

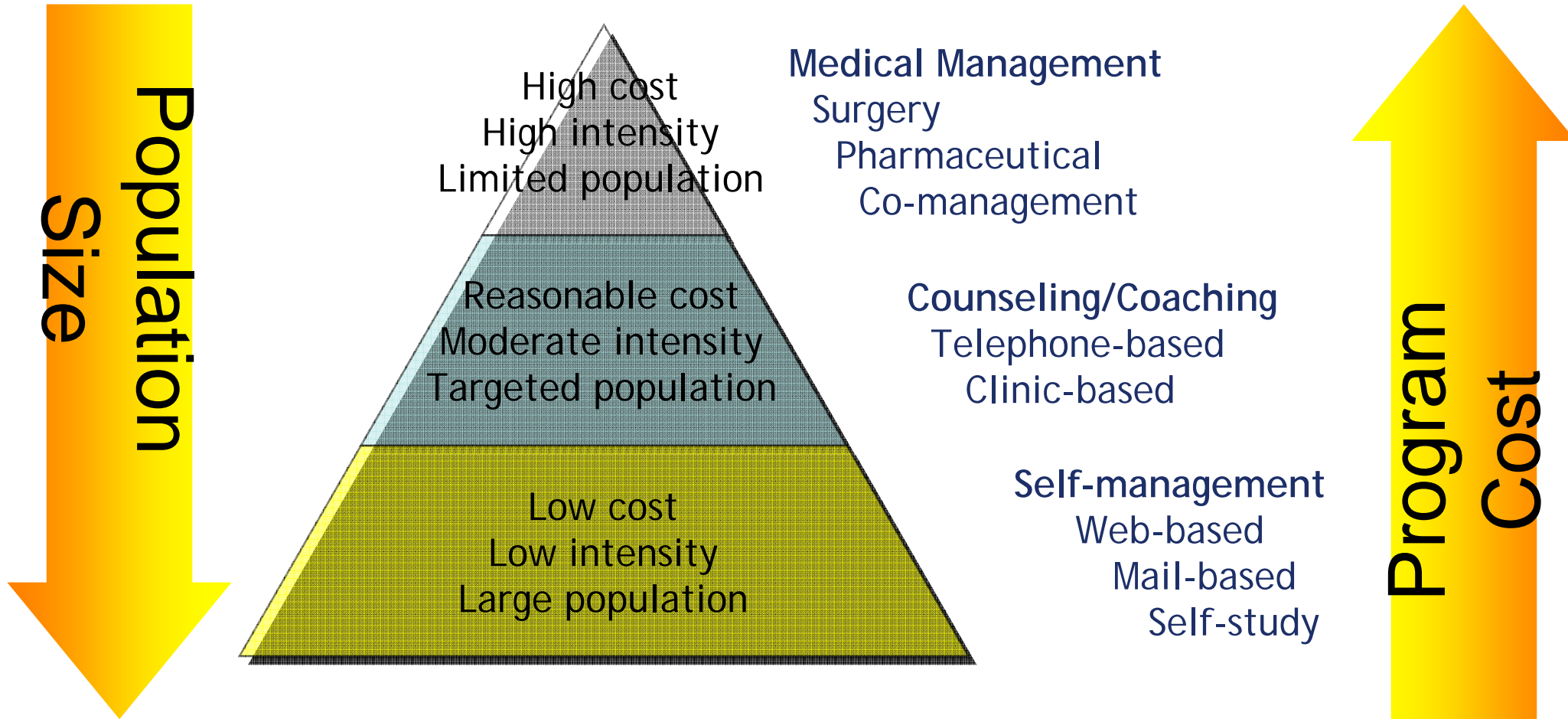
# Secondary Prevention: The Role of the Patient

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# Tiers of disease management



# 10 leading causes of death in the United States

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Cause	Deaths
	Estimated #
<b>Heart disease</b>	720,058
<b>Cancer</b>	505,322
<b>Cerebrovasc. disease</b>	144,088
<b>Unintentional injuries</b>	91,983
<b>Chronic lung disease</b>	86,679
<b>Pneumonia/ Influenza</b>	79,513
<b>Diabetes</b>	47,664
<b>Suicide</b>	30,906
<b>Chronic liver disease</b>	25,188
<b>HIV infection</b>	
	<b>1,757,188</b>

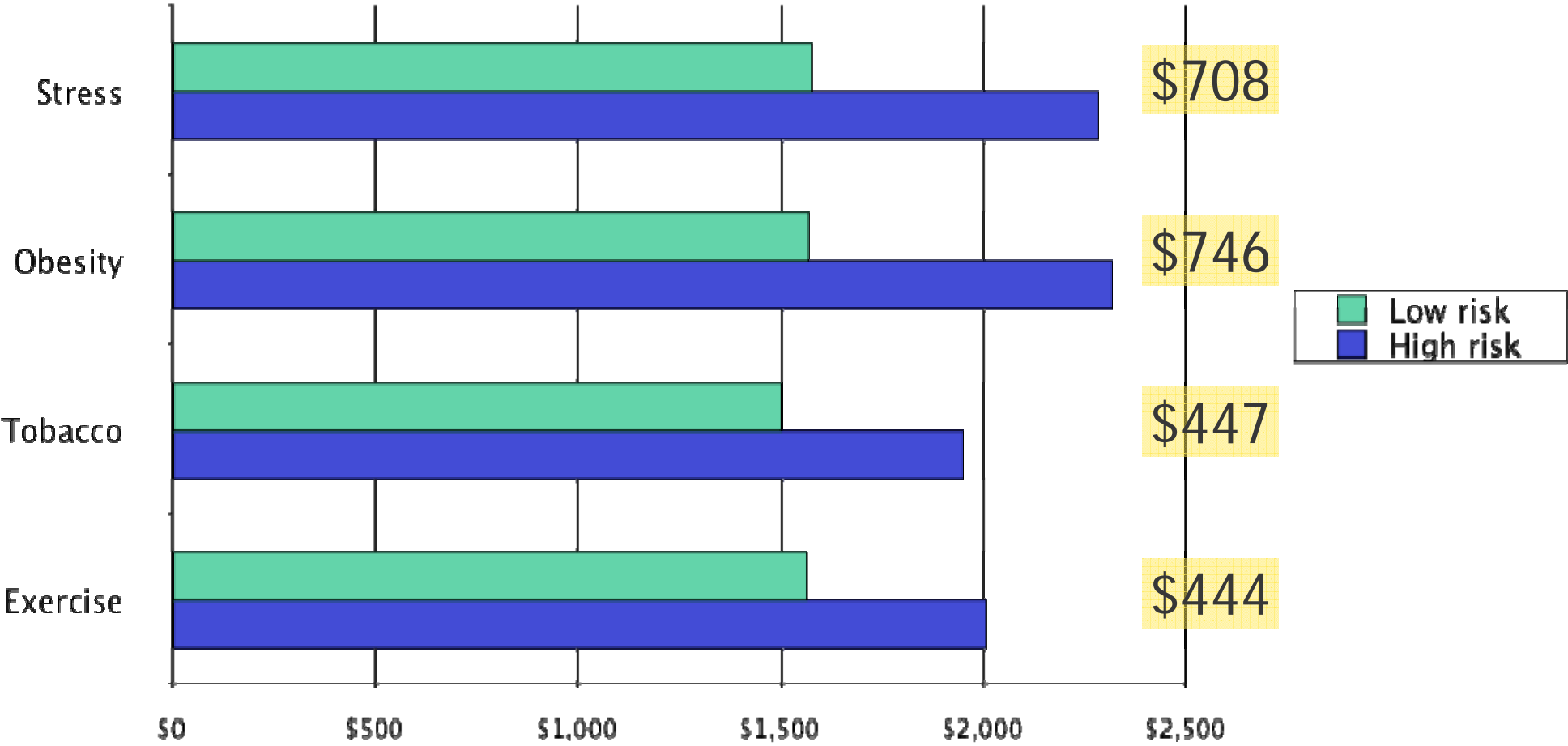
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# Actual causes of death in the United States

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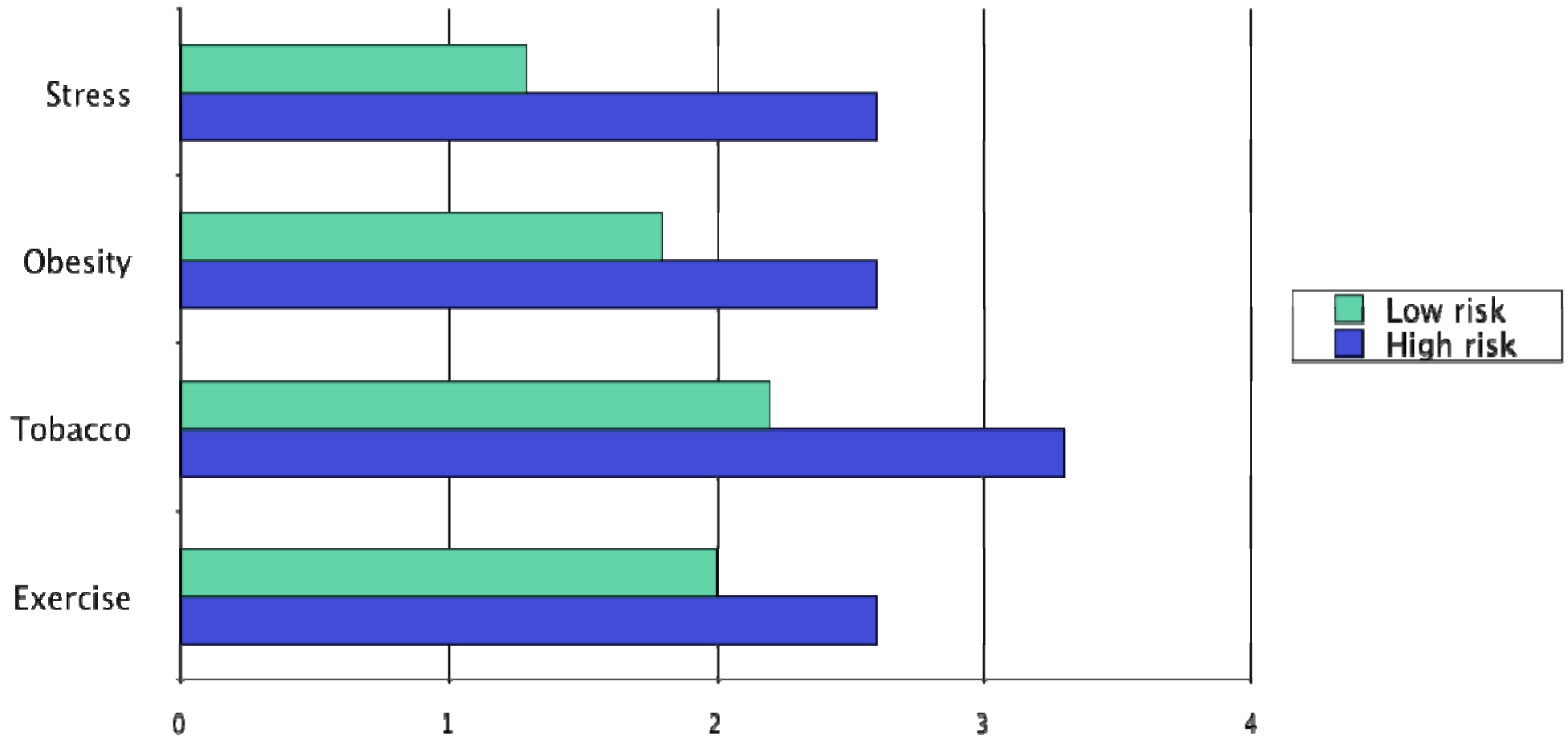
Cause	Deaths	
	Estimated #	% Total
<b>Tobacco</b>	400,000	19
<b>Diet/ activity patterns</b>	300,000	14
<b>Alcohol</b>	100,000	5
<b>Microbial agents</b>	90,000	4
<b>Toxic agents</b>	60,000	3
<b>Firearms</b>	35,000	2
<b>Sexual behavior</b>	30,000	1
<b>Motor vehicles</b>	25,000	1
<b>Illicit use of drugs</b>	20,000	<1
<b>Total</b>	<b>1,060,000</b>	<b>50</b>

# Medical expenditures (1996 U.S. dollars) for high and low-risk status of health-related behaviors. HERO Study 1998

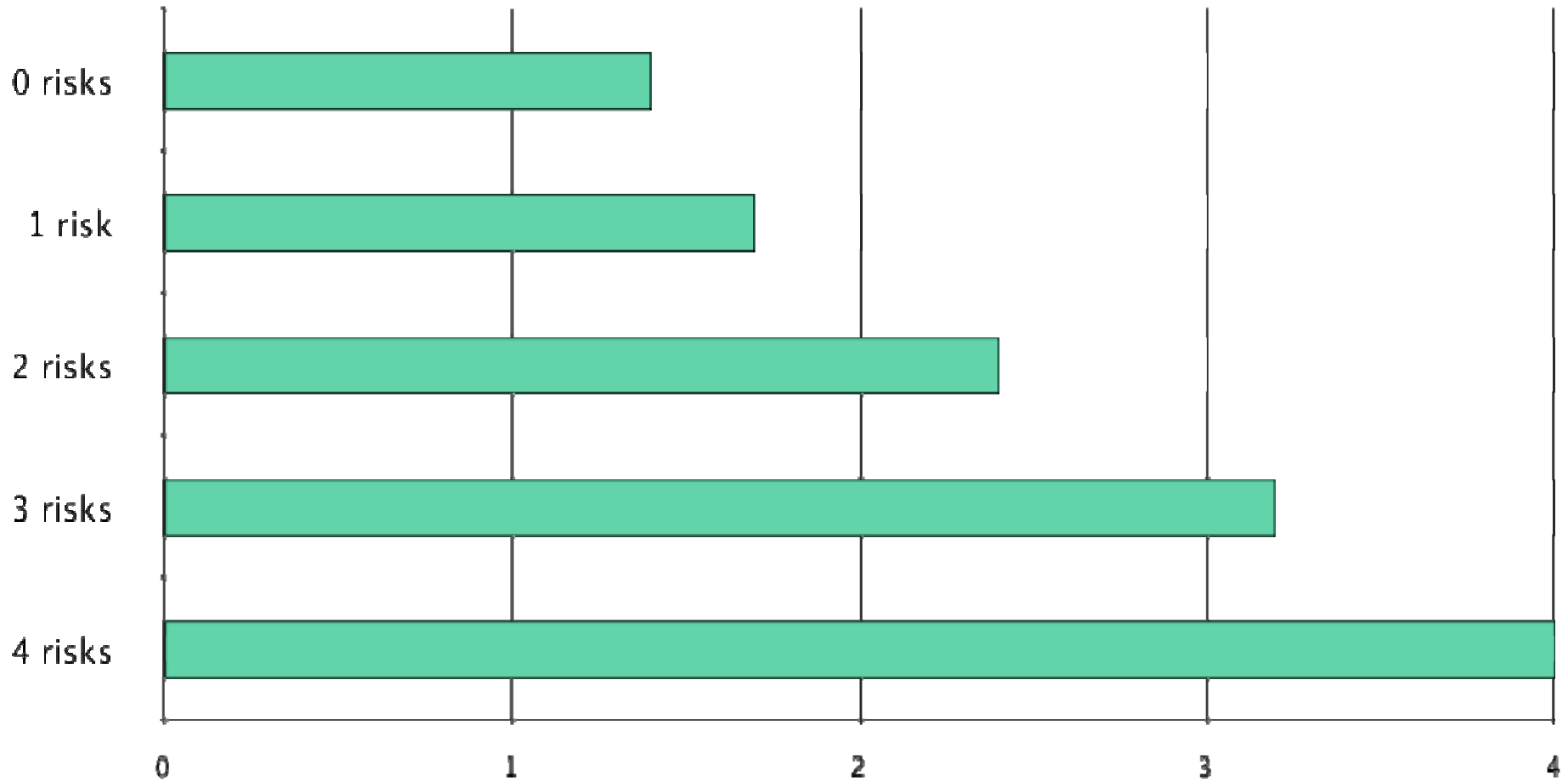


Goetzel et al. The relationship between modifiable health risks and health care expenditures. Journal of Occupational and Environmental Medicine, Vol 40, No 10, 1998.

Days of worked missed for high and low-risk status of health-related behaviors. United Parcel Service 2005 N= 10,216; all p-values <.005



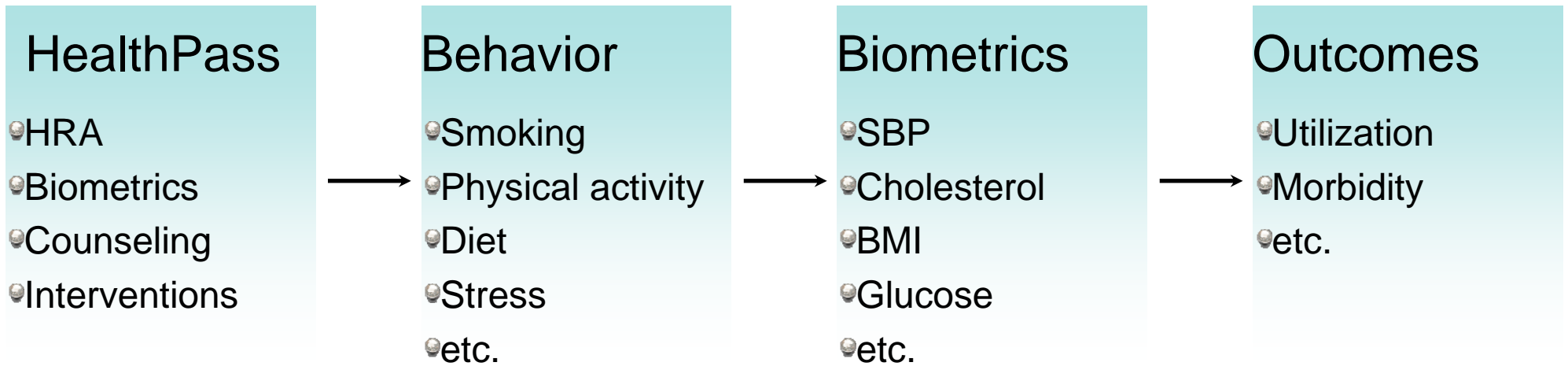
Days of worked missed by number of risk factors  
(stress/obesity/smoking/exercise). United Parcel Service  
2005 N=10,216; F=9.8; p<.0001



Case Study:  
HMSA HealthPass Program

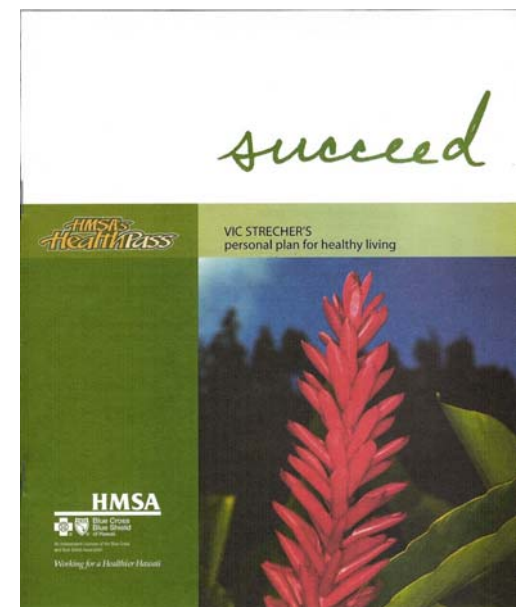


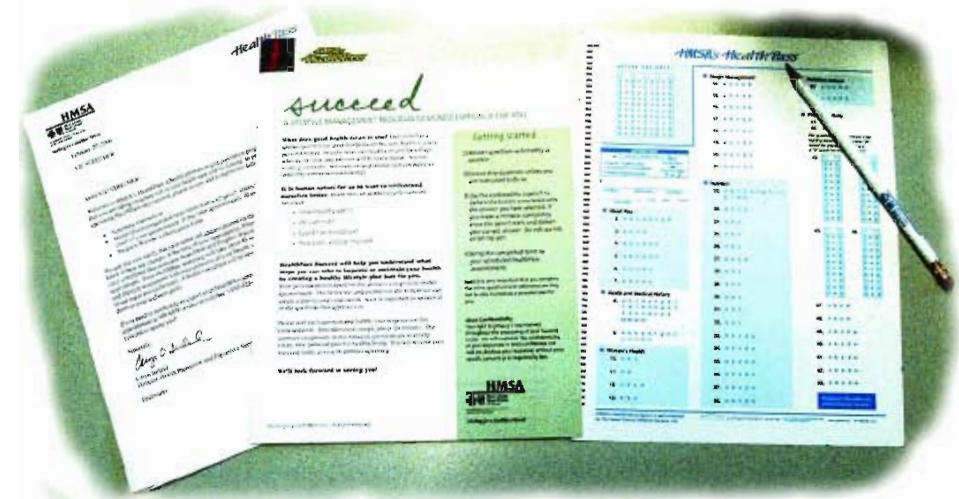
# Background



# Setting the agenda using Health Risk Assessment (HRA):

- Use HRA (Succeed):
  - To identify overall health condition
  - To identify good and poor health behaviors
  - To identify motivation to change poor health behaviors
  - To identify self-efficacy in changing poor health behaviors





**Action Plan for VIC STRECHER**

Congratulations on taking a more active role in your health care! You have completed HMSA's HealthPass benefits and lifestyle assessment program on Monday, February 27, 2006. Your goals and next steps are listed below.

**WELLNESS FOCUS:** Weight, Body Fat

Manage your weight.

Your BMI is 26.83. Decrease your weight by 5% of your total weight to reach your goal weight of 158 lbs.

**SAE Classification**

- Underweight: under 18.5
- Healthy weight: between 18.5 and 24.9
- Overweight: between 25 and 29.9
- Obese: 30 and over

**Next Steps!**

Show your Succeed Guide and biometric results with your physician.

Healthy Lifestyle Programs available on the HealthPass website or app.

Source: Weight Management Program

*succeed*

VIC STRECHER'S  
 personal plan for healthy living

Want to learn more about healthy lifestyle programs available through HMSA's HealthPass?

**Introducing Succeed Interventions ...**



**Weight Management & Physical Activity**

Take control of your weight. HealthMedia Balance™ will develop a weight management and physical activity program for you. Balance has helped thousands of people manage their weight, and it can help you, too. Balance is not a great nutrition and exercise plan, it teaches you how to make your own smart decisions about managing your weight. It will create personalized strategies for making healthy food selections, increasing physical activity, and cultivating a positive self-image so you can achieve your goals.



**Nutrition**

Healthy eating doesn't have to be complicated. HealthMedia Balance™ will create a personal nutrition program that fits your lifestyle. Do you want to increase your energy and feel in control of what you eat, rather than feeling your eating controls you? Success doesn't just give you the information on nutrition, it teaches you personalized strategies for making smart, satisfying food choices that improve your health and well-being.

Weight Management Program



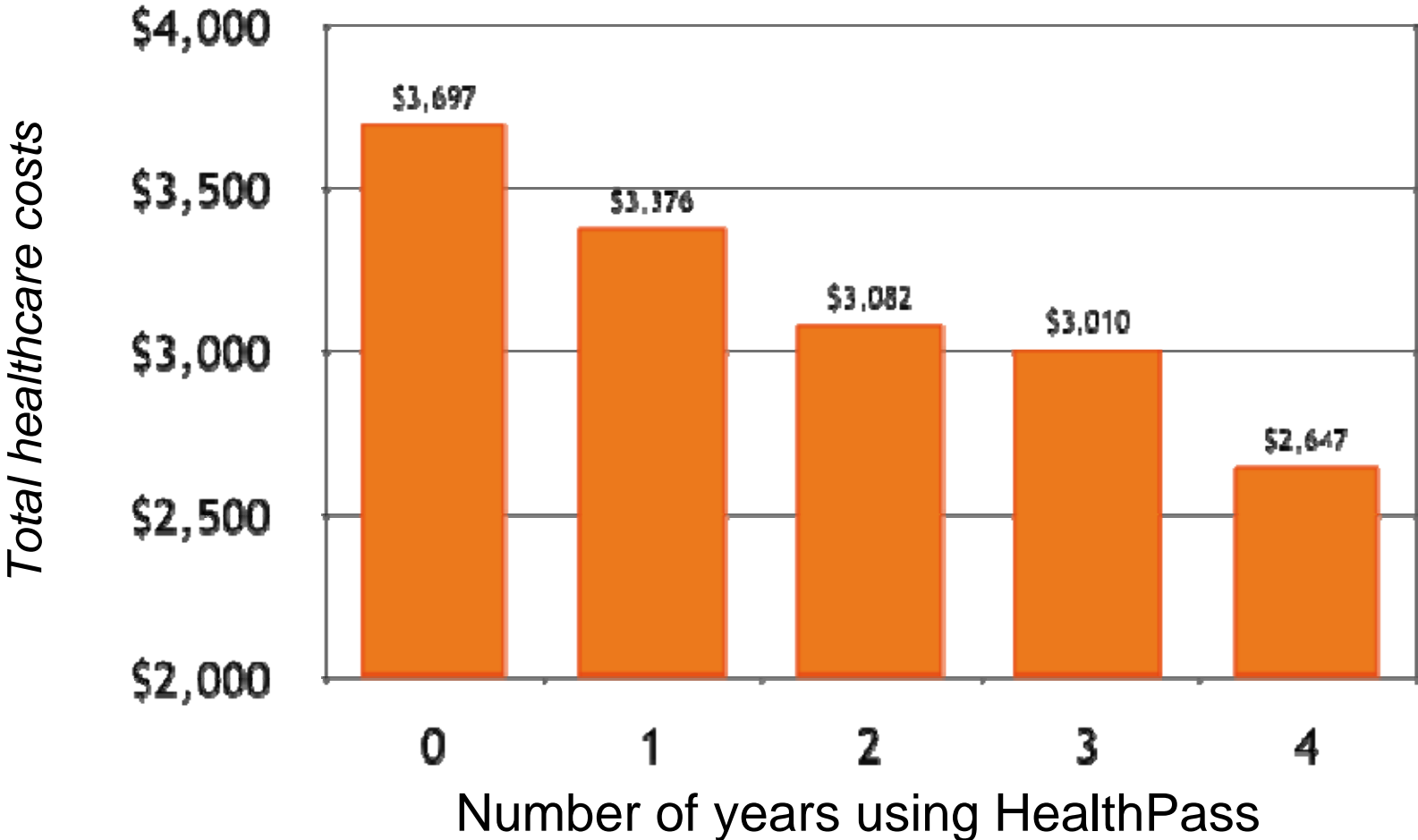
# Background

2002-2005 total HMSA members: 384,801

2002-2005 total HealthPass participants: 52,261

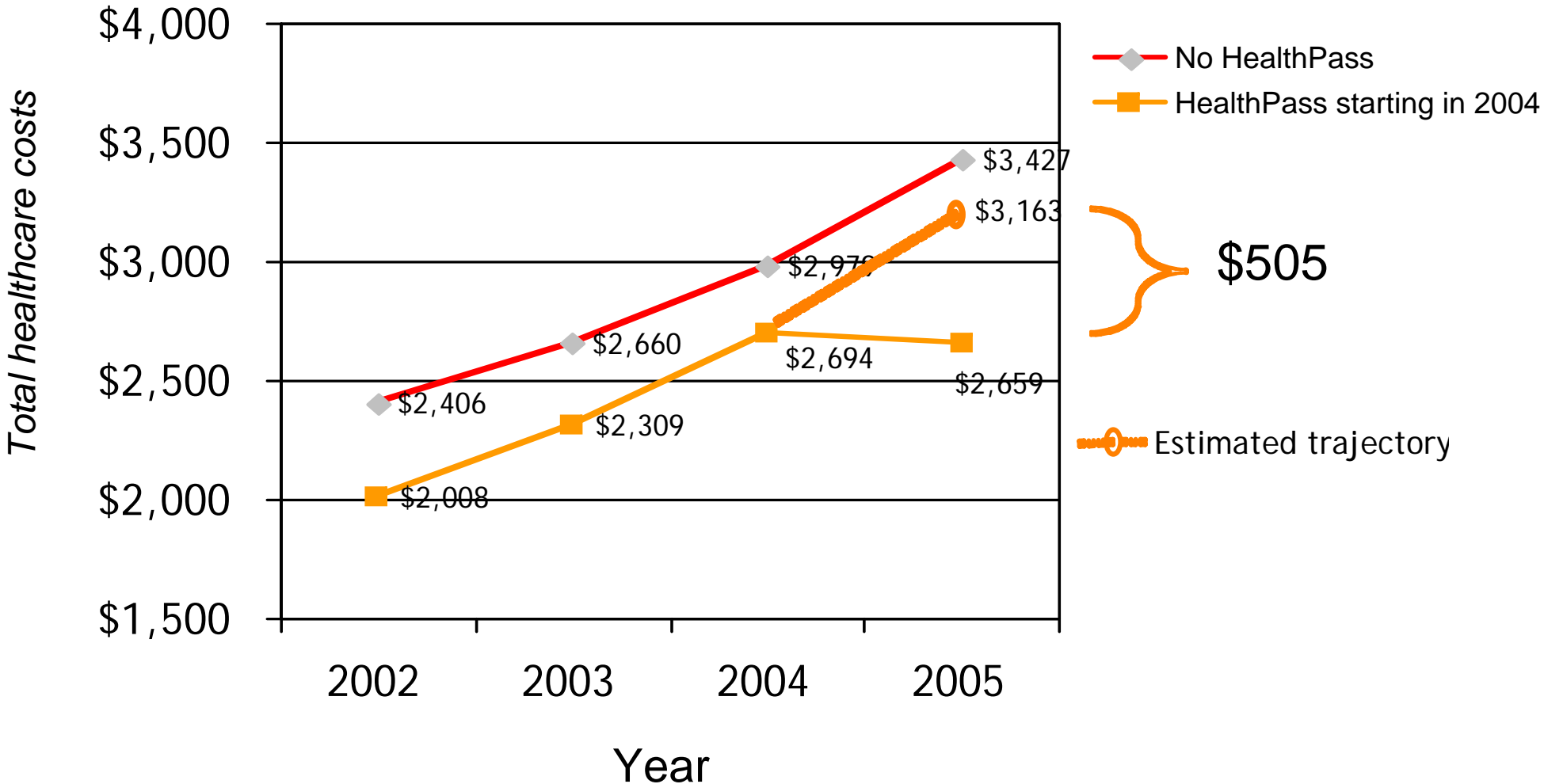
	2005 HealthPass	2005 non-HealthPass
Gender (% female)	58.1%	50.4%
Age (mean)	55.0	58.3
Morbidity (mean)	2.6	2.5

2005 HMSA total member care costs by number of years using the HealthPass Program among members with costs >\$0 in each year.\*  
(N=207036 members; F=20.9; p<.0001)



\*2005 total member costs include drug, medical, inpatient and outpatient costs. Savings adjusted for 2002 healthcare costs; 2002 morbidity; age; and gender. HMSA members from 2002-2005.

# Total care costs for HMSA members using HealthPass beginning in 2004 versus members never using HealthPass .\*



\*Total member costs include drug, medical, inpatient and outpatient costs. Savings adjusted for 2002 morbidity; age; and gender. N=194797 members; difference between groups in 2005\* p<.001; differences between groups in 2003-4 are non-significant. Trajectory estimate used 2nd-order polynomial regression of 2002-2004 total costs for best fit.

# Return-on-investment

2002 ROI = 2.6

2003 ROI = 2.0

2004 ROI = 2.6

2005 ROI = 3.3



# Taking a closer look at HealthPass users: Do people change?

Primary prevention:



Secondary prevention:

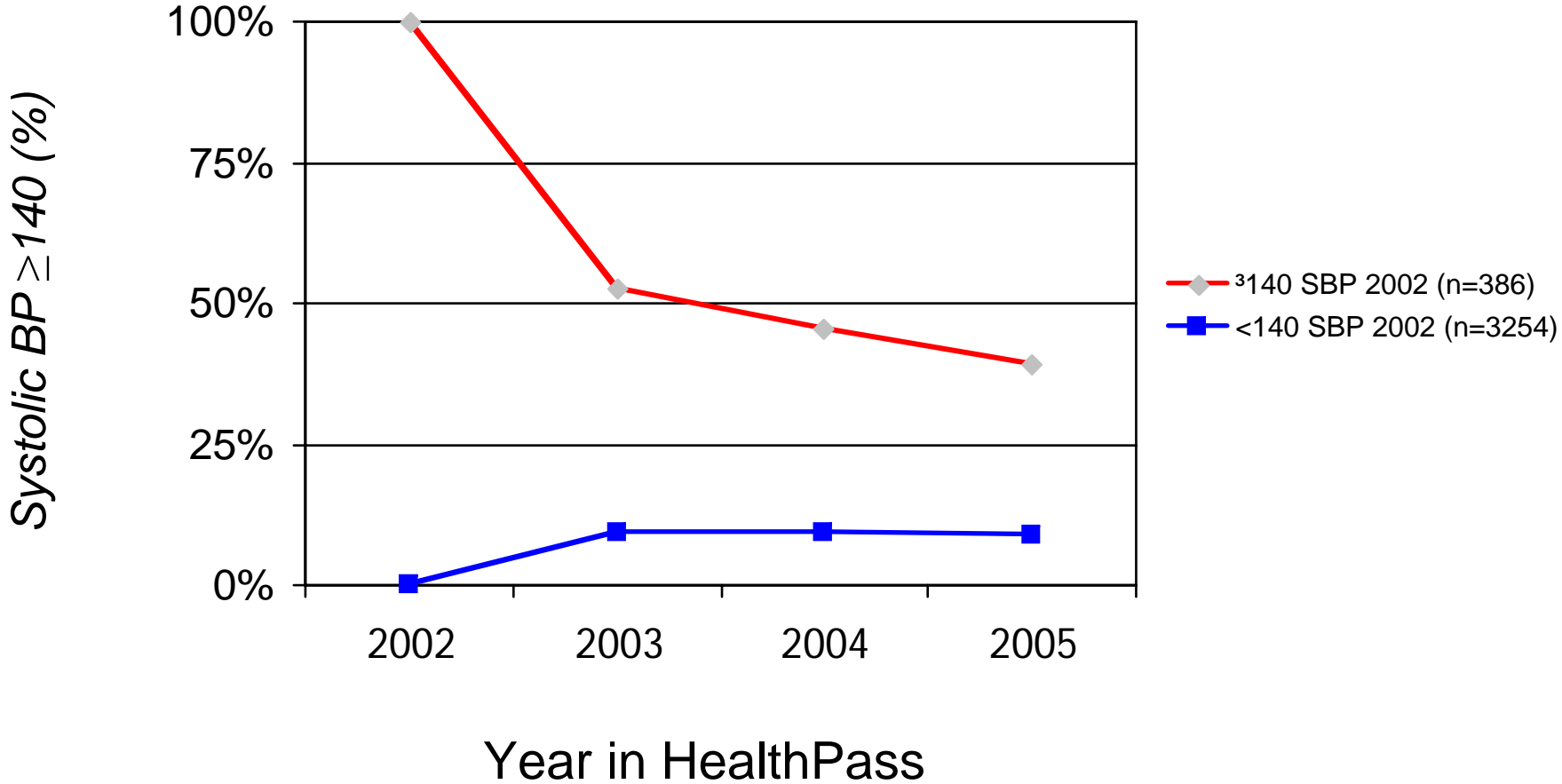


Taking a closer look at HealthPass users:  
Do people change? Biometric outcomes.

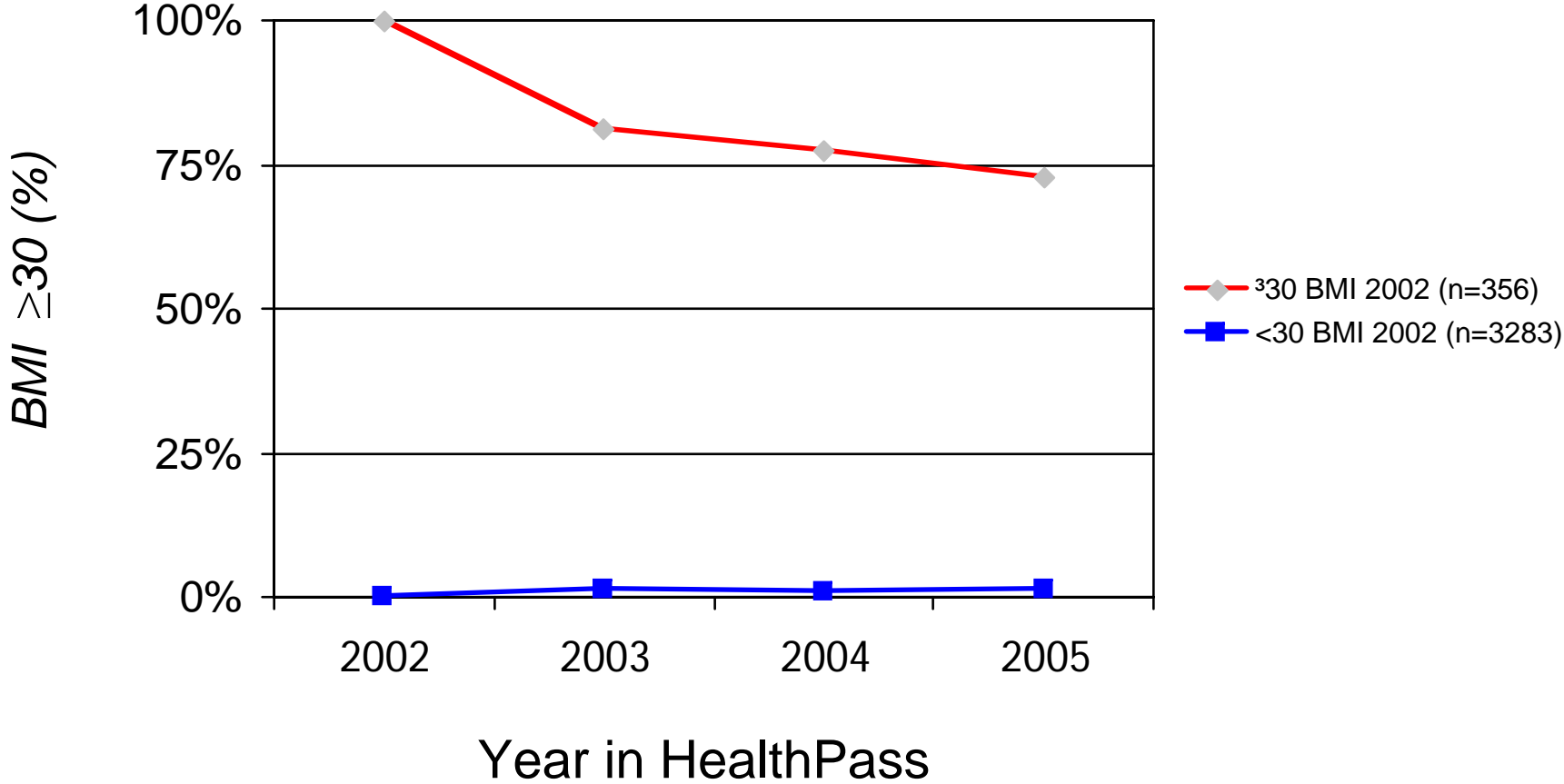


HealthPass

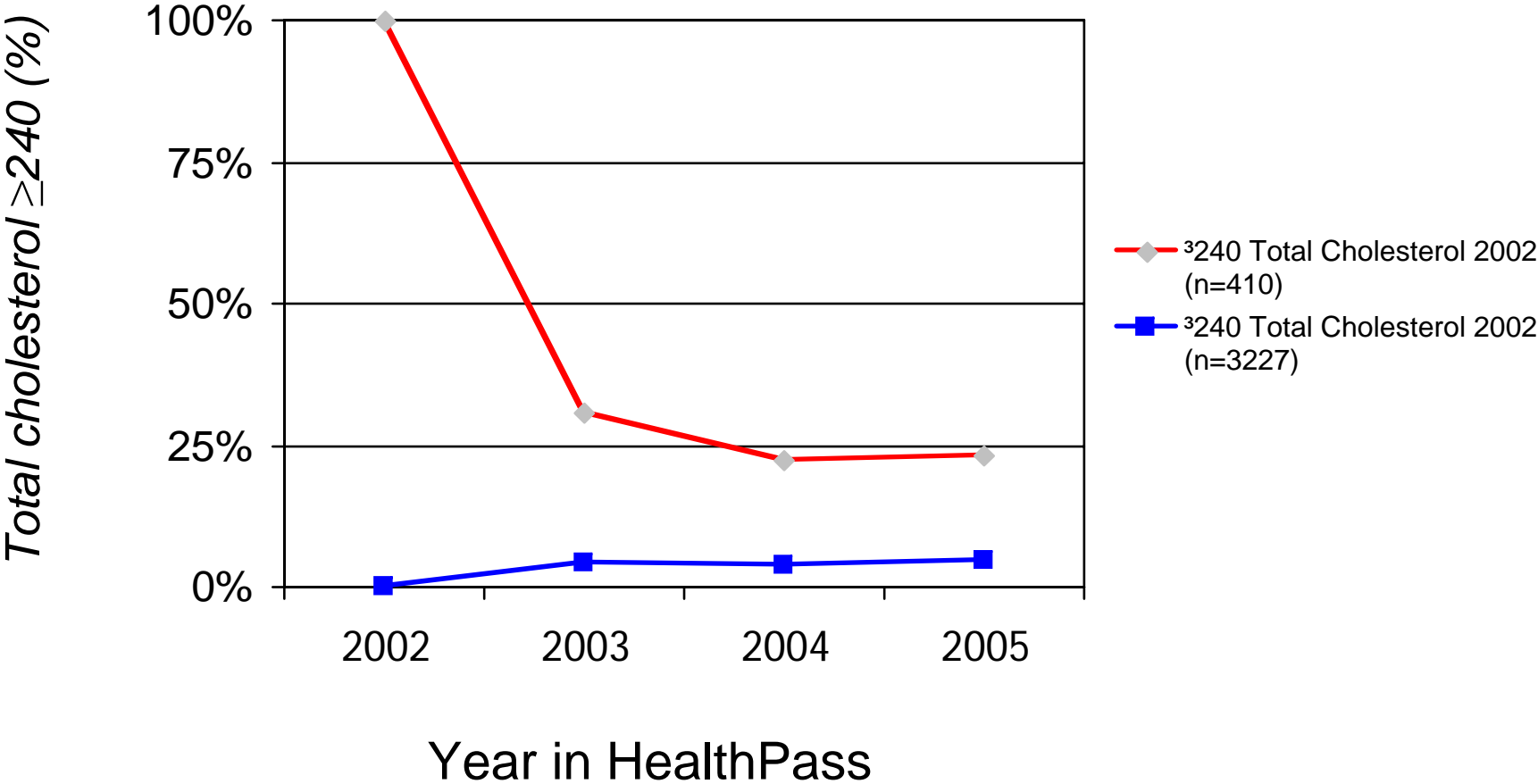
# Changes in systolic blood pressure (SBP) by 2002 SBP status among HealthPass users since 2002.



# Changes in Body Mass Index (BMI) by 2002 BMI status among HealthPass users since 2002.



# Changes in total cholesterol by 2002 cholesterol status among HealthPass users since 2002.

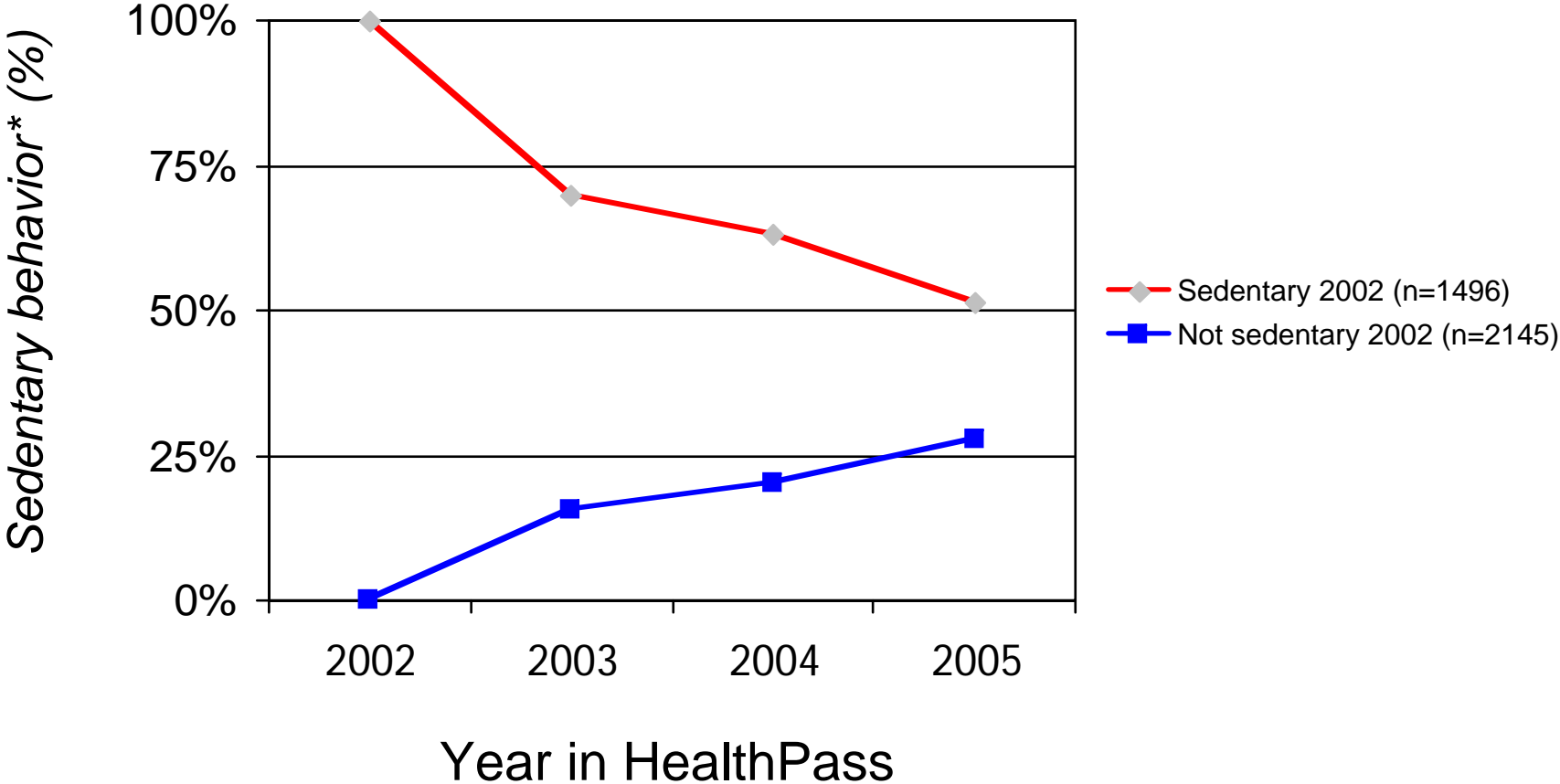


Taking a closer look at **HealthPass** users:  
Do people change? Behavioral outcomes.



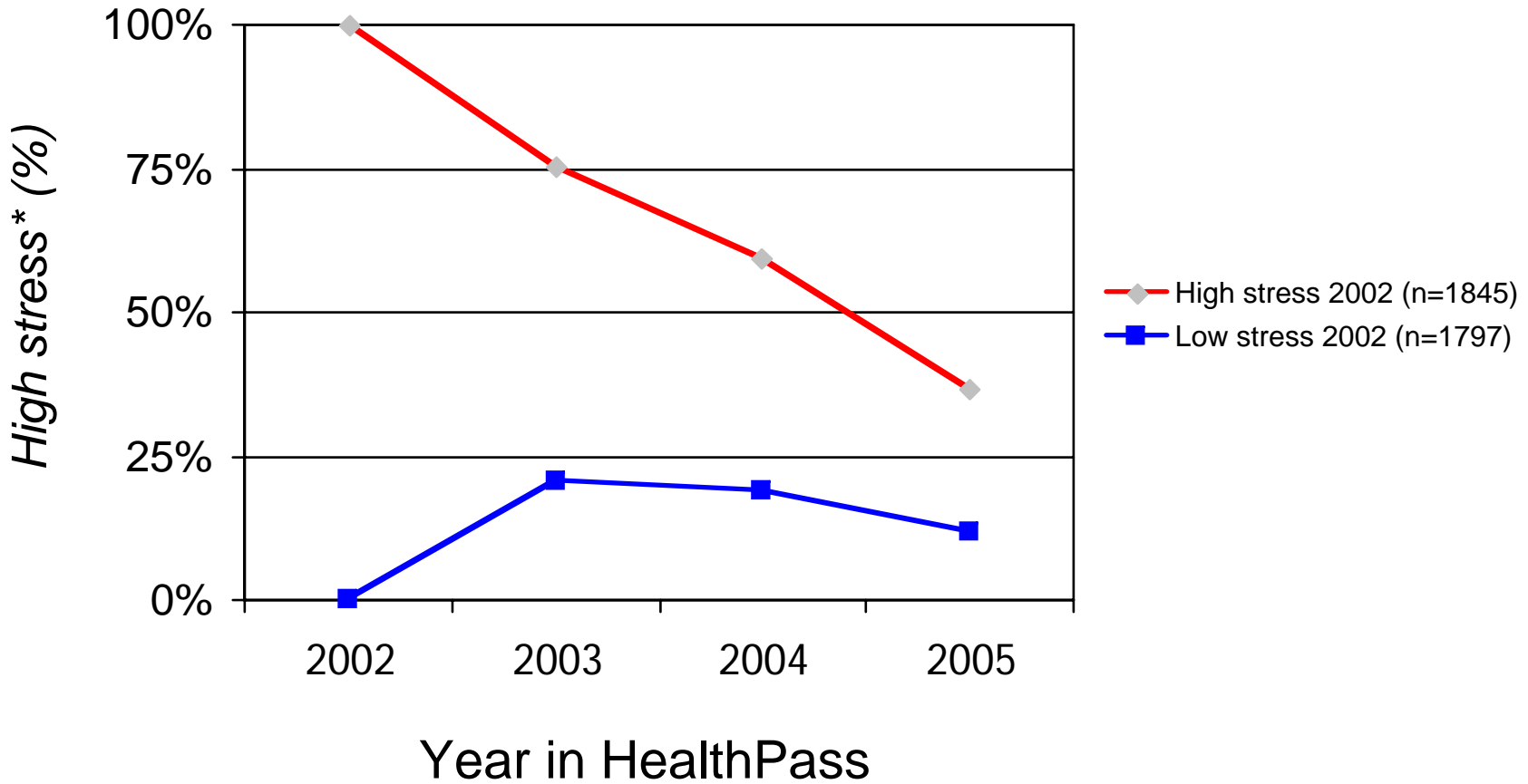
**HealthPass**

# Changes in sedentary behavior\* by 2002 sedentary status among HealthPass users since 2002.



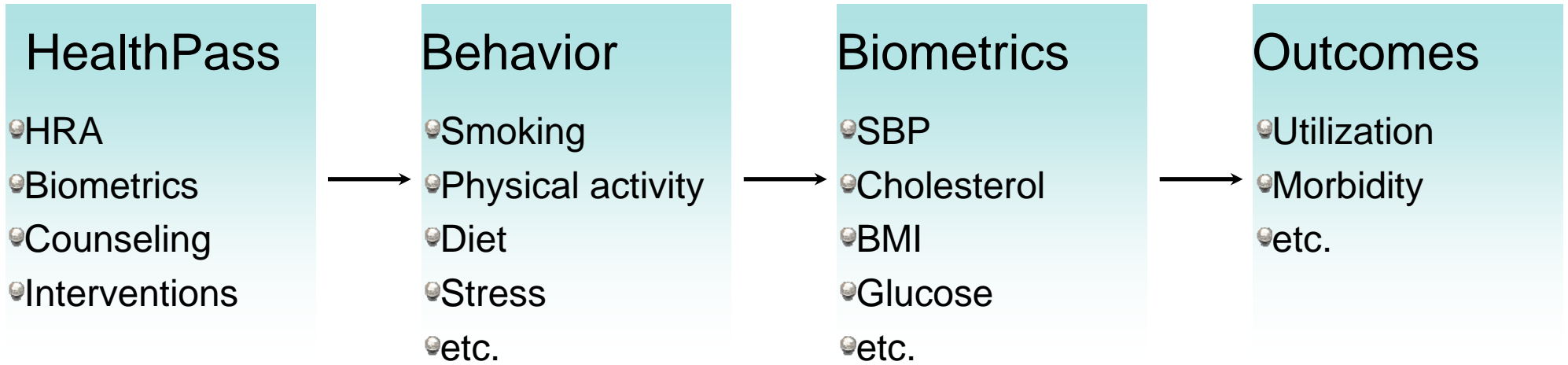
\*Sedentary behavior cut-off <8/10 in Succeed HRA Behavioral Score..

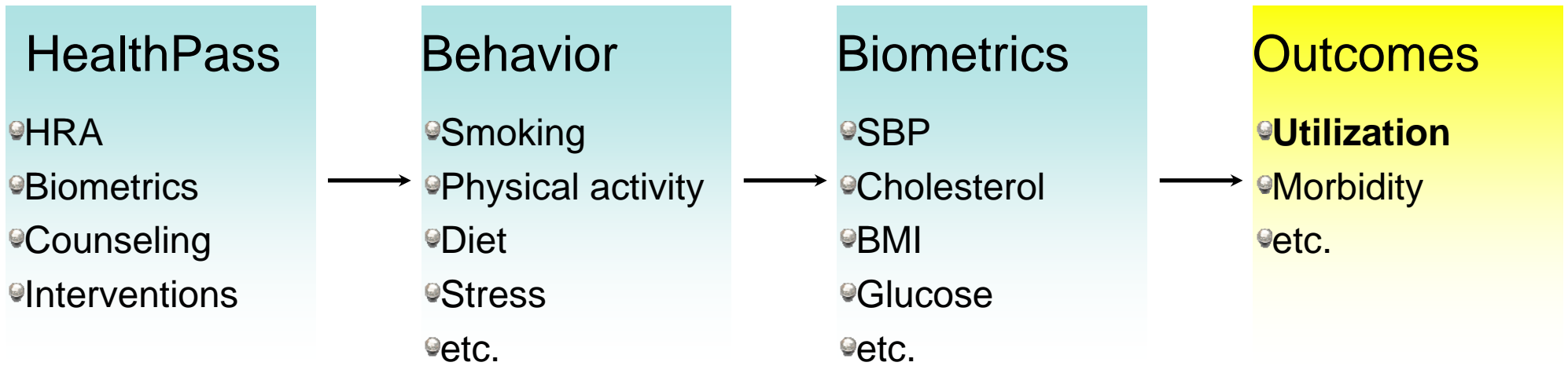
# Changes in high stress\* by 2002 stress status among HealthPass users since 2002.

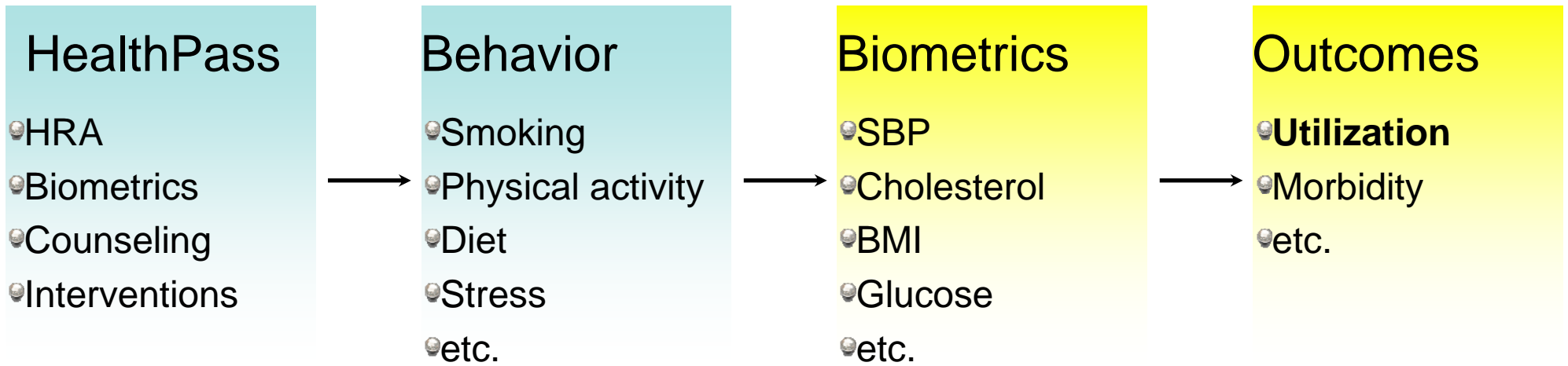


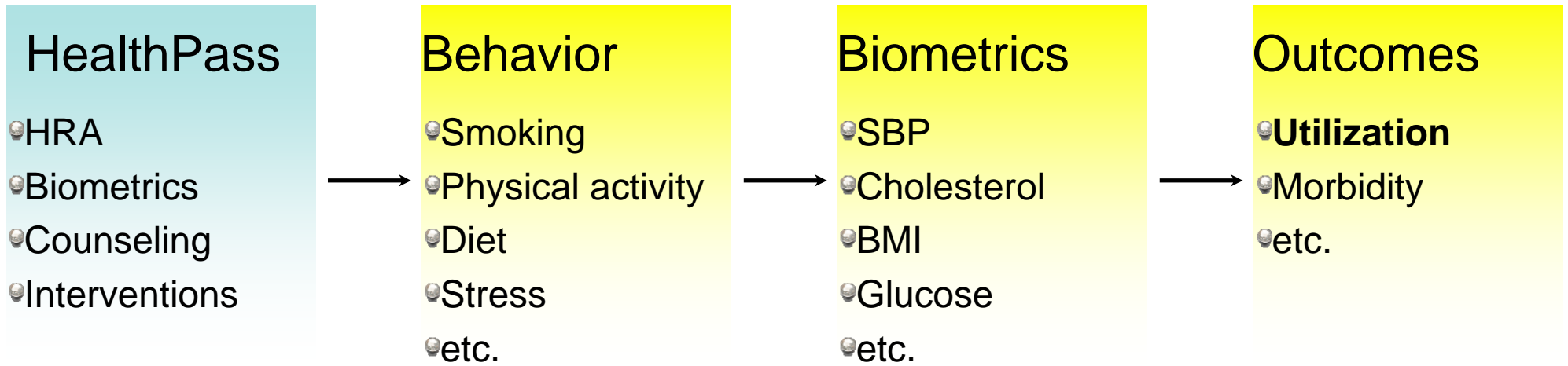
\*High stress cut-off <8/10 in Succeed HRA Behavioral Score..

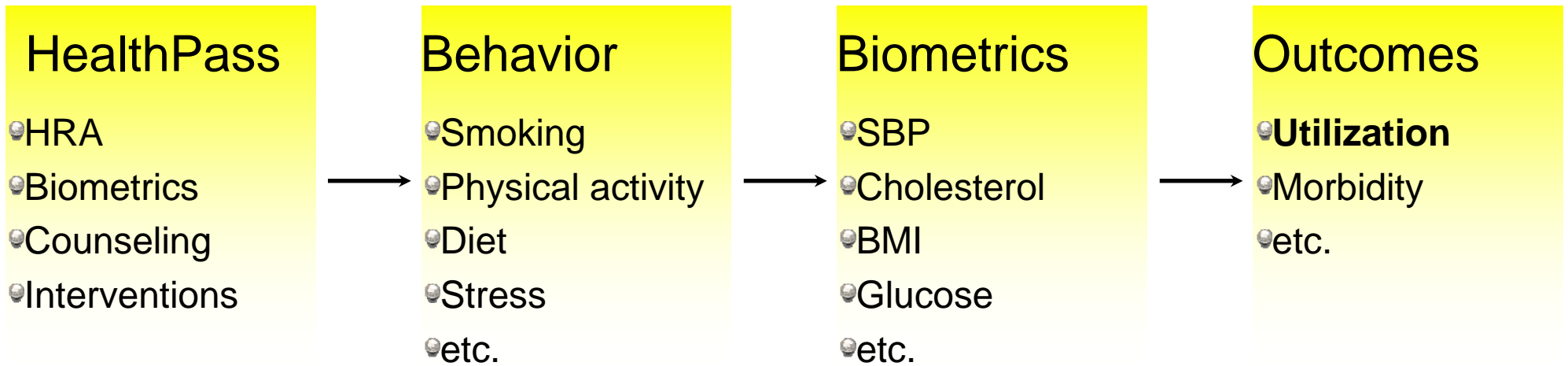












# The I.D.E.A.L. Criteria:

An framework for reviewing the complexities of health-related behavior change

- ☑ Integrated
- ☑ Data Centric
- ☑ Evidence-Based
- ☑ Adaptive
- ☑ Longitudinal

An integrated program has multiple components that have a shared understanding of the client.



# Integrated

- ☑ To what extent does one programmatic component “know” what another programmatic component is doing for a particular client?
- ☑ To what extent can one programmatic component utilize the resources of another programmatic component?

The data management programming should be integrated with the behavioral intervention such that data analyses can document intervention pathways, identify modal pathways, and link these pathways to outcomes in a timely, efficient manner.

# Data-Centric

- ☑ To what extent are the processes of behavioral intervention encounters documented in a standardized manner on a client level?
- ☑ To what extent are previous encounters available to the behavioral intervention system?
- ☑ To what extent are behavioral assessment data recorded on a client level?
- ☑ To what extent are behavioral outcomes recorded on a client level?
- ☑ Are encounter, assessment, and outcome data housed in the same database?
- ☑ To what extent are data be readily retrieved from the database?

The content of a behavioral intervention should be developed on the basis of theory-informed research in the behavioral and communications sciences.

# Evidence-Based

- ☑ To what extent was the behavior change component created using a foundation of behavioral science theory?
- ☑ To what extent does each behavioral science theory used have a body of published research evidence in at least the approximate behavioral issue of concern?
- ☑ To what extent are the relevant constructs from each theory addressed in the behavior change component?
- ☑ To what extent are the mechanisms between the constructs of each theory addressed in the behavior change component?
- ☑ To what extent is the content of the program expressed in a clear, easy-to-understand manner?
- ☑ To what extent is content organized in a way that allows easy navigation?
- ☑ To what extent is the communication style overly technical?
- ☑ To what extent does the graphic design support the content?

Tailored, adaptive, communication should remove extraneous feedback while focusing on the feedback and communications channel required by the client.

# Adaptive

- ☑ To what extent does the behavioral component have a method for prioritizing focal issues of concern?
- ☑ To what extent can the behavioral component tailor intervention content to meet specific needs and interests of the user?
- ☑ To what extent does the program allow user the selection of media channel?
- ☑ To what extent does the program have a method for establishing a risk ranking for prioritization/ triaging efforts and services?

Programmatic content and timing should adapt to the changing needs of the client.



# Longitudinal

- ☑ To what extent does the behavioral component take into account changes in psychosocial needs over the course of behavior change?
- ☑ To what extent does the behavioral intervention reassess psychosocial needs at relevant periods of time?
- ☑ To what extent can the behavioral component provide the right help, at the right time, over time?

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# Thank you!

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