 35 to 74 years old upon entry, were followed for 22 years or to death or to the age of 75. Their longshoring experience was computed in terms of work-years according to categories of high, medium and low caloric output. Individual work assignments were reclassified annually to allow for effect of job transfers. The age-adjusted coronary death rate for the high-activity category was 26.9 per 10,000 work-years, and the medium and low categories had rates of 46.3 and 49.0, which were little different from each other. This protective "threshold" effect was seen especially for the sudden-death syndrome, in which the death rate for heavy workers was 5.6, as contrasted with 19.9 for moderate and 15.7 for light workers. We conclude that repeated bursts of high energy output established a plateau of protection against coronary mortality, and that several different mechanisms may explain this finding. (N Engl J Med 292:545-550, 1975)
“Aha” Moment

NIH Consensus Development Conference on Cardiovascular Health and Physical Activity

- Study: Mild Hypertension
- Medication group
- Exercise group
- Who had better numbers?
- Medication takers
- Who had better outcomes?
- Exercisers
“Every American should accumulate 30’ or more of moderate intensity physical activity on most, preferably all, days of the week.”
“An agent with lipid-lowering, antihypertensive, positive inotropic, negative chronotropic, vasodilating, diuretic, anorexigenic, weight-reducing, cathartic, hypoglycemic, tranquilizing, hypnotic, and antidepressive qualities.”

William C. Roberts, MD
Editor-in-Chief
American Journal of Cardiology 1984; 53:261
The Miracle Drug: Exercise is Medicine®

Rationale

In an era of spiraling health care expenditures, getting patients to be more active may be the ultimate low-cost therapy for achieving improved health outcomes.¹ Studies show that regular physical activity (PA) has health benefits at any body weight and that it’s critical for long-term weight management. In fact, recent work has shown that exercise is as effective as prescription medications in the management of several chronic diseases.² Consequently, PA promotion should be the foundation of clinical therapy and public health policy, whether to promote health or control weight. Just as weight and blood pressure are addressed in some manner at nearly every healthcare provider visit, so should attention be given to exercise prescription and the accumulation of [150 minutes of moderate intensity PA per week.]³

The Exercise is Medicine® (EIM) Solution

An intervention using the PA guidelines from the National Physical Activity Guidelines⁴

<table>
<thead>
<tr>
<th>Age</th>
<th>Aerobic Activity Recommendations</th>
<th>Muscle Strengthening Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>6–17</td>
<td>60 minutes of moderate to vigorous physical activity (PA) per day</td>
<td>As part of their 60 or more minutes of daily PA, children and adolescents should include muscle-strengthening PA on at least 3 days of the week</td>
</tr>
<tr>
<td>18–64</td>
<td>150 minutes of moderate PA or 75 minutes of vigorous PA a week</td>
<td>Activities that are moderate or high intensity and involve all major muscle groups on 2 or more days a week</td>
</tr>
<tr>
<td>65+</td>
<td>150 minutes of moderate PA or 75 minutes of vigorous PA a week</td>
<td>Activities that are moderate or high intensity and involve all major muscle groups on 2 or more days a week</td>
</tr>
</tbody>
</table>
• Ancient “laws of health”
  • “To breath fresh air, eat proper foods, drink the right beverages, take plenty of exercise, get the proper amount of sleep and include our emotions when analyzing our overall well being.

Don’t just sit there!

We know sitting too much is bad, and most of us intuitively feel a little guilty after a long TV binge. But what exactly goes wrong in our bodies when we park ourselves for nearly eight hours per day, the average for a U.S. adult? Many things, say four experts, who detailed a chain of problems from head to toe.

ORGAN DAMAGE

Heart disease
Muscles burn less fat and blood flows more sluggishly during a long sit, allowing fatty acids to more easily clog the heart. Prolonged sitting has been linked to high blood pressure and elevated cholesterol, and people with the most sedentary time are more likely to have cardiovascular disease than those with the least.

Overproductive pancreas
The pancreas produces insulin, a hormone that carries glucose to cells for energy. But cells in inactive muscles don’t respond as readily to insulin, so the pancreas produces more and more, which can lead to diabetes and other diseases. A 2011 study found a decline in insulin response after just one day of prolonged sitting.

Colon cancer
Studies have linked sitting to a greater risk for colon, breast and endometrial cancers. The reason is unclear, but one theory is that excess insulin encourages cell growth. Another is that regular movement boosts natural antioxidants that kill cell-damaging — and potentially cancer-causing — free radicals.

TROUBLE AT THE TOP

Foggy brain
Moving muscles pump fresh blood and oxygen through the brain and trigger the release of all sorts of brain and mood-enhancing chemicals. When we are sedentary for a long time, everything slows, including brain function.

Strained neck
If most of your sitting occurs at a desk at work, craning your neck forward toward a keyboard or slouching your head to create a phone or tablet typing can strain the cervical vertebrae and lead to permanent imbalances.

Sore shoulders and back
The neck doesn’t slouch alone. Slumping forward overtaxes the shoulder and back muscles as well, particularly the trapezius, which connects the neck and shoulders.

BAD BACK

Inflexible spine
Spines that don’t move become inflexible and susceptible to damage in mundane activities, such as when you reach for a coffee cup or bend to tie a shoe. When we move around, soft discs between vertebrae expand and contract like sponges, soaking up fresh blood and nutrients. When we sit for long time, discs are squashed unevenly and lose sponginess. Collagen hardens around supporting tendons and ligaments.

MUSCLE DEGENERATION

Musky abs
When you stand, move or even sit up straight, abdominal muscles keep you upright. But when you slump in a chair, they go unused. Tight back muscles and wavy abs form a posture-wonking alliance that can exaggerate the spine’s natural arch, a condition called hyperlordosis, or swayback.

Tight hips
Flexible hips help keep you balanced, but chronic坐s and slouching can greatly restrict the hip flexor muscles in front that they become short and tight, limiting range of motion and stride length. Studies have found that decreased hip mobility is a main reason elderly people tend to fall.

Limp glutes
Sitting requires your glutes to do absolutely nothing, and they get used to it. Soft glutes hurt your stability, your ability to push off and your ability to maintain a powerful stride.

Disk damage
People who sit more are at greater risk for herniated lumbar disks. A muscle called the psoas travels through the abdominal cavity and, when it tightens, pulls the upper lumbar spine forward, upper back weight rests entirely on the ischial tuberosity (sitting bones) instead of being distributed along the arch of the spine.
“Diseases of Workers”

“Those who sit at their work and are therefore called ‘chair workers’, such as cobblers and tailors, suffer from their own particular diseases…suffer from general ill health…caused by their sedentary life. These workers should at least exercise on holidays to counteract harm done by many days of sedentary life”
History of Medicine

2000 BC  Eat this root.
1000 BC  That root is heathen. Say this prayer.
1850 AD  Prayer is superstition. Drink this potion.
1930 AD  That potion is snake oil. Swallow this pill.
1970 AD  That pill is ineffective. Take this antibiotic.
2000 AD  That antibiotic is artificial. Eat this root.
The Healthcare Challenge!

Cancer
Stroke
Cardiovascular Disease
Diabetes
Osteoporosis
Arthritis
COPD
Hypertension
Dyslipidemia
Peripheral Vascular Disease
Metabolic Syndrome
Obesity & Overweight
Osteopenia
Osteoporosis
Pre-Cancer
Pre-Hypertension
Pre-Diabetes
Depression
Low Back Pain
Anxiety
Asthma
Fibromyalgia/CFS
Alzheimers

The image illustrates various health conditions prevalent in the healthcare industry.
A strong dose-response relationship exists between most chronic diseases and lifestyle-related risk factors.
AND NOW IN 2017

MY GENES MAKE ME DO IT

Thrifty Genes  Evolved out of NEED. Conserve
They drive us to load up on calories and take it easy
Because tomorrow we will have to walk for days without food.
BACKGROUND: Both genetic and lifestyle factors contribute to individual-level risk of coronary artery disease. The extent to which increased genetic risk can be offset by a healthy lifestyle is unknown.

CONCLUSIONS: Across four studies involving 55,685 participants, genetic and lifestyle factors were independently associated with susceptibility to coronary artery disease. Among participants at high genetic risk, a favorable lifestyle was associated with a nearly 50% lower relative risk of coronary artery disease than was an unfavorable lifestyle. (Funded by the National Institutes of Health and others.)
Figure 3. 10-Year Coronary Event Rates, According to Lifestyle and Genetic Risk in the Prospective Cohorts.
Shown are standardized 10-year cumulative incidence rates for coronary events in the three prospective cohorts, according to lifestyle and genetic risk. Standardization was performed to cohort-specific population averages for each covariate. The I bars represent 95% confidence intervals.
<table>
<thead>
<tr>
<th>Determinants</th>
<th>Decreases Disease Risk</th>
<th>Increases Disease Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>Fruit/vegetables; dietary fiber; natural foods; food variety; healthy eating patterns; fish; low dose alcohol</td>
<td>High total energy; high E density; excess processed foods/meats; sugars; saturated/trans fats; excess alcohol; obesity;</td>
</tr>
<tr>
<td>(in) Activity</td>
<td>Aerobic/resistance exercise; stability / mobility training</td>
<td>Sitting; sedentary work; excessive exercise</td>
</tr>
<tr>
<td>Stress, anxiety, depression</td>
<td>Perceived control; resilience; self-efficacy; coping skills; exercise/fitness; healthy diet</td>
<td>Overload; learned helplessness; early trauma; boredom; drug use; excess alcohol</td>
</tr>
<tr>
<td>Technopathology</td>
<td>Selective technology use; preventive care; limiting exposure</td>
<td>Machinery use; TV/small screens; repetitive actions; excessive noise</td>
</tr>
<tr>
<td>Inadequate Sleep</td>
<td>Sleep hygiene; healthy diet; exercise</td>
<td>Shift work; excessive entertainment; sleep disorders; interactive media in room; obesity; medications; stress</td>
</tr>
<tr>
<td>Environment</td>
<td>Political/economic structure; infrastructure for exercise; reduce chemical use</td>
<td>Political/economic structure; passive influences; second-hand smoke; pollution; drug immunity; endocrine-disrupting chemicals</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>Something to do; someone to love; something to look forward to</td>
<td>Unemployment; displacement; ageing and loss of responsibility; depression; negative affect; early experiences</td>
</tr>
<tr>
<td>Alienation</td>
<td>Family relationships; improved parenting; increased competencies</td>
<td>Discrimination; early experiences; poor parental support; feelings of isolation; illness; emotional distress; social rejection</td>
</tr>
<tr>
<td>Loss of culture/identity</td>
<td>Cultural acceptance and support; conflict resolution ;cultural pride/training</td>
<td>Warfare; domination by invading culture; displacement</td>
</tr>
<tr>
<td>Occupation</td>
<td>Employment; social justice; work equality; economic security</td>
<td>Shift work; stress; hazard exposure; conflict</td>
</tr>
<tr>
<td>Drugs, smoking, alcohol</td>
<td>Social Support; relationships; resilience; employment</td>
<td>Stress; anxiety; depression; peer/social pressure; addiction</td>
</tr>
<tr>
<td>Over-and Underexposure</td>
<td>Sunlight (adequate) light; general stimulation</td>
<td>Climate; sunlight; excessive darkness; radiation; asbestos</td>
</tr>
<tr>
<td>Relationships</td>
<td>Companionship; peer support; maternal support in childhood; love</td>
<td>Loneliness; interpersonal conflict; lack of support</td>
</tr>
<tr>
<td>Social inequity</td>
<td>Socioeconomic status; education; trust; economic security</td>
<td>Poverty; Inequality; lack of welfare support</td>
</tr>
</tbody>
</table>
Sorry I'm late, Moira— I went for a blood test.

I've finally decided to have a complete physical. Yeah?... That's something I should do, too.

But I'd like to lose a little weight first. Exercise, tone up a bit, you know...

... Do all the stuff I was supposed to do after I had my last physical.
EVERYBODY NEEDS A COACH

OUR DEDICATED COACHES BELIEVE IN YOU.

The Summit now offers Individual and Group Fitness Coaching, Individual Nutrition Coaching and Individual Wellness Coaching. Please call for more info: 751.4105

Mabel Becomes Fred's Personal Trainer
Coaching
Health and Wellness coaches are 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 clients mobilize internal strength and external resources for sustainable change.
Background of Health & Wellness Coaches

- Case managers
- Nurses
- Nurse practitioners
- Physicians
- Physician assistants
- Physical therapists
- Occupational therapists
- Exercise physicists
- Social workers
- Psychologists
- Counselors
- Dietitians
- CAM/integrative practitioners
- Diabetes educators
- Health educators
- Dietitians
- Personal trainers
- Fitness instructors
- Massage therapists
- Athletic trainers
- Ex-professional athletes
- Sports coaches
- Teachers
- Mental health professionals
- Career transitioners
- Recreational therapists
Health & Wellness Coaching Standards

International Consortium for Health & Wellness Coaching and the National Board of Medical Examiners are strategic partners…

….launching national standards for training, education, and certification of health & wellness coaches in 2017. Application Feb 1, exam Sep 2-16.
Health and wellness coaches work with individuals and groups in a client-centered process to facilitate and empower the client to develop and achieve self-determined goals related to health and wellness. Coaches support clients in mobilizing internal strengths and external resources, and in developing self-management strategies for making sustainable, healthy lifestyle, behavior changes. While health and wellness coaches per se do not diagnose conditions, prescribe treatments, or provide psychological therapeutic interventions, they may provide expert guidance in areas in which they hold active, nationally recognized credentials, and may offer resources from nationally recognized authorities such as those referenced in the NCCHWC’s healthy lifestyle curriculum. As partners and facilitators, health and wellness coaches support their clients in achieving health goals and behavioral change based on their clients’ own goals and consistent with treatment plans as prescribed by individual clients’ professional health care providers. Coaches assist clients to use their insight, personal strengths and resources, goal setting, actions steps and accountability toward healthy lifestyle change.
NCCHWC Code of Ethics

(Updated October 3, 2016)

NCCHWC is committed to maintaining and promoting excellence in coaching. Therefore, NCCHWC expects all credentialed health and wellness coaches (coaches, coach faculty and mentors, and students) to adhere to the elements and principles of ethical conduct: to be competent and integrate NCCHWC Health and Wellness Coach Competencies effectively in their work.

The NCCHWC Code of Ethics is designed to provide appropriate guidelines, accountability and enforceable standards of conduct for all NCCHWC Credential-holders. In line with the NCCHWC definition of coaching, all NCCHWC Credential-holders commit to abiding by the following Code of Ethics.
**Methods**  Reviewed > 800 papers; 284 included

**Coaching Elements**

- Client-centered (guided by patient values)
- Client-determined goals
- Self-discovery
- Accountability
- Combined with education
- Ongoing relationship
- Coaches trained in behavior change, motivational techniques

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COACHES FACILITATE LEARNING AND DISCOVERY ON THE CLIENT’S PART THROUGH THE CYCLE OF HEALTH COACHING BY:

- Establishing the alliance with trust, rapport and empathy
- Holding the client’s agenda foremost
- Evoking client values and strengths
- Evoking the client’s broader vision to support desired health outcomes
- Supporting the patient/client in seeking clarity and self-assessing readiness
- Identifying the patient-determined goals
- Supporting movement into action
- Tracking the progress in ways the patient has identified to increase their own accountability
- Helping the Client/Patient to articulate learning and insights
- Continuing to plan for sustained changes
HEALTH COACH MODEL

ARRANGE
• Referral
• Follow-up

ASSESS
• Health behaviors
• Self-efficacy

ADVISE
• Health risks
• Benefits of change
• Appropriate amount

ASSIST
• Barriers and problem-solving techniques
• Program opportunities
• Social support

AGREE
• Collaborative goals based on person’s interest & confidence to perform behavior

Personal Wellness Vision & Action Plan
1. Specific goals in behavioral terms.
2. Follow-up plan
3. Professional and social support

Adapted from: Glasgow et al. Am J Prev Med 2004;27(2S)
Journey to Wellness

Positive lifestyle outcomes have been shown in those with the following conditions:

- Obesity
- Heart Disease/Heart Failure/Stroke
- Peripheral Vascular Disease
- Diabetes
- Osteoporosis
- Metabolic Syndrome
- Arthritis
- Chronic Pain / Low Back Pain
- Orthopedic Conditions
- COPD/Asthma
- Hypertension
- Fibromyalgia
- Multiple Sclerosis
- Dyslipidemia
- Parkinson’s Disease
- Depression
- HIV
- Cancer

If you or anyone you know is limited by a chronic health condition, check out the Journey to Wellness Program today!

Judy & Jack Wigmore

"After my breast cancer diagnosis and chemo in Oregon, I was worried about the level of healthcare and fitness resources in the area but found that I had nothing to fear. The Summit has it all and more. With my Wellness Coach, I got support to begin my journey. Zumba and stretching classes are great, with instructors that have infectious good cheer. I have been to many gyms, but none as fine as The Summit.”

-Judy

"The Journey to Wellness program has been a life changing experience for me. I am in stroke recovery and have received loving support that continues to the present. My sincere thanks to The Summit.”

-Jack

Laura Hampson

"Participating in the Journey to Wellness Program has been quite life changing. I feel better now than I did ten or twenty years ago! At Journey to Wellness, the mentors are top quality, and provide great support to help everyone succeed. Journey to Wellness is one of the best decisions I’ve ever made!”

-Laura

THE SUMMIT MEDICAL FITNESS CENTER
KALISPELL REGIONAL HEALTHCARE

205 Sunnyview Lane, Kalispell, MT 59901
406.751.4100 • www.summithealthcenter.com
SUMMIT MEDICAL FITNESS CENTER
COACHING STAFF BACKGROUNDS

• Primary Care Physician
• Ph.D. – Health Promotion
• Ph.D. – Clinical Exercise Physiology (RCEP)
• M.S. – Clinical Exercise Physiology (RCEP)
• M.S.W. – Licensed Clinical Counselor
• M.S. – Athletic Trainer/Exercise Physiologist
• M.S. – Licensed Dietician
• M.S. – Exercise Physiologist / Personal Trainer (ACSM) / NSCA
• B.S. – Personal Trainers (ACE and ACSM)
• B.S. - R.N.
THE JOURNEY TO WELLNESS PROGRAM

• Provider Referral ONLY
• 4 month program; $350
• Program Objectives:
  • Cultivate environment of successes
  • Establish a pattern of regular exercise & mindful eating/nutrition.
  • Increase overall quality of life
  • Identify & target barriers
  • Measure behavioral and health/clinical outcomes.
JOURNEY TO WELLNESS

- Multi-disciplinary team approach
- **Personalized coaching**
  - Wellness Vision
  - Associated SMART Goals
  - Focus on Positivity
- **RD / BSW : Body Balance Program**
- Unlimited facility access
- Group Activities & classes
- Health education/wellness seminars
- Vector Wellness On-line Platform
- Progress reporting to referring MD
JOURNEY TO WELLNESS – COACH CHECKLIST

Client Name:  __________________________ Phone #:  __________________________ Start Date:  __________

**COACHES: Please complete this checklist for each J2W participant:** THANKS 😊

**At orientation:**
- [ ] Powerpoint
- [ ] Wellness Vision/Goals
- [ ] 5 week Letter

**Prior to Initial Coach Meeting:**
- [ ] Biometrics
- [ ] Review chart
- [ ] Enter HHQ into IHP

**Initial Coach Meeting:**
- [ ] Health history – what’s their story?
- [ ] Tour, locker use
- [ ] Wellness Vision/goals – refine 2 wk & 3 mo. Goals
- [ ] Schedule SHAPE test with exercise goal
- [ ] ID Readiness to change for 3 m goal
- [ ] Positivity test
- [ ] Create “Weekly Plan” form
  - [ ] Use class schedules, lectures, support groups, etc
  - [ ] Create workout with client – K.I.S.S. please 😊
  - [ ] Make 2 copies “weekly plan” (1 chart, 1 participant)
- [ ] Get contact frequency/modo preference
- [ ] Set 2 week appointment, give reminder card
- [ ] Review IHP (optional)
- [ ] Membership card

**After 1st meeting:**
<table>
<thead>
<tr>
<th>Survey</th>
<th>Threshold</th>
<th>Recommended Intervention</th>
</tr>
</thead>
</table>
| Exercise minutes/week         | >150 minutes = Lower risk  
<150 minutes = higher risk                                               |                                                                                          |
| Blood Pressure                | <120 sys, < 80 dias = Low  
120-139 sys, 80-89 dias = Mod  
>140 sys, <90 dias = High                                             |                                                                                          |
| Dartmouth COOP                | Low risk = <25  
Mod risk = 25 – 35  
High risk = >35 – 45                                                      |                                                                                          |
| PHQ-9 Depression Screen       | 0 - 4 Low  
5 - 14 Moderate depression  
15 - 27 high depression  
High risk - >9 total and/or a score of >1 on question #9 | Patients scoring >9 or a score of >1 on question 1i* be referred back to their MD for evaluation.  
*If patient is suicidal, an immediate evaluation by qualified personnel is recommended. |
| Anxiety Screen                | None = < 5  
Mild = 5-9  
Moderate = 10-15  
Severe = 16-21                                                          | A “severe” score should be referred back to MD for further evaluation                    |
| Nutritional Behavior          | Any YES answers indicate referral to RD                                   | Moderate – high risk scores indicated potential need for Dietitian/Body balance program referral |
| Mindfulness                   | Any yes answer, ask open ended questions.                                 | >1 Yes answer - indicated potential need for Dietitian/Body balance program referral.      |
| Body Fat Percentage           | Women  
< /=  24%  
25% -31%  
> or = 32%  
Men  
< or = 16%  
17% - 24%  
> or = 25%                                                    |                                                                                          |
| Positivity Ratio              | Goal of > 3.0                                                             |                                                                                          |
JOURNEY TO WELLNESS

- Multi-disciplinary team approach
- Personalized coaching

Wellness Vision

- Associated SMART Goals
- Focus on Positivity
- RD / BSW: Body Balance Program
- Health education/wellness seminars
- Unlimited facility access & classes
- Vector Wellness On-line Platform
- Progress reporting to referring MD
Please rank your satisfaction between 1 (low) and 10 (high) for each pillar on the Wellness Wheel.
This exercise will help you assess your readiness to change behavioral areas related to health and wellness.

1. List the behaviors you would like to work on changing or adopting (refer back to any imbalance in your wellness wheel and where your energy lies).
2. Rate how important making the behavioral change is on a scale of 1 to 10
3. Rate your current level of confidence in making these changes (1 to 10)

<table>
<thead>
<tr>
<th>1. Behavior</th>
<th>2. Importance</th>
<th>3. Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
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<tr>
<td>B.</td>
<td></td>
<td></td>
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<tr>
<td>C.</td>
<td></td>
<td></td>
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<tr>
<td>D.</td>
<td></td>
<td></td>
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<tr>
<td>E.</td>
<td></td>
<td></td>
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<tr>
<td>F.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MOTIVATION & CONFIDENCE ARE CO-DEPENDENT

Moore, 2008
Welcome to *Journey to Wellness*

Help us help you!
Tell us what you **MOST** want to get out of your first visit with your coach?

Where do you sit on the wellness wheel?

---

**My Wellness Vision:** This is a clear picture or statement of how I would *feel*, how I would *look*, and what I'd *be doing* if I were at my "best" (ex. I am energized, lighter and happier. I eat to fuel my body and move/play daily to feel my best. I take time to "smell the flowers" and notice the little things along the way.)

I am....

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

This wellness vision is important to me because....

________________________________________________________________________

________________________________________________________________________
VISION TO ACTION COACHING TOOL

1. What is going well in your life?
2. What are 5 things that make you thrive?
3. What is your vision for your future well-being?
4. Why does this vision matter to you?
5. What strengths can you use?
6. What is a key challenge?
7. What are three strategies for overcoming your challenge?
8. What are your goals and first steps?
9. What insights did you have?
<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desired Outcome:</td>
<td>Why Now?</td>
</tr>
<tr>
<td>Values:</td>
<td></td>
</tr>
<tr>
<td>Strengths:</td>
<td></td>
</tr>
<tr>
<td>Successes:</td>
<td></td>
</tr>
<tr>
<td>Motivators:</td>
<td></td>
</tr>
<tr>
<td>Past Supports:</td>
<td></td>
</tr>
<tr>
<td>Present Supports:</td>
<td></td>
</tr>
<tr>
<td>Challenges:</td>
<td></td>
</tr>
<tr>
<td>Strategies:</td>
<td></td>
</tr>
<tr>
<td>Vision Statement:</td>
<td></td>
</tr>
<tr>
<td>Supporting 3 Month Goals:</td>
<td></td>
</tr>
</tbody>
</table>
JOURNEY TO WELLNESS

- Multi-disciplinary team approach
- Personalized coaching
  - Wellness Vision
  - Associated SMART Goals

Focus on Positivity

- RD/Body Balance Program
- Health education/wellness seminars
- Unlimited facility access & Classes
- Online tracking/mentoring
- Progress reporting to referring MD
Positive Emotions are a Vital Sign

“You tested positive for being negative.”
POSITIVITY SELF TEST

Name: ____________________________ Date: __________

Take two minutes to complete the Positivity Self Test now. Your score provides a snapshot of how your emotions of the past day combine to create your positivity ratio.

Instructions: How have you felt in the past day? Look back over the past day (i.e., from this time yesterday up to right now). Using the 0-4 scale below, indicate the greatest degree that you've experienced of each of the following feelings.

0 = Not at all  1 = A little bit  2 = Moderately  3 = Quite a bit  4 = Extremely

What is the most:

<table>
<thead>
<tr>
<th>Emotional State</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amused, fun-loving, or silly you felt?</td>
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<tr>
<td>Angry, irritated, or annoyed you felt?</td>
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<tr>
<td>Ashamed, humiliated, or disgraced you felt?</td>
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<tr>
<td>Awe, wonder, or amazement you felt?</td>
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<tr>
<td>Contemptuous, scornful, or disdainful you felt?</td>
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<tr>
<td>Disgust, distaste, or revulsion you felt?</td>
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<tr>
<td>Embarrassed, self-conscious, or blushing you felt?</td>
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<tr>
<td>Grateful, appreciative, or thankful you felt?</td>
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<tr>
<td>Guilty, repentant, or blameworthy you felt?</td>
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<tr>
<td>Hate, distrust, or suspicion you felt?</td>
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<tr>
<td>Hopeful, optimistic, or encouraged you felt?</td>
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<tr>
<td>Inspired, uplifted, or elevated you felt?</td>
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<tr>
<td>Interested, alert, or curious you felt?</td>
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<tr>
<td>Joyful, glad, or happy you felt?</td>
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<tr>
<td>Love, closeness, or trust you felt?</td>
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<tr>
<td>Proud, confident, or self-assured you felt?</td>
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<tr>
<td>Sad, downhearted, or unhappy you felt?</td>
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<tr>
<td>Scared, fearful, or afraid you felt?</td>
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<tr>
<td>Serene, content, or peaceful you felt?</td>
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<tr>
<td>Stressed, nervous, or overwhelmed you felt?</td>
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</table>
Enjoy your National Forest

- National forests are public lands set aside for public use and enjoyment.
- There are no entrance fees to use the forest, however, there are fees at developed sites. No fees to hike or walk.
- Dogs are welcome; some trails and developed areas may require a leash.
- Trails may have a variety of users – walkers, hikers, horses, and bikes.
- Trailhead signs help keep you informed on local issues, mileage.

Safety message

- Tell someone where you are going and when you expect to be back.
- Carry water, snacks, and phone.
- Hike with a friend and your trekking poles.
- Only go as far as you are able – enjoy and be safe.
- Dress in layers, appropriate for any weather condition.
- Wear sturdy non-slip shoes or hiking boots.
- Carry bear spray and know how to use it.
- Tread lightly and safely.

Forest walking trails for you to enjoy on your Journey to Wellness and beyond.

“I have walked myself into my best thoughts and I know of no thought so burdensome that one cannot walk away from it.”
- Soren Kierkegaard

Forest Walks

“Each walk is an opportunity to celebrate nature and quality of life.”
- Barbi Webber
Hungry Horse - US Forest Service Road #2861

The road is located near the Hungry Horse Ranger Station in Hungry Horse, MT. Park along the road and walk toward the Flathead River and back to your vehicle. Approximate length 2 miles round trip. Note that this is an open road, however, traffic is very light and the road is paved and wide.

Directions: From Kalispell take US Highway 2 to Hungry Horse, turn right at the Hungry Horse Ranger Station sign (6th Street), go straight and find a parking spot along the road. Walk North toward the river. Cell phones work in this area.

Trailhead Facilities: Park along the road, there is no signage or trailhead.

At a Glance
Fees: None
Season of Use: Year Round
Usage: Low, light vehicle traffic on road
Users: Walkers, hikers, mountain bikers, motorcycles, ATVs
Dogs: Must be on leash
Closest Town: Hungry Horse, MT

Trail Length: 2 miles
Elevation Change: minimal
Trailhead Coordinates:
Latitude: 48.385758 N
Longitude: -114.069551 W

Select "GIS Data Library" then "Trail Routes" listed under "Transportation"
Forest Walks

The Journey to Wellness program strives to harness your strengths to build your best self. Health and wellness is an essential component of that balance. The health benefits of being in nature are immediate. In celebration of this, a partnership between Journey to Wellness program and the US Forest Service have identified the following walking trails to inspire you to experience your forest and enjoy the outdoors.

Common features of these forest trails:
- Near the Flathead Valley
- Between 1 – 5 miles in distance
- Dogs on leash
- Clear signage
- Developed parking
- Gentle terrain
- Well maintained trails

Flathead National Forest Walking Trails

**Tally Lake District**
- Danny On Trail #370; 1-7 miles
- Finger Lake Trail #802; 1-3 miles
- Round Meadow Trails #45; 1-13 miles
- Tally Lake Accessible Tr. #809; .4 miles - fee

**Hungry Horse/Glacier View District**
- Jewel Basin Hiking Area; 1-10 miles
- Hungry Horse Ranger Station
  FS Road 2861; 2 miles to river and back;
  light vehicle traffic.

**Swan Lake District**
- Krause Basin Interpretive Trail #904; 1/3 mile
- Echo/Broken Leg Divide #544; 9.4 miles
- Strawberry Lake #5; 2.8 miles

**Spotted Bear District**
- Historic Ranger Station and Compound;
  1-3 miles
- Red Creek Trail #486; 1.4 miles

Easiest accessible trails are in orange.

Note: Camping available at Spotted Bear Campground. Day/Overnight

Contact information

Flathead National Forest
650 Wolfpack Way | Kalispell, MT 59901
(406) 758-5204
www.fs.fed.us/r1/flathead

Summit Medical Fitness Center
Journey to Wellness Program
205 Sunnyview Lane | Kalispell, MT 59901
(406) 751-4106
clisowski@krm.org

Trail Maps available at The Summit, US Forest Service office, or online.
So; What About DIETS?
Let’s Look at a Little Data!
R = randomized, controlled trials; NR5 = before & after trials; NR9 = qualitative studies; other = all other non-randomized designed studies with data; CND = coaching articles without data (e.g., commentary, opinions, reviews)

*Health & Wellness Coaching: Compendium of the Literature (upcoming in 2017)*
Health & Wellness Coaching Research

- 149 empirical studies with outcomes data
- 71 RCTs
- diabetes, cardiovascular disease, obesity, non-clinical
- large scale studies
- sustainability studies

Health & Wellness Coaching Research Compendium, coming in 2017
THE EFFECTS OF HEALTH COACHING ON ADULT PATIENTS WITH CHRONIC DISEASES

Systematic Review

- 12 studies identified (2009-2013)
  - RCTs
    - Adults with chronic disease health care professionals
- Improved weight management
- Improved A1C
- Improved social support
- Increased physical activity
- Improved physical and mental health

“Health Coaching is an effective .......... taking advantage of a patient’s willingness to change lifestyle and support home-based self-care”

Community medical fitness programs and health coaching are emerging trends in health care but very little information is available on the effects of combining the two. Fitness programs are generally acknowledged as beneficial; when health coaching is available and used regularly is there an enhanced program effect? **PURPOSE:** To determine the health impact of a coaching component integrated within a community-based medical fitness program. **METHODS:** Journey to Wellness (J2W) program enrollees \( (N = 1,306) \) were predominately female (76%; 24% male) aged 12-87 y \( (53.54 \pm 14.34) \). Over a 3-mo intervention, J2W emphasized exercise participation, offered nutrition counseling, community (social/ emotional) events, and health coaching. Health coaches were trained using an 18-week educational program. Coaching participation averaged \( 4.4 \pm 2.5 \) sessions with 0-22 range and was analyzed at three levels \( (0-3; 4-6; 6+ \) sessions). Pre and post measures were Patient Health Questionnaire (PHQ), Lifestyle Nutrition Behavior (LNB), General Anxiety Disorder (GAD), Dartmouth Quality of Life (QoL), exercise minutes, weight, waist circumference, systolic and diastolic blood pressure. A series of 2x3 ANOVA were used to examine data after adjusting alpha. **RESULTS:** J2W intervention significantly \( (p < .01) \) improved all outcomes with > 250% increase in exercise minutes. Between 20-43.17% improvements were observed for health scores (PHQ, GAD, QoL) while LNB improved 7.5%, and biometrics (weight, waist, blood pressures) between 1-2.2%. Moreover, significant interactions \( (p < .01) \) indicated greater participation in health coaching further enhanced the J2W effect for PHQ and QoL (weight and GAD approached significance, \( p < .05 \) and < .1 respectively). **CONCLUSION:** By all accounts J2W was an extremely effective community wellness intervention. When participants participated regularly in health coaching the beneficial effects of this medical fitness program were enhanced. Health and wellness coaches working in conjunction with a medical fitness program provide a powerful community-based health intervention.
## Primary Diagnosis

<table>
<thead>
<tr>
<th>Primary Diagnosis</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis</td>
<td>53</td>
<td>4.06</td>
</tr>
<tr>
<td>Cancer</td>
<td>48</td>
<td>3.67</td>
</tr>
<tr>
<td>Cardiac Issues</td>
<td>53</td>
<td>4.06</td>
</tr>
<tr>
<td>Chronic Pain</td>
<td>181</td>
<td>13.85</td>
</tr>
<tr>
<td>Depression/Anxiety</td>
<td>27</td>
<td>2.07</td>
</tr>
<tr>
<td>Diabetes</td>
<td>44</td>
<td>3.37</td>
</tr>
<tr>
<td>Fibromyalgia</td>
<td>87</td>
<td>6.66</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>38</td>
<td>2.91</td>
</tr>
<tr>
<td>Hypertension</td>
<td>7</td>
<td>5.66</td>
</tr>
<tr>
<td>Obesity</td>
<td>271</td>
<td>20.73</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>31</td>
<td>2.37</td>
</tr>
<tr>
<td>Other</td>
<td>283</td>
<td>21.65</td>
</tr>
<tr>
<td>Pre-Diabetes</td>
<td>103</td>
<td>7.88</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td>1306</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Gender
- Female = 76%
- Male = 24%

### Age
- $53.54 \pm 14.34$ years
- Range 12 – 87 years
Program Effect: before/after J2W (N = 1306)
Every outcome variable improved over time with J2W programming

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pre</th>
<th>Post</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DART (QOL)</td>
<td>24.98 +6.32</td>
<td>19.51 +5.88**</td>
<td>-21.91</td>
</tr>
<tr>
<td>PHQ-9 (Depression)</td>
<td>8.06 +5.93</td>
<td>4.58 +4.40**</td>
<td>-43.17</td>
</tr>
<tr>
<td>GAD-7 (Anxiety)</td>
<td>6.76 +5.84</td>
<td>4.01 +4.31**</td>
<td>-40.62</td>
</tr>
<tr>
<td>Pain</td>
<td>4.52 +2.41</td>
<td>3.83 +2.29**</td>
<td>-15.27</td>
</tr>
<tr>
<td>SBP</td>
<td>125.19 +17.74</td>
<td>122.86 +17.30**</td>
<td>-1.86</td>
</tr>
<tr>
<td>DBP</td>
<td>77.95 +12.05</td>
<td>75.97 +11.42**</td>
<td>-2.53</td>
</tr>
<tr>
<td>Weight</td>
<td>209.39 +57.84</td>
<td>204.88 +55.09**</td>
<td>-2.15</td>
</tr>
<tr>
<td>BMI</td>
<td>34.16 +8.67</td>
<td>33.60 +8.30**</td>
<td>-1.60</td>
</tr>
<tr>
<td>BF%</td>
<td>42.05 +13.66</td>
<td>40.90 +9.38*</td>
<td>-2.73</td>
</tr>
<tr>
<td>Waist</td>
<td>41.77 +7.37</td>
<td>40.52 +7.12**</td>
<td>-3.00</td>
</tr>
<tr>
<td>Ex min/wk</td>
<td>71.70 +165.05</td>
<td>269.47 +255.31**</td>
<td>281.12</td>
</tr>
<tr>
<td>Positivity Ratio</td>
<td>2.67 +2.97</td>
<td>4.05 +3.66**</td>
<td>51.55</td>
</tr>
<tr>
<td>NutrBeh</td>
<td>11.86 +8.82</td>
<td>10.97 +9.63**</td>
<td>-7.51</td>
</tr>
<tr>
<td>NutrMind</td>
<td>1.73 +1.53</td>
<td>1.18 +1.53**</td>
<td>-31.83</td>
</tr>
</tbody>
</table>

*p<.05  **p < .001
## CHANGE IN POSITIVITY ASSOCIATION WITH CHANGE IN CLINICAL AND BEHAVIORAL VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>(+) Associated</th>
<th>(-) Associated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise Min/Week</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Dartmouth</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>PHQ 9</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>GAD 7</td>
<td></td>
<td>X</td>
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<tr>
<td>Pain</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>SBP</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>DBP</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Body / Mindfulness</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

(+): Positivity goes up / Variable Score Goes Up  
(-): Positivity goes up / Variable Score Goes Down  

**All Significant at 95% level of confidence**
Outcome Variables: Coaching Effect before / after J2W
JTW Participants with more coaching had better improvement in DART, PHQ-9 and GAD7.
### Outcome Variables by Primary Diagnosis Presentation: before/after J2W

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>DART</th>
<th>PHQ-9</th>
<th>GAD-7</th>
<th>Pain</th>
<th>SBP</th>
<th>DBP</th>
<th>Wt</th>
<th>BMI</th>
<th>BF%</th>
<th>Waist</th>
<th>Ex/Wk</th>
<th>Pos</th>
<th>NutBeh</th>
<th>Mindf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis</td>
<td>**</td>
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<td>Cancer</td>
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<td>Cardiac</td>
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<td>Chronic Pain</td>
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<td>Fibromyal</td>
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<tr>
<td>Obesity</td>
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<td>Orthopedic</td>
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<tr>
<td>Pre-Diab</td>
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**Note.** $p < .01^{**}$; $p < .05^{*}$; $p < .10^t$
### One Year Post Data: n = 76; (47 SMFC memberships)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pre-program</th>
<th>Post-program</th>
<th>Post-One Year</th>
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<tr>
<td>Positivity</td>
<td>2.66</td>
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<td>3.47</td>
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<tr>
<td>PhQ - 9</td>
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<td>4.71</td>
<td>5.35</td>
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<td>GAD - 7</td>
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<td>4.14</td>
<td>3.41</td>
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<tr>
<td>PAIN</td>
<td>4.37</td>
<td>3.88</td>
<td>3.89</td>
</tr>
<tr>
<td>Exercise (min/wk)</td>
<td>81.96</td>
<td>287.85</td>
<td>222.23</td>
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<tr>
<td>Dartmouth QOL</td>
<td>24.37</td>
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<td>20.35</td>
</tr>
<tr>
<td>Body Weight</td>
<td>204.65</td>
<td>201.77</td>
<td>185.88</td>
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<tr>
<td>BMI</td>
<td>42.28</td>
<td>33.11</td>
<td>31.09</td>
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<tr>
<td>BF %</td>
<td>41.41</td>
<td>40.49</td>
<td>39.87</td>
</tr>
<tr>
<td>Waist Circ.</td>
<td>40.87</td>
<td>39.85</td>
<td>39.33</td>
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<tr>
<td>Nutrition behaviors</td>
<td>18.57</td>
<td>16.84</td>
<td>3.09</td>
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<td>Body Image</td>
<td>1.50</td>
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<td>1.16</td>
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<tr>
<td>DBP</td>
<td>77.54</td>
<td>75.46</td>
<td>76.47</td>
</tr>
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</table>
THE SUMMIT/BIO WELLNESS PILOT STUDY

Goal:

A reduction in cardiovascular risk using BIO’s comprehensive wellness platform and the coordinated efforts of a physician, wellness coach, and dietitian to optimize the health and well-being of the participant.
BETA STUDY DETAILS:

- 6 month intervention phase
- Bloodwork & urinalysis = 4 draws
- Physician assessment = 5 visits
- Wellness coach = 13 visits
- Registered Dietitian = 6 visits
- Recipes, meal plans
- Exercise Guidance
- Online tracking of food/activity
Clinical ASCVD
ACS Symptoms
Hx MI/Angina Hx
CRD, PVD, TIA, Stroke

Refer to personal Physician

Statin Risk Reduction Tx per 2013 CG/AHA Guidelines

Diabetes Type I or II Age 40—70 y/o
LDL-C 70-189mg/dL

Statin Risk Reduction treatment per 2013 ACC/AHA Guidelines

>7.5% Estimated 10 Yr ASCVD Risk

5%-7% Estimated 10 Yr ASCVD Risk

Enroll BIO Wellness CT

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BIO Reassessment
Months 1, 2, 4, 6

LDL > 160 Mg/dl
LDL pattern = B
Phenotype
Genetic hyperlipidemia
Lp(a)>47mg/dl
FH of ASCVD > 55
hs-CRP >2mg/l
CAC score >300
Agatson units
Ankle/Brachial Index <0.9

BIO Personalized Plan and Lifestyle modifications interventions
BIO Real Risk Score Residual Risk

Adults >21 y/o?

Complete BIO Initial Screen

Metabolic Syndrome

Personal Eval. and Asses.
Diag Lab w/ASCVD Risk panel
Ankle/Brachial Index
CAC Score
PROJECT TIMELINE:

<table>
<thead>
<tr>
<th>Evaluation &amp; Management</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
<th>Month 5</th>
<th>Month 6</th>
<th>F/U assess at SMFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1 Initial Assess sat</td>
<td>START</td>
<td>Wk 1</td>
<td>Wk 2</td>
<td>Wk 3</td>
<td>Wk 4</td>
<td>Wk 5</td>
<td>Wk 6</td>
</tr>
<tr>
<td>Wk of 11/14</td>
<td>Dec 13th</td>
<td>Jan 10th</td>
<td>wk of Jan 1st</td>
<td>Jan 10th</td>
<td>Jan 23rd</td>
<td>Mar 7th</td>
<td>wk of Mar 20th</td>
</tr>
</tbody>
</table>

P= Physician
C=Wellness Coach
D= Dietician

11/1
Initial Assess sat

Dec 13th

Jan 10th

Jan 23rd

Mar 7th

wk of Mar 20th

F/U assess at SMFC

Wk May 1st
SOME CONCLUDING THOUGHTS
KEY PILLARS OF POPULATION HEALTH / VALUE BASED CARE

- **Business vision**, population definition, policies, modeling, financials, contracts, procedures, market analysis, and value proposition

- **Risk, incentives, payment management, shared savings**

- **Workflows, role changes, people, care coaches, wellness program development, health risk assessment process, population engagement**

- **Integration and interoperability including HIE, patient portal, analytics, coaching tools and health risk assessment**
*80% of what affects health outcomes* is associated with factors outside the traditional boundaries of healthcare delivery—health behaviors (tobacco use, sexual activity), social and economic factors (employment, education, income), and physical environment (air quality, water quality). When healthcare delivery systems expand their interactions with patients to these territories, now the purview of the public health system, outcomes will improve.
Focus on ZERO Trends: Don’t Get Worse!!
HEALTH COACH MODEL

ARRANGE
• Referral
• Follow-up

ASSESS
• Health behaviors
• Self-efficacy

PERSONAL WELLNESS VISION & ACTION PLAN
1. Specific goals in behavioral terms.
2. Follow-up plan
3. Professional and social support

ADVISE
• Health risks
• Benefits of change
• Appropriate amount

ASSIST
• Barriers and problem-solving techniques
• Program opportunities
• Social support

AGREE
• Collaborative goals based on person’s interest & confidence to perform behavior

Adapted from: Glasgow et al. Am J Prev Med 2004;27(2S)
Look, Mom—Burritos! Yum!
“If You Rest, You Rust!”

Helen Hayes (1900-1993)
LIFESTYLE AS MEDICINE

The Assault Fork
Responsible for
Thousands of People
Dying Every Year
Of Obesity And
Heart Disease

Ban It Before
More Lives Are Lost
Health Risk Appraisal
Data Analytics/Risk Stratification

EMR/meaningful Use
Care Guidelines/Protocols

Team Model
Of Care

Patient-Centered
Medical Home

Behavioral
Health

Patient Engagement
Prevention/Wellness
Self-Management Support/Coaching

Minor/Moderate Health Challenge
At Risk
Apparently Healthy

Chronic Disease Management

Acute Care

Complex
OP CM

"Maybe this is the last year I'm goin' hunting"
TAKEAWAYS

1. Evidence supports use of coaching and coaching skills
2. Coaching ignites professional well-being
3. Coaching catalyzes positive shifts in clients and culture
4. Coaching future is bright
5. Coaching is becoming a key cornerstone in healthcare
Five Feature Articles

- **Affect-based Exercise Prescription: Rationale and Supporting Evidence**
  - Panteleimon Ekkekaks, Ph.D., FACSM; Mark E. Hartman, MS, MA; Matthew A. Ladwig, MS

- **Role of Behavioral Economics in Understanding and Working with Clients**
  - Liz Hathaway, Ph.D., MPH, Med

- **Changes in Motivation**
  - Anna Wasserkampf, MSc; Pedro J. Teixeira, Ph.d.; Marlene N. Silva, Ph.D.

- **Engaging the Family to Promote Physical Activity**
  - Keeley J. Pratt, Ph.D., LMFT; Jennifer Lotto, M.S.; Jacqueline Goodwin, Ph.D.

- **Motivational Dynamics of Wearable Activity Monitors**
  - Elizabeth J. Lyons, Ph.D., MPH

All Associate Editor Columns discuss an area of Behavior Change.
“WE MAKE A LIVING BY WHAT WE GET; WE MAKE A LIFE BY WHAT WE GIVE”
SIR WINSTON CHURCHILL