

# **Lifestyle Intervention for Type 2 Diabetes and Increasing Employee Participation in Employer Offered Programs**

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# Objectives

- By the end of the presentation you will:
  - Understand what qualifies as a lifestyle intervention related to type 2 diabetes
  - Have knowledge of the current treatment guidelines for type 2 diabetes
  - Hear my personal experience implementing a diabetes treatment program in a clinical setting
  - Have knowledge on current research on engaging employees in these programs

# Lifestyle Intervention

## The American Association of Clinical Endocrinologists - Type 2 Diabetes Treatment Algorithm

“The key components of lifestyle therapy include MNT, regular physical activity, sufficient amounts of sleep, behavioral support, and smoking cessation and avoidance of all tobacco products.”

## The American Diabetes Association “Standards of Medical Care in Diabetes”

“Lifestyle management is a fundamental aspect of diabetes care and includes diabetes self-management education and support, MNT, physical activity, smoking cessation counseling, and psychosocial care.”



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American Diabetes Association. Lifestyle Management: Standards of Medical Care in Diabetesd2019. *Diab Care*; 2019;42(Suppl. 1):S46–S60.

Garber AJ, et. All. . CONSENSUS STATEMENT BY THE AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AND AMERICAN COLLEGE OF ENDOCRINOLOGY ON THE COMPREHENSIVE TYPE 2 DIABETES MANAGEMENT ALGORITHM – 2018 EXECUTIVE SUMMARY. *Endo Prac*; 2019;24(1):91-120.

# Lifestyle Intervention

- *But what does lifestyle intervention really mean?*
- Simply put – a lifestyle intervention targets lifestyle behaviors
  - Many lifestyle behaviors have been identified as contributors to overall morbidity and mortality in relation to chronic disease
  - The benefit of lifestyle intervention is prevention of progression or recurrence of chronic disease

# Lifestyle Intervention

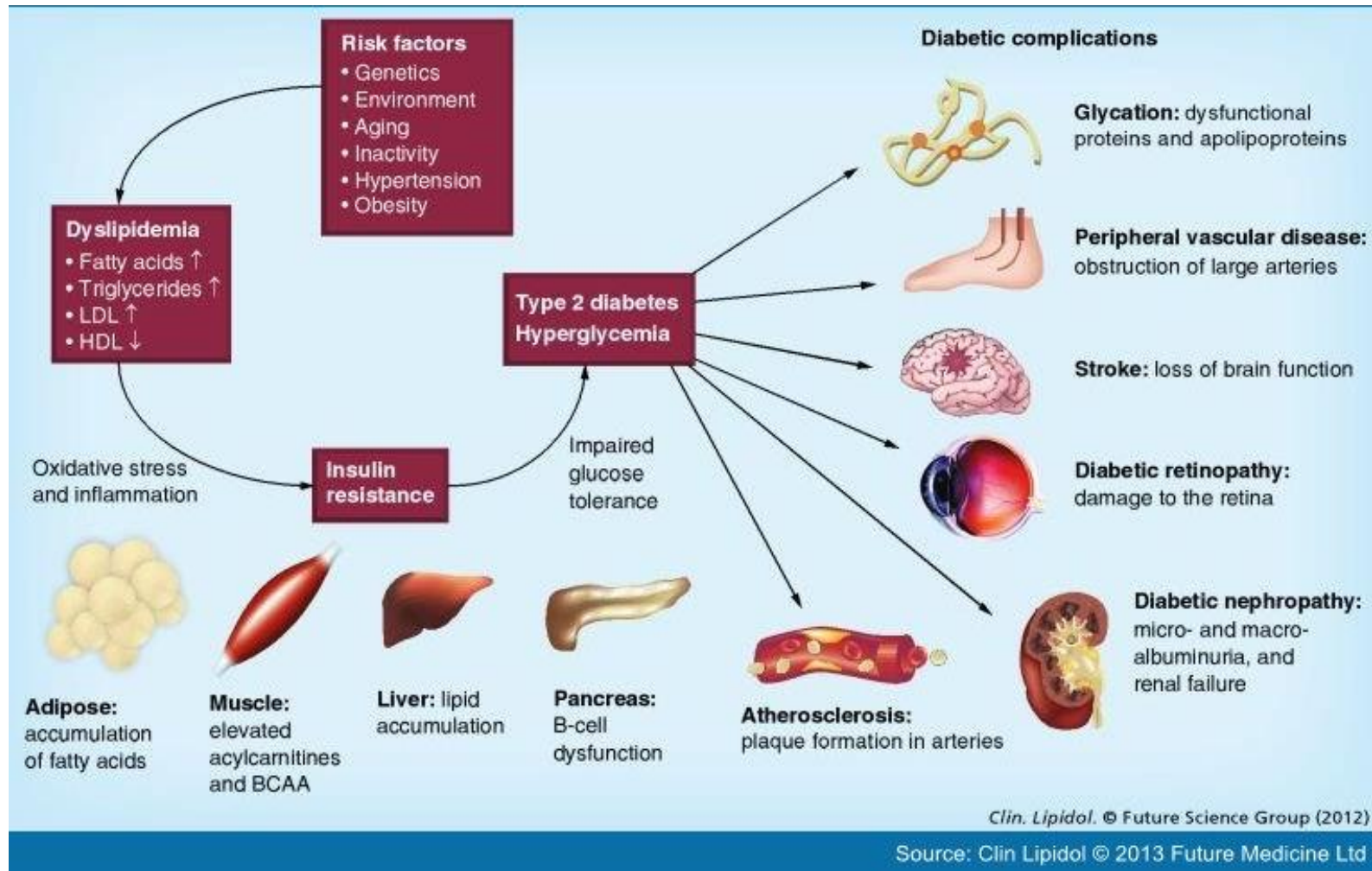
- Lifestyle intervention is not diet and exercise education alone, and must contain at least one additional component to assist with behavior modification:
  - individual and/or group counseling
  - regular contact (by phone or in-person)
  - self-monitoring
  - individual goal setting
  - pre-planning
  - stress management
  - stimulus control
  - cognitive restructuring
  - medication

# Lifestyle Intervention for Type 2 Diabetes

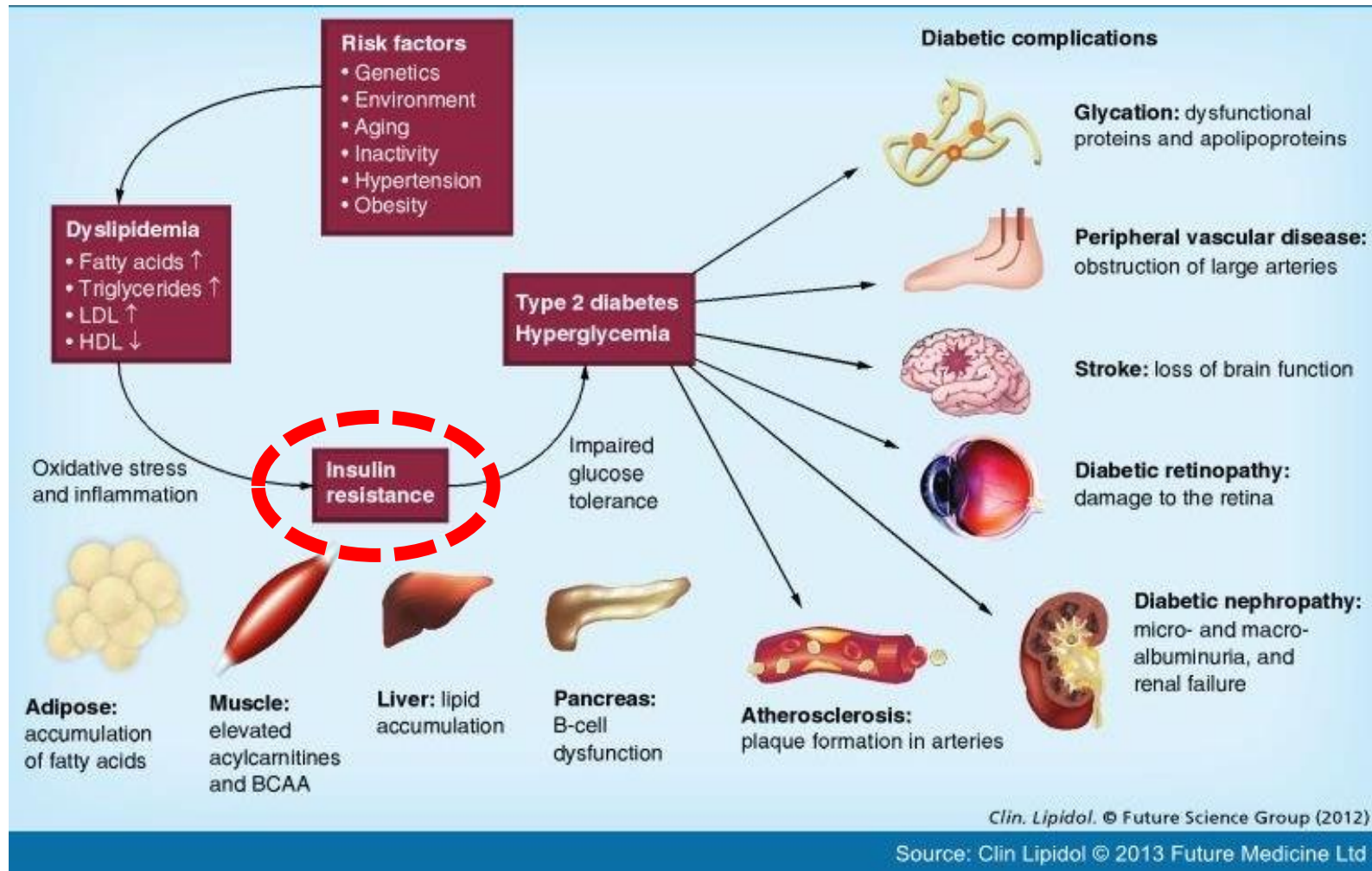


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# Lifestyle Intervention for Type 2 Diabetes

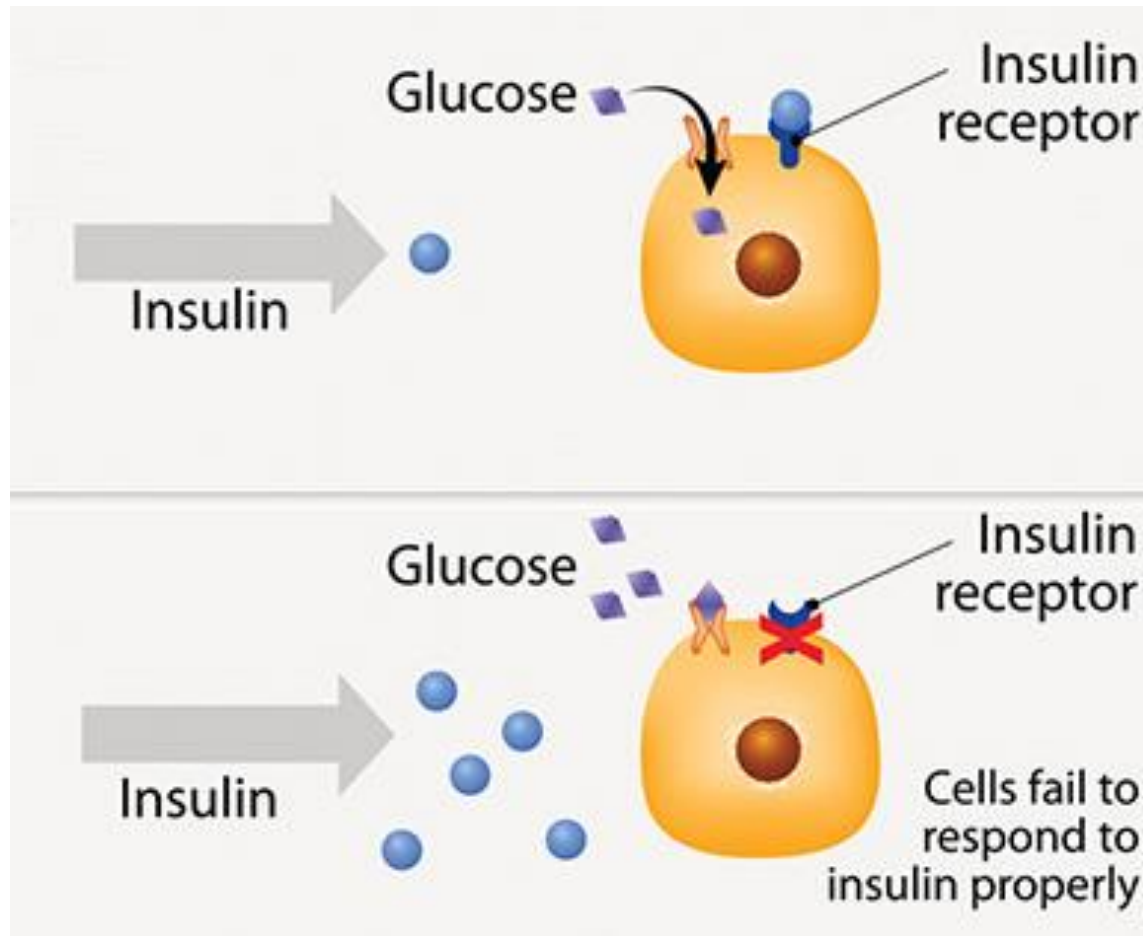


# Lifestyle Intervention for Type 2 Diabetes





# Lifestyle Intervention for Type 2 Diabetes



# Lifestyle Intervention for Type 2 Diabetes

- What lifestyle behaviors should we target to *improve insulin sensitivity and/or reduce carbohydrate intake*?
  1. Diet (calorie focused diet to reduce energy intake for weight loss, which improves insulin sensitivity)
  2. Physical activity (can contribute to weight loss and alone improves insulin sensitivity)
  3. Diet (reducing consumption of carbohydrate containing foods, which decreases blood sugars)

# Lifestyle Intervention for Type 2 Diabetes

- What lifestyle behaviors should we target to *improve insulin sensitivity and/or reduce carbohydrate intake*?
  1. Ideally this lifestyle intervention should be modeled after the Diabetes Prevention Program (DPP) as the primary focus is diet and activity behaviors:  
<https://www.cdc.gov/diabetes/prevention/employers-insurers.htm>

# Lifestyle Intervention for Type 2 Diabetes

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# Lifestyle Intervention for Type 2 Diabetes

- Self-monitoring of dietary and physical activity behaviors
  - increases awareness of the behavior
  - allows progress towards achievement of the goal to be tracked
- Stimulus control
  - altering the environment
- Goal setting
  - establishing a specific, measurable, achievable goal
- Pre-planning
  - development of a specific plan to encourage a particular behavior
- Problem solving
  - remove barriers

# Lifestyle Intervention for Type 2 Diabetes

- <https://www.cdc.gov/diabetes/prevention/resources/curriculum.html>

*A description of the intensive lifestyle intervention*

Table 1—Key aspects of the DPP lifestyle protocol

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- Clearly defined weight loss and physical activity goals
  - Individual case managers or “lifestyle coaches”
  - Intensive, ongoing intervention
    - Initial core curriculum to achieve standardization of the intervention
    - Supervised exercise sessions offered at least two times per week throughout the trial
    - A flexible maintenance program with supplemental group classes, motivational campaigns, and restart opportunities
  - Individualization through a “toolbox” of adherence strategies
  - Materials and strategies that addressed the needs of an ethnically diverse population
  - An extensive local and national network of training, feedback, and clinical support
-

# Lifestyle Intervention for Type 2 Diabetes

- What about medication management?
  1. Improve insulin sensitivity
  2. Preserve pancreatic function
  3. Reduce blood sugars
  4. Manage diabetes related symptoms

# Lifestyle Intervention for Type 2 Diabetes

- Medication management alone is not appropriate as many medications related to treatment of diabetes require a specific dietary strategy (aka lifestyle intervention)
  - Example: **Sulfonylureas**
  - Example: **Split/ Mix Insulin**
  - Example: **Insulin Dosing**
  - Example: **GLP1 Agonists**



# Lifestyle Intervention for Type 2 Diabetes

- Summary
  - Treatment for Type 2 Diabetes should appropriately follow treatment guidelines, which means a focus on lifestyle intervention (program like DPP) should be the primary component
  - If medication management is addressed in the program by an appropriate professional (MD, Endocrinologist, PA, NP, CDE) that heightens the program
    - Alternatively – PCPs can be notified employee is going through a lifestyle program and medications may need adjustment over time

# My Experience with Implementing a Diabetes Program



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# My Experience with Implementing a Diabetes Program

- Program cost: \$250
  - Offered to patients with pre-diabetes or type 2 diabetes
  - Weekly support groups available (attendance not required) – these were on 2 days per week (am and pm)
  - Access to RD/CDE at anytime – free check-up appts
    - Could discuss medication changes or other issues related to treatment plan
  - Required to attend all MD appts (occurred every 3 mo at minimum)

# My Experience with Implementing a Diabetes Program

- If patient attended all MD appts they would be reimbursed \$100 of the \$250 fee after 6 months
  - Group attendance was roughly 10-15 per session

# My Experience with Implementing a Diabetes Program

- Upper administration took away the fee BUT we continued to offer the same benefits to our patients we worked with who had pre-diabetes or type 2 diabetes
  - What do you think happened to attendance rates?

# Employee Engagement in Employer Offered Programs



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# Employee Engagement in Employer Offered Programs

- <https://ama-roi-calculator.appspot.com/>

**AMA** DPP COST SAVING CALCULATOR

Your organization type

Your insured population size (age 18-64)

Your cost of program per participant

Prevalence of prediabetes

Your anticipated enrollment  
 Low range   
 High range

Your anticipated completion  
 Low range   
 High range

**Your potential 3 yr ROI**

-19% 42%

**Your potential 3 yr net savings**

\$-8,142 \$91,096

For your population:

Potential individuals with prediabetes in your population **962**

Potential enrollment in DPP  
 Lower **96** **481** Upper

Potential completion of DPP  
 Lower **38** **337** Upper

Potential number of diabetes cases prevented by DPP over 3 years  
 Lower **6** **49** Upper

**Your potential 5 yr ROI**

○ Upper range : 71%  
 ○ Lower range : -3%

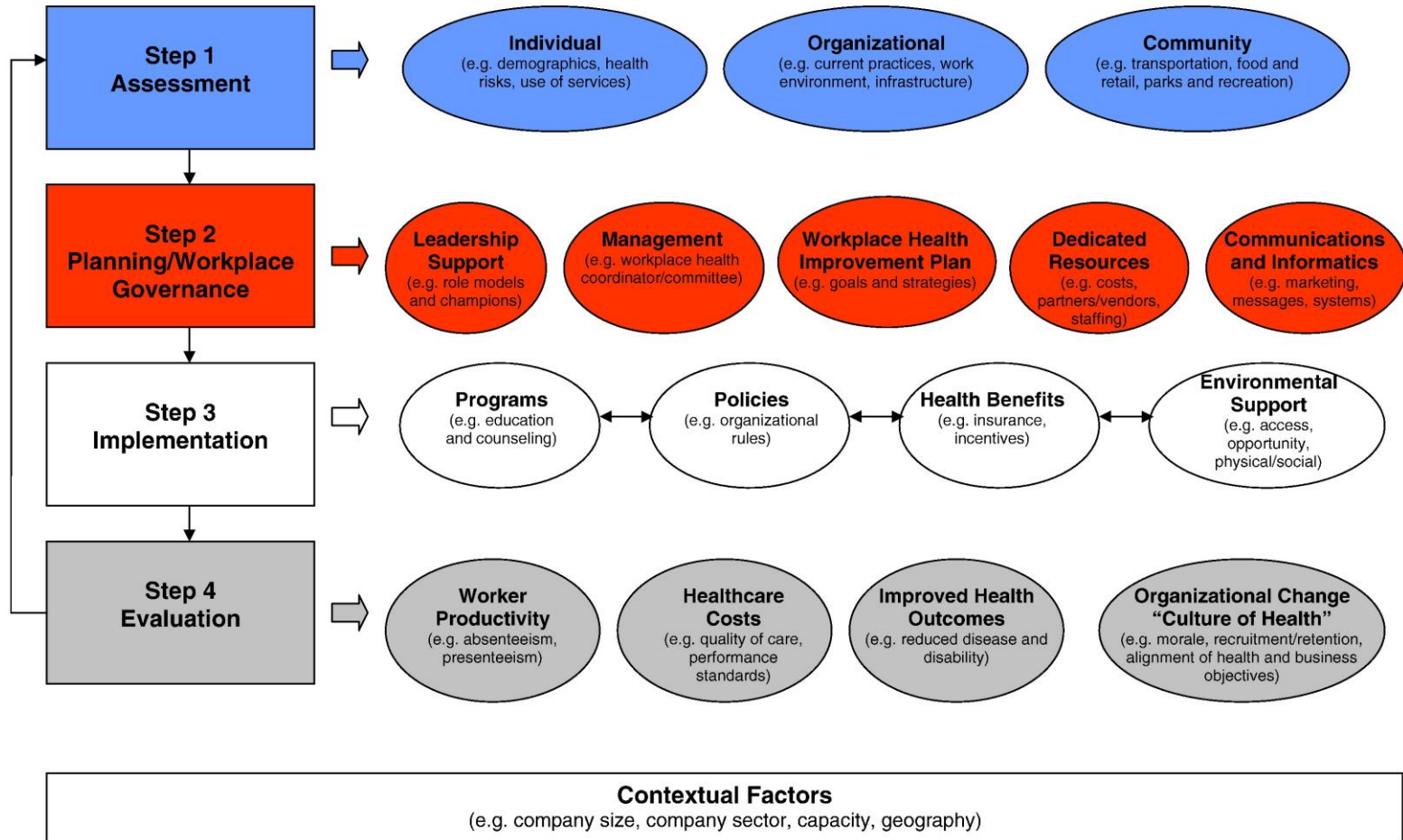
SEE HOW TO IMPROVE YOUR ROI

DOWNLOAD YOUR RESULTS

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# Employee Engagement in Employer Offered Programs

## Workplace Health Model





# Employee Engagement in Employer Offered Programs

- Common barriers identified in the literature (list is most commonly reported to least commonly reported):
  - insufficient incentives,
  - inconvenient locations,
  - time limitations,
  - not interested in topics presented,
  - undefined reasons,
  - schedule,
  - marketing,
  - health beliefs,
  - and not interested in the program

# Employee Engagement in Employer Offered Programs

- Behavioral economics
  - The CDC and other research recommends the use of financial incentives to increase participation in employer offered wellness programs
  - Programs with financial incentive increase participation and health outcomes as compared to programs with no financial incentive

# Employee Engagement in Employer Offered Programs

- Incentives (typically take the form of financial rewards, such as discounts on gym memberships or cash payments for participation) show favor over financial penalties (such as higher contributions to health plans).
- Penalties can be effective, but concerns over their use to discriminate against certain populations should be considered.

# Employee Engagement in Employer Offered Programs

- **Step 1: Design & Analyze**
- Seek and support employees' input and participation in:
  - Creating a wellness committee.
  - Developing an employee needs and interest survey.
  - Using interviews and focus groups.
  - Completing an employee needs and interests survey.
  - Securing leadership support.
  - Developing a strategic communications plan.
  - Reviewing and designing a benefits plan.
  - Completing a work site health evaluation.
  - Conducting an organizational policy review.
  - Prioritizing staffing, program materials, data system, recognition, and incentives to develop the budget.
  - Identifying community partners in health.
  - Identifying measures for program evaluation.
- **Step 2: Implement**
- Work with employees to:
  - Create a program accessible to employees and family members—on-site, online, and by phone.
  - Provide programs that are low cost and affordable to the workers.
  - Communicate the program offerings through numerous channels (e.g., e-mail, posters, website, newsletters, postcards).
  - Create a healthy environment (e.g., tobacco-free workplace and healthy meeting and vending policies, walking trails, on-site physical activity options).
  - Offer team and individual programming (e.g., challenges, education sessions).
  - Connect with a health coach, team leader, or others.
  - Demonstrate leadership support and encouragement in wellness opportunities.
- **Step 3: Evaluate Success**
- Work with and support managers and senior leaders to:
  - Communicate the benefits of the program and success stories.
  - Provide recognition to individuals and specific units, departments, and locations.
  - Survey participants to capture feedback on programs, including satisfaction and suggestions.
  - Generate participation reports specific to unit, departments, or location.
  - Complete impact measures and reporting to include changes in health behavior and clinical parameters.
  - Complete cost benefits analysis (requires 2 to 3 years of data).

# Employee Engagement in Employer Offered Programs

- Appropriate assessment of needs
- Incentives
- Employee engagement with program development

# Additional Resource

**Do you want  
to lose  
weight and  
help your  
family live a  
healthier  
lifestyle?**

See if you and your  
family are eligible for  
our research study!

**865-974-0752**



## **The Families Becoming Healthy Together Program**

Classes start February 2020!

*Call today!*



Healthy Eating and Activity Lab  
Department of Nutrition

Questions?