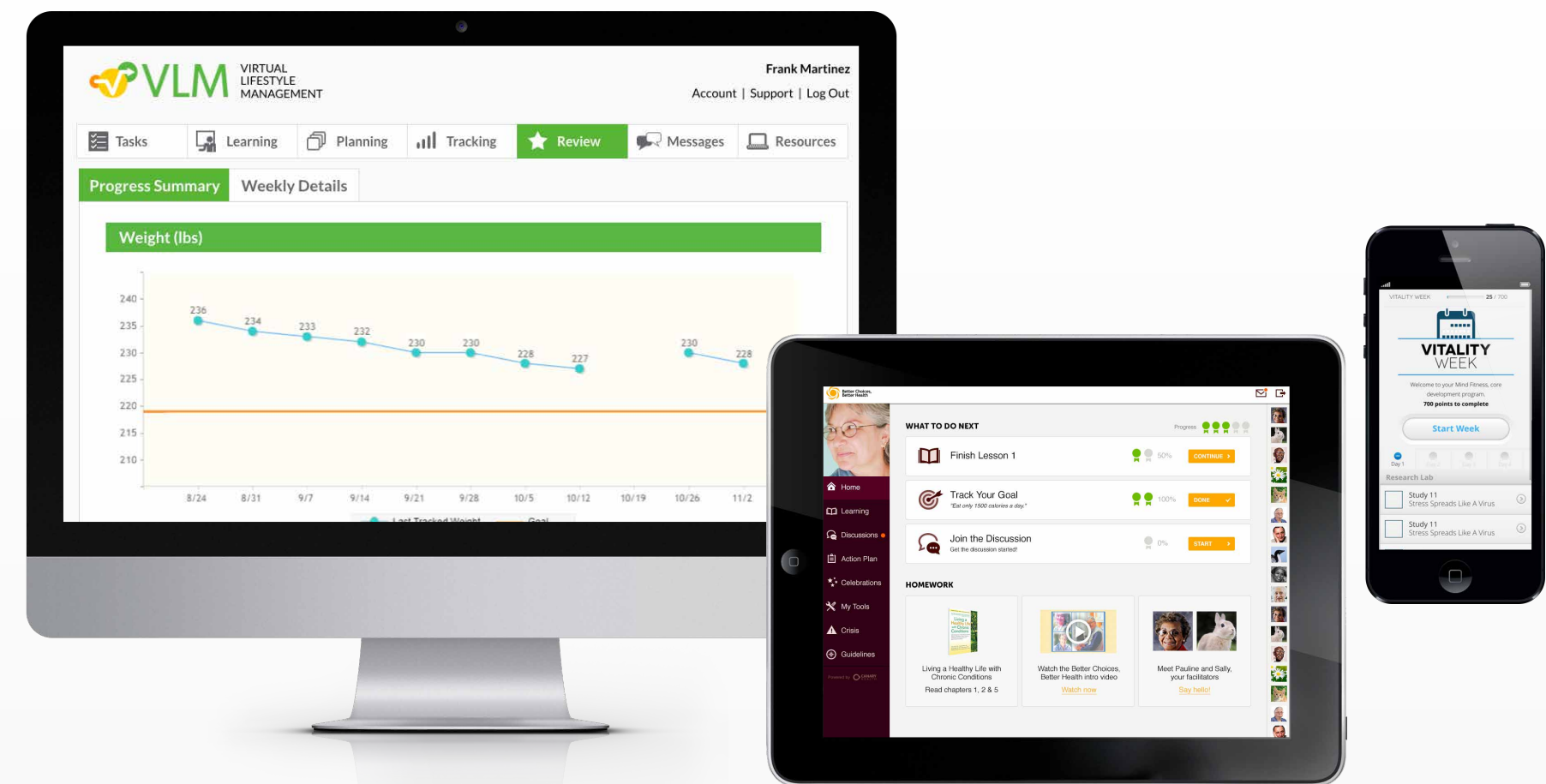




# Return on Investment to Behavior Change Programs:

Value in self-management support



# About Me

- President & CEO, Canary Health
- Past GM of dLife Healthcare Services
- Taught Industrial Organization of Healthcare & Statistics
- PhD in Healthcare Economics



**Adam Kaufman PhD**  
CEO and President  
[akaufman@canaryhealth.com](mailto:akaufman@canaryhealth.com)

# Canary Health's Mission

We are – and always have been – dedicated to empowering self-management to enable health behavior change.

1. Put individual back at center
2. Health should be a resource for living



We work every day to deliver that promise

And... we need to deliver value

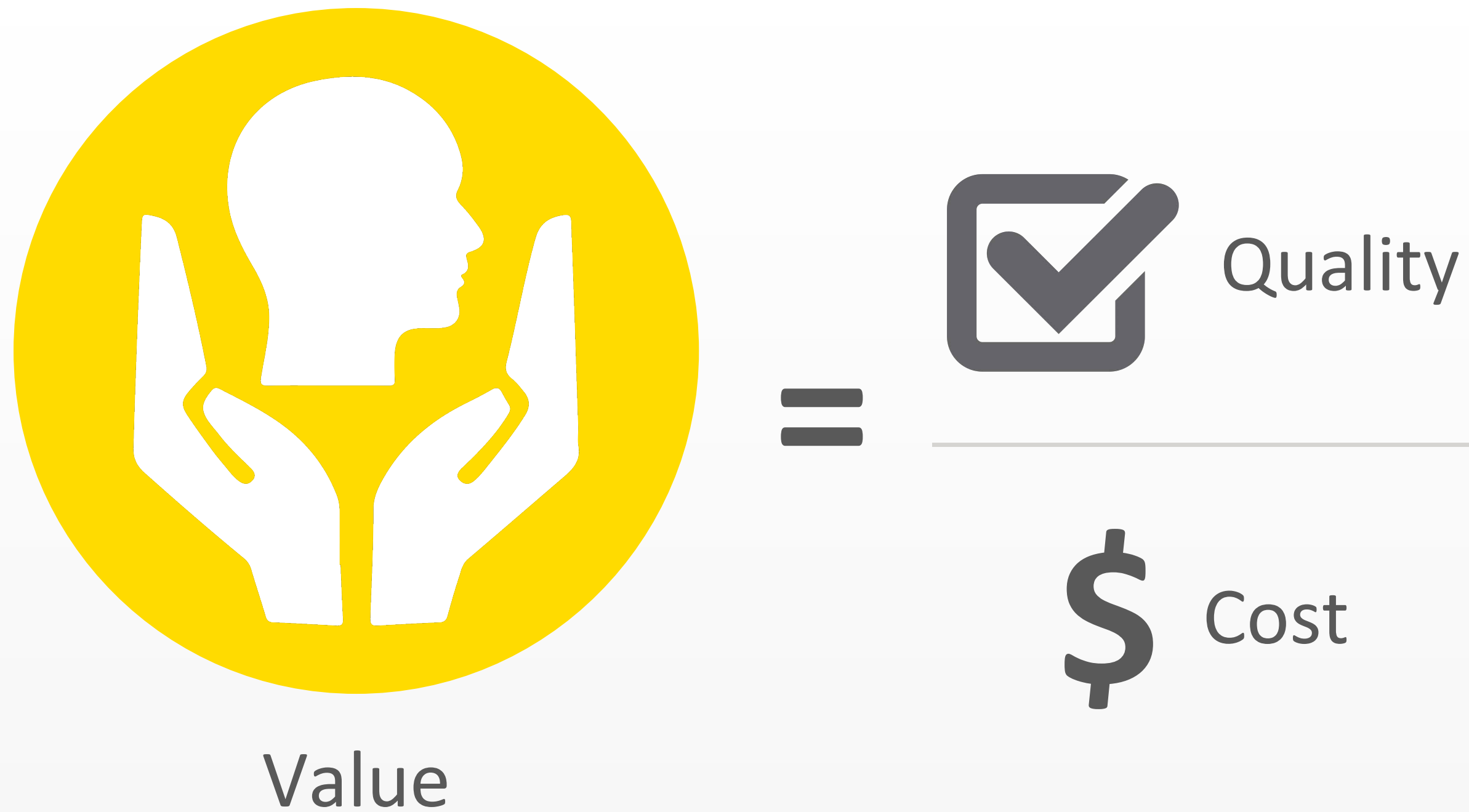
But how does self-management bring value to the population health manager?

# Outline of Our Story to ROI

- So what do we mean by value in Healthcare?
- Self-Management: Completing the Value Puzzle
- How Self-Management Works
- Closing Thoughts & Further Questions

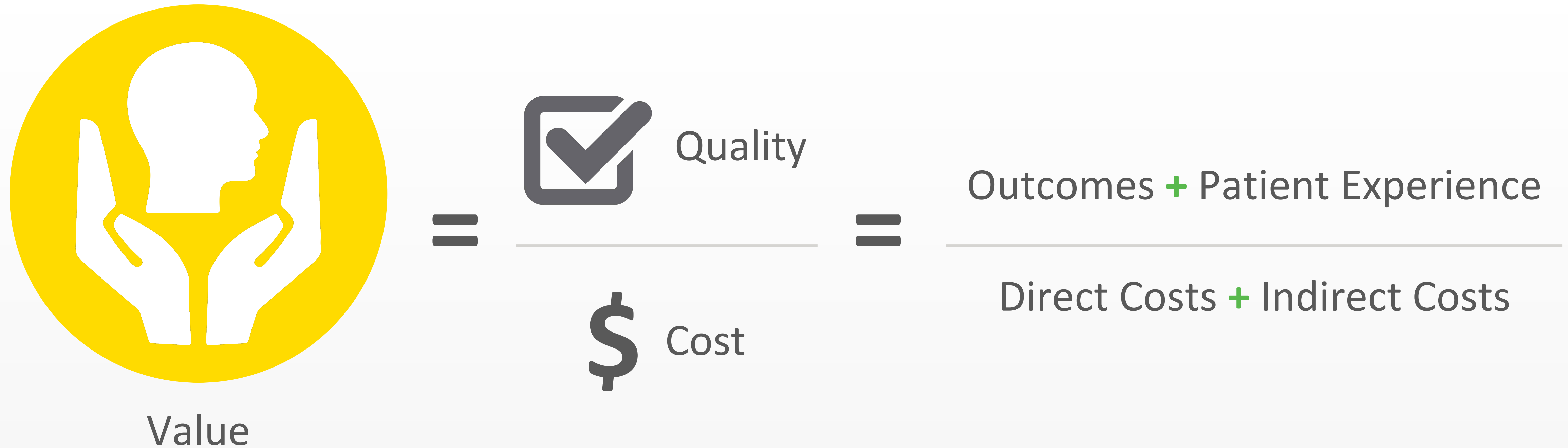


# Value in Healthcare



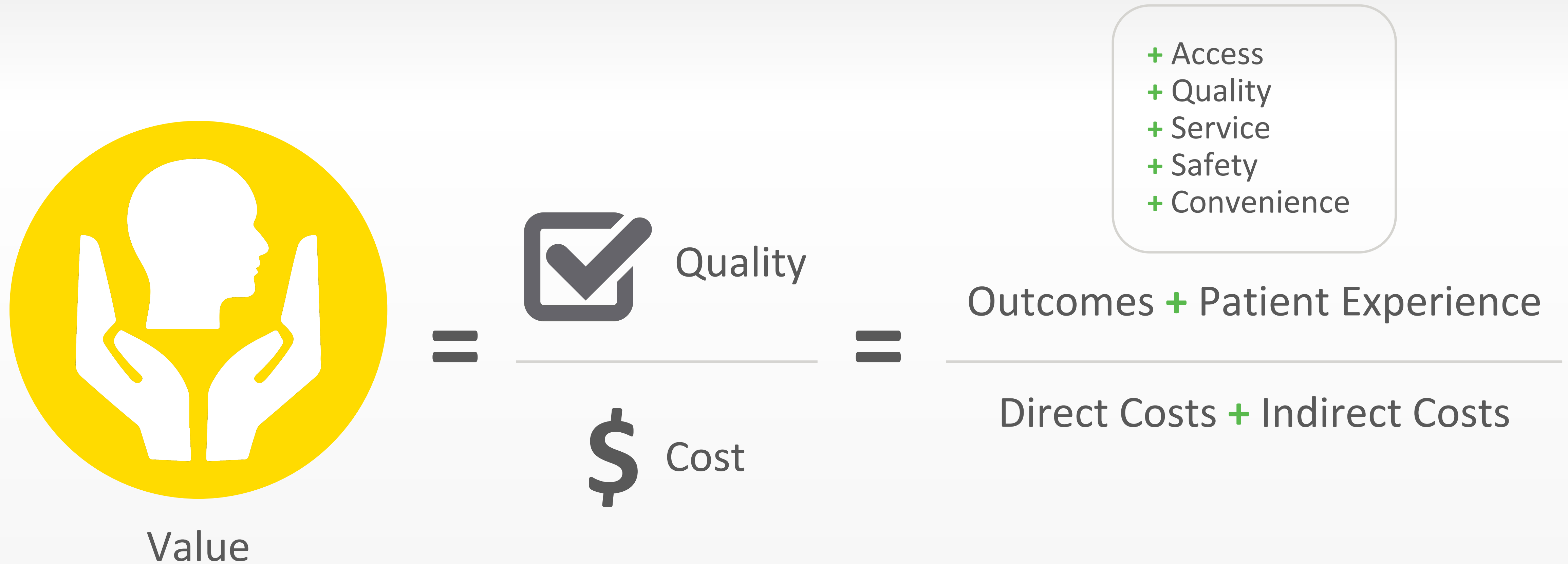
PM360: <https://www.pm360online.com/how-do-you-define-value-in-healthcare>

# Value in Healthcare



PM360: <https://www.pm360online.com/how-do-you-define-value-in-healthcare>

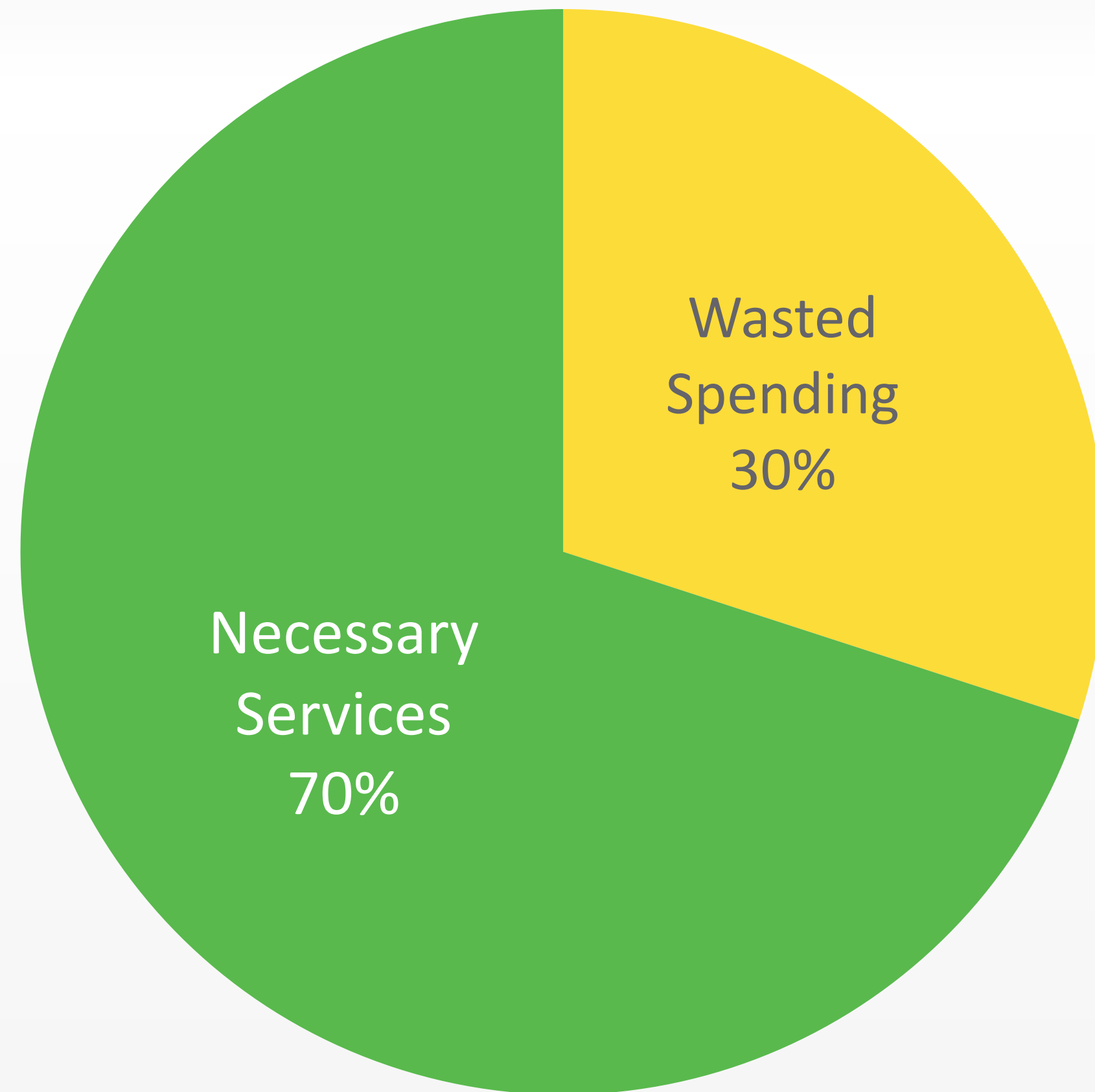
# Value in Healthcare



PM360: <https://www.pm360online.com/how-do-you-define-value-in-healthcare>



# Up to 30% of healthcare spending is wasted



Unnecessary Services	8.2%
Ineffectively Delivered Services	5.1%
Excess Administrative Costs	7.5%
Prices That Are Too High	4.1%
Missed Prevention Opportunities	2.2%
Fraud	2.9%



Overwhelmed by all the ways to Value

# Making sense of delivering value

## Clinical Management

- Clinical standards/pathways
- Therapy adherence



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## Delivery System Design

- High-performance networks
- Practice redesign (e.g. Medical Home)



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## Clinical Management

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## Delivery System Design

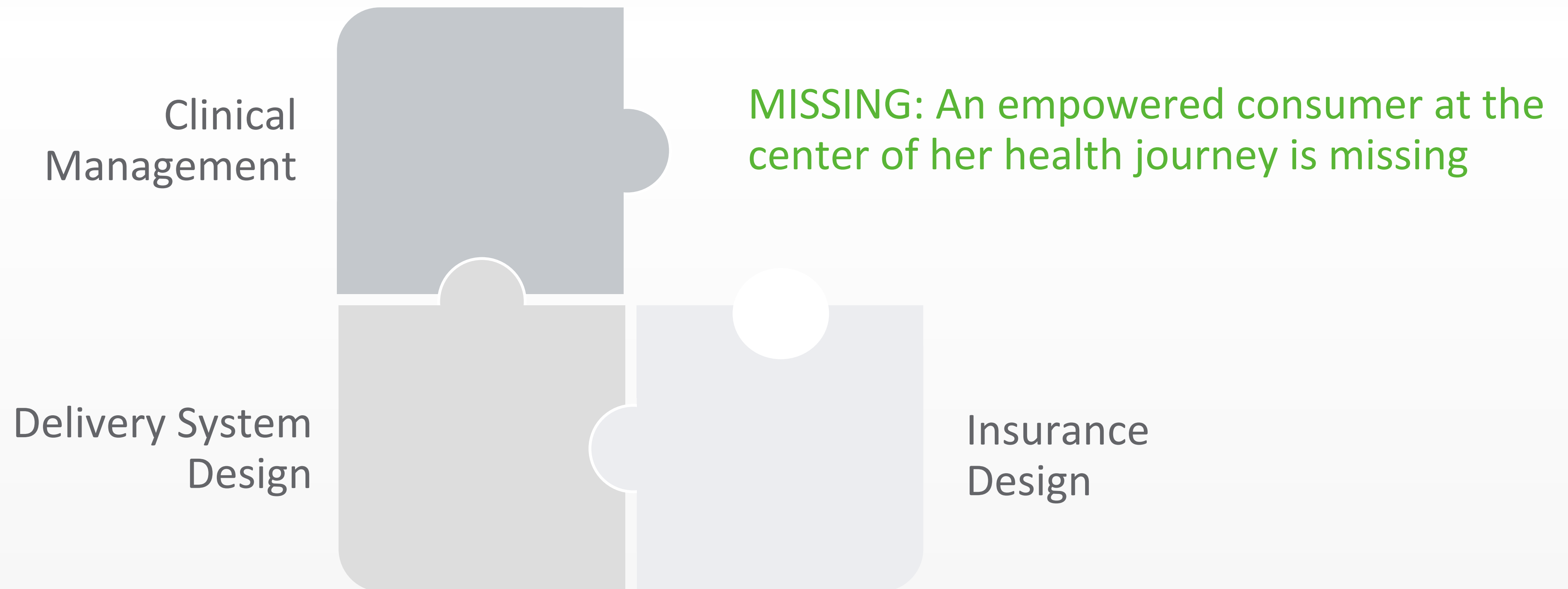
- High-performance networks
- Practice redesign (e.g. Medical Home)

## Insurance Design

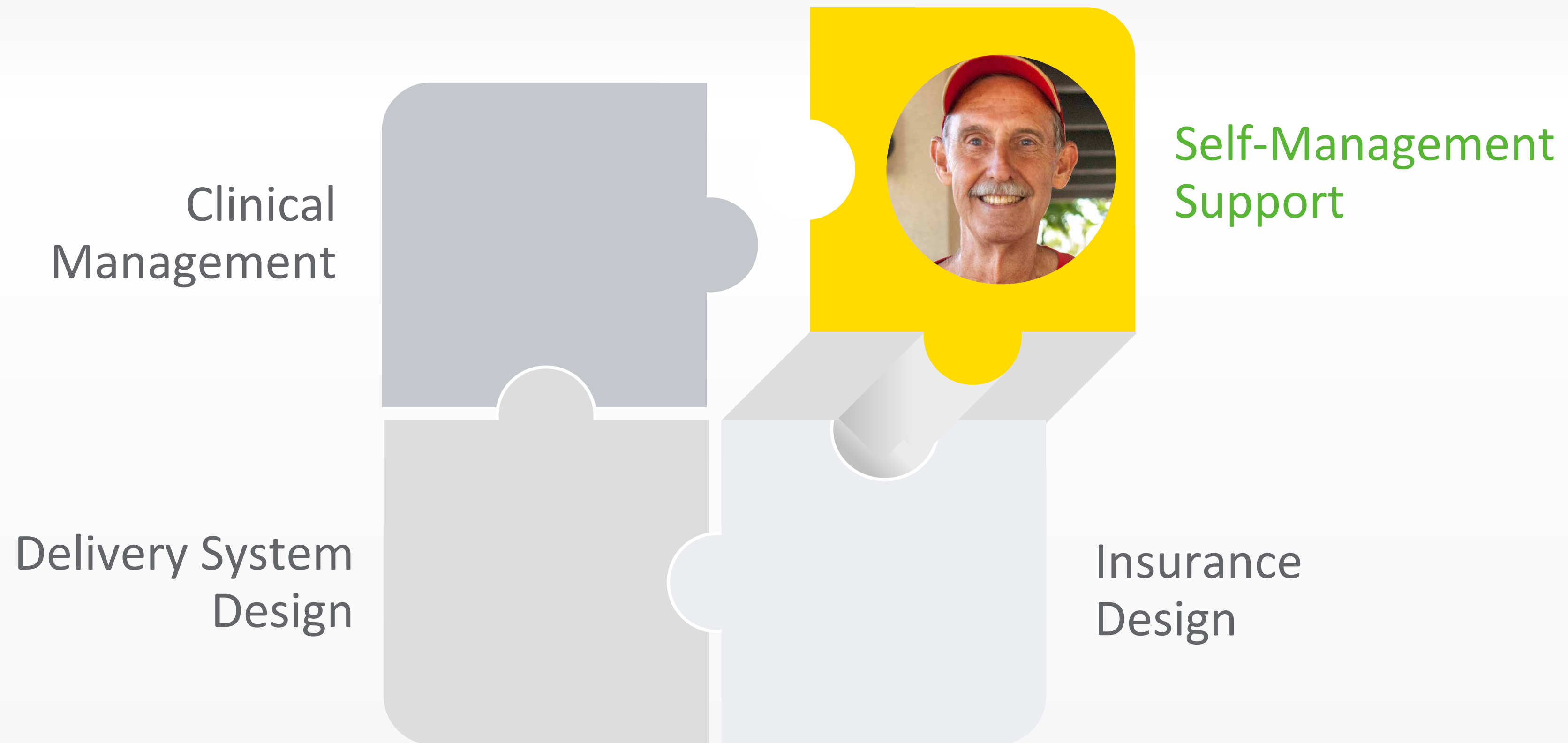
- Consumer incentives
- Transparent quality/price information



# Clear something was missing...



# Delivering Value-Based Healthcare



Self-Management Support is The Missing Piece

# Self-Management



“Self-management relates to the tasks that an individual must undertake **to live well** with one or more chronic conditions. These tasks include gaining confidence to deal with **medical management, role management, and emotional management.**”

*1st Annual Crossing the Quality Chasm Summit (2004)*



# Self-Management's Impact

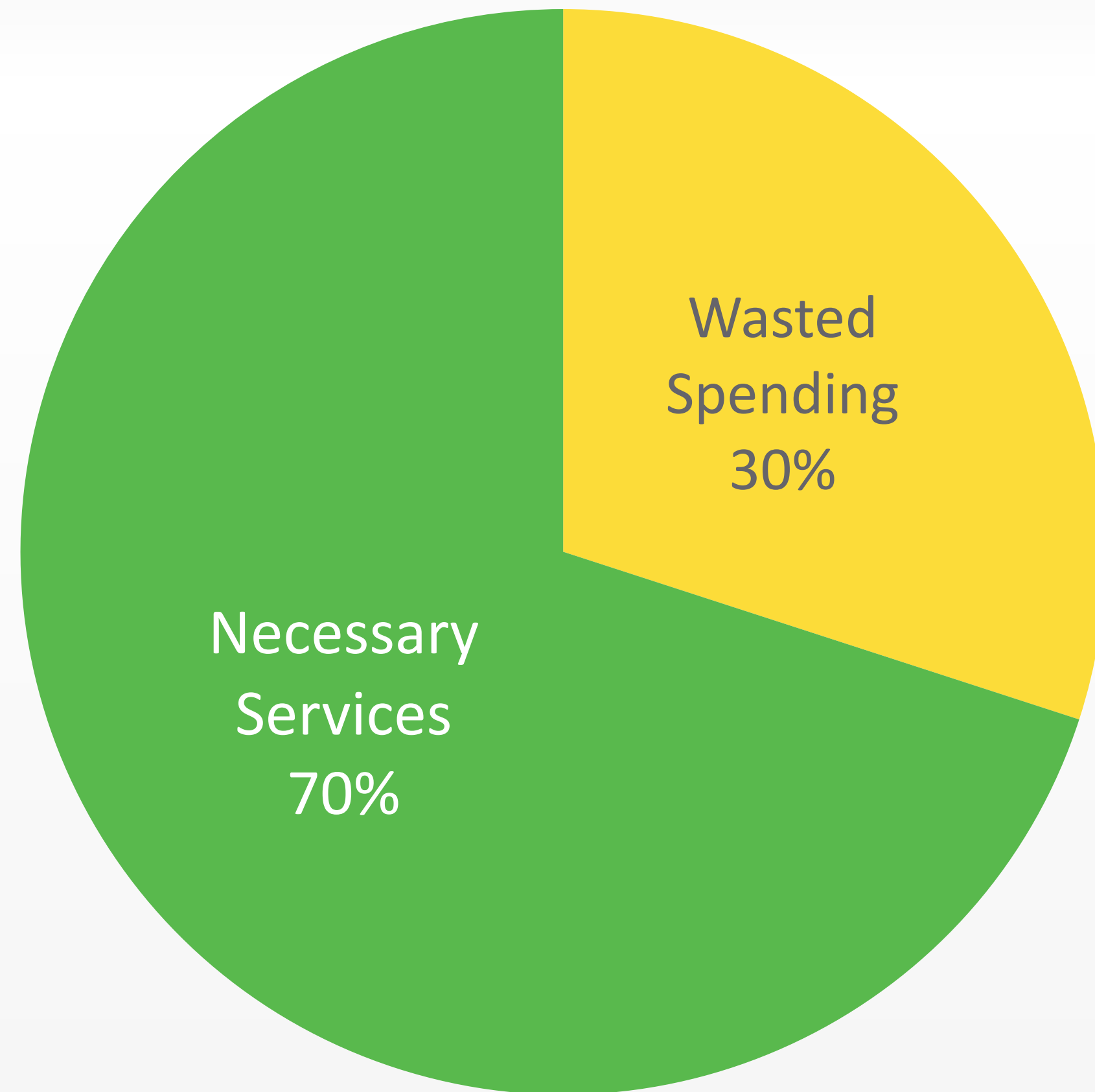
1

Supporting more appropriate health-services utilization

Basically complement and improve other approaches to value-based healthcare



# Up to 30% of healthcare spending is wasted



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# Self-Management's Impact

People with chronic diseases who are confident and practice self-management experience improved health status and use fewer healthcare resources.

*J. H. Hibbard, J. Greene, R. Sacks et al., "Improving Population Health Management Strategies: Identifying Patients Who Are More Likely to Be Users of Avoidable Costly Care and Those More Likely to Develop a New Chronic Disease," Health Services Research, published online Aug. 23, 2016.*

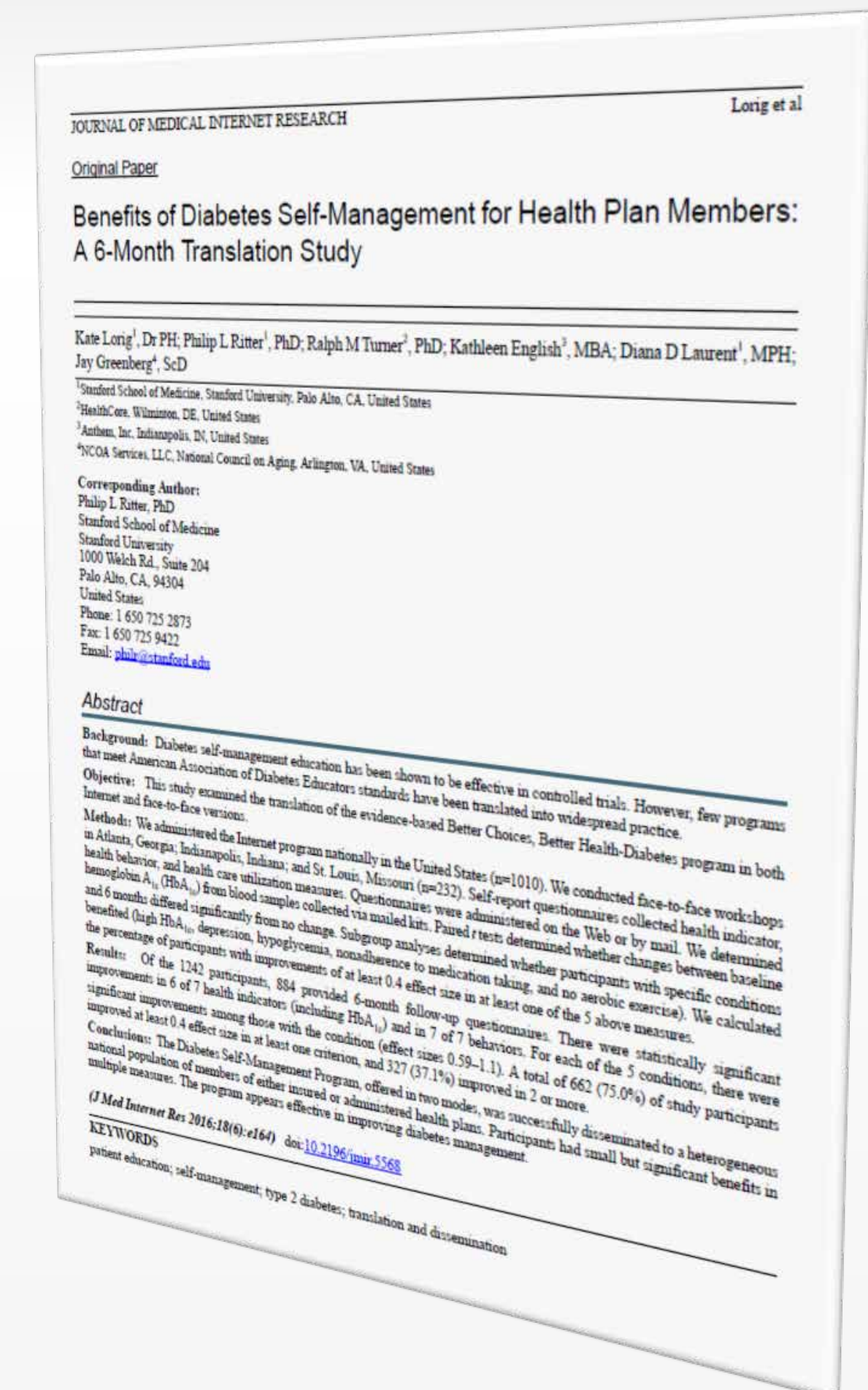


# Digital Self-Management Proven Effective In Diabetes

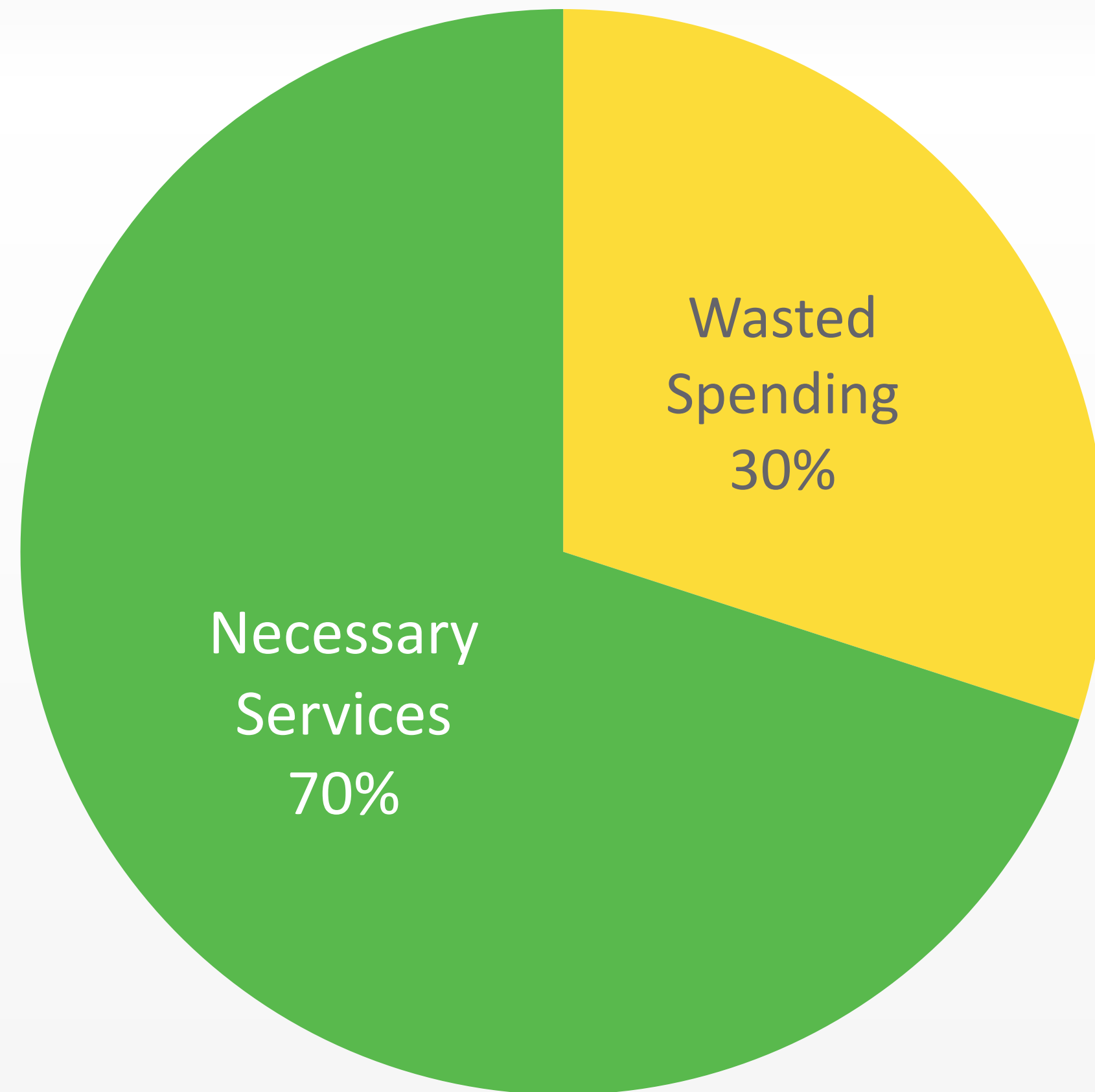
## One thousand person study conducted with Anthem (second largest US Health Insurer)

1. HbA1c decreased 0.93% for those >9%
2. Depression improved
3. Frequent hypoglycemic symptoms decreased
4. Medication adherence improved
5. Exercise increased 43 minutes per week

Benefits of Diabetes Self-Management for Health Plan Members: A 6-Month Translation Study  
Kate Lorig, Dr PH; Philip L Ritter, PhD; Ralph M Turner, PhD; Kathleen English, MBA; Diana D Laurent1, MPH; Jay Greenberg, ScD; J Med Internet Res 2016;18(6):e164 doi:10.2196/jmir.5568



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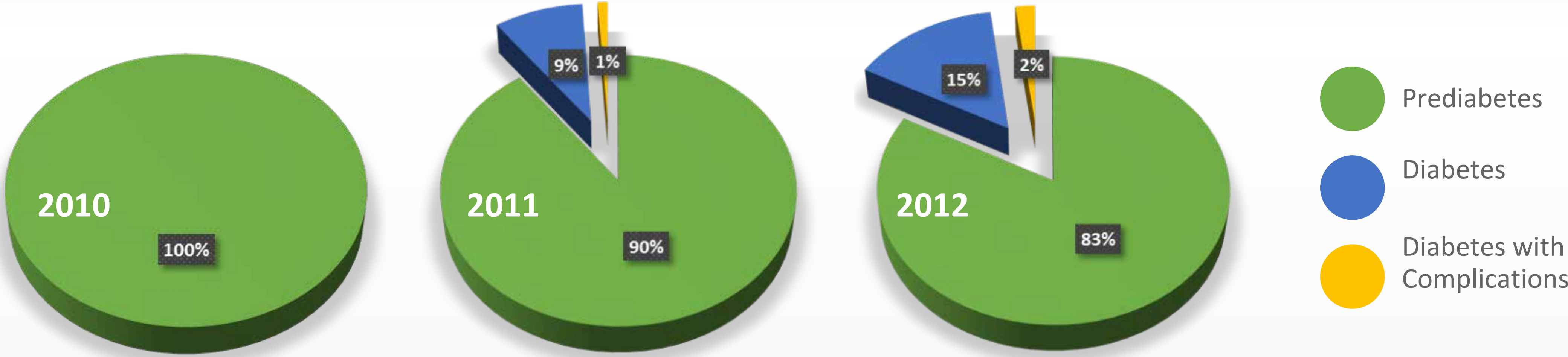
# Self-Management's Impact

2

Preventing the progression of chronic disease



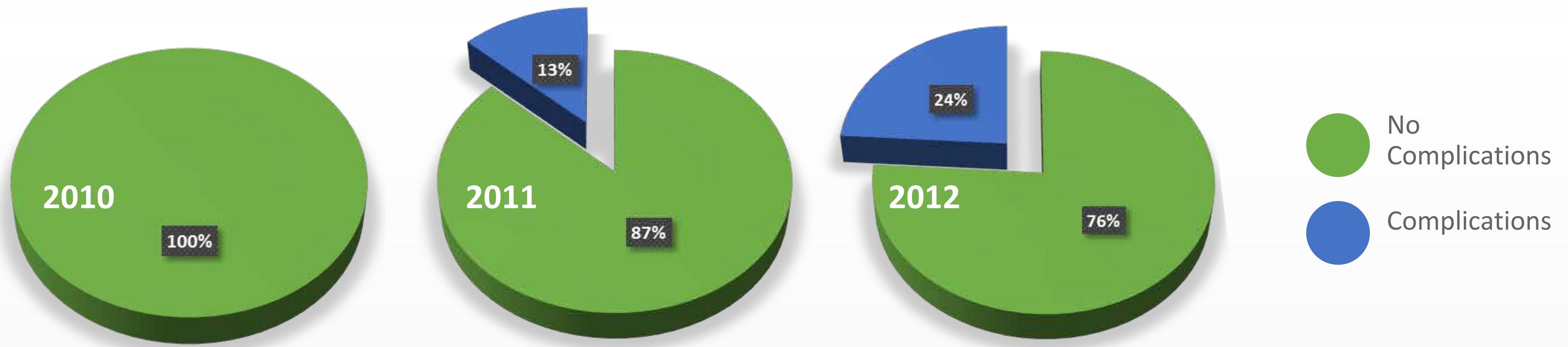
# Progression to a Preventable Condition is Common



Humana Medicare Advantage Population

## Prediabetes to Diabetes

# Progression to Preventable Complications Common

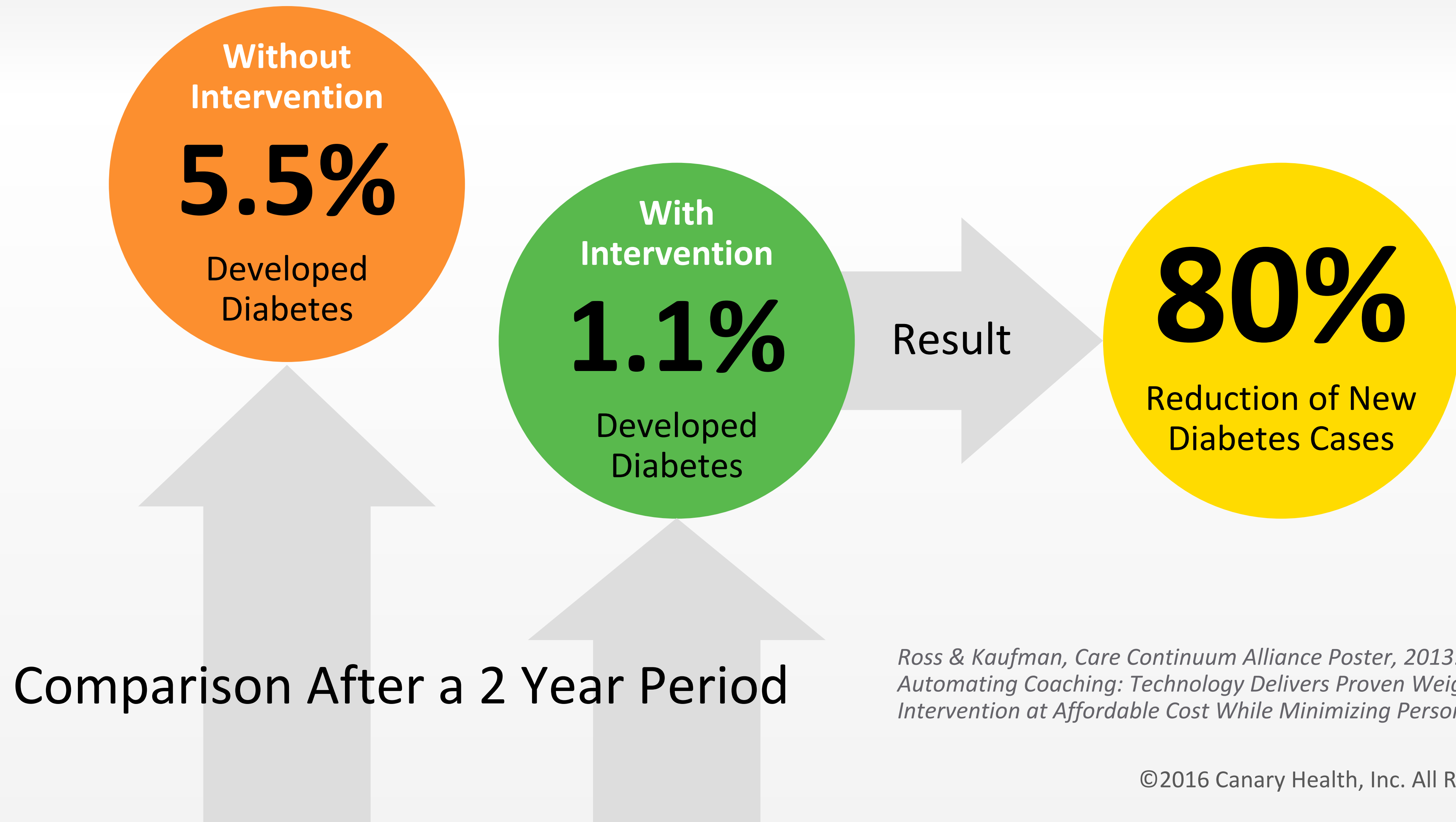


Humana Medicare Advantage Population

## Diabetes to Complications



# Self-Management Can Prevent Chronic Conditions



*Ross & Kaufman, Care Continuum Alliance Poster, 2013:  
Automating Coaching: Technology Delivers Proven Weight Loss  
Intervention at Affordable Cost While Minimizing Personnel Time*

# And Complications

	2-Year Prevalence Increase	
	Without Intervention	With Intervention
Cardiovascular Disease	3.9%	-1.3%
Hypertension	3.2%	-1.3%
Hyperlipidemia	2.1%	-1.1%
Sleep Apnea	5.7%	1.6%
Joint Related	4.5%	1.6%
Type 2 Diabetes	5.5%	1.1%

Study received Gold Standard from **DMPC**  
Disease Management

*Ross & Kaufman, Care Continuum Alliance Poster, 2013:  
Automating Coaching: Technology Delivers Proven Weight Loss  
Intervention at Affordable Cost While Minimizing Personnel Time*

# Self-Management's Impact



Patients' ability to self-manage their health is linked to lower risk of chronic disease & hospital use.

*Commonwealth Fund 2016: <http://www.commonwealthfund.org/publications/in-the-literature/2016/aug/improving-population-health-management>*

# How Self-Management Works

“There were many things that the workshop helped me with or better yet opened my eyes to....I was illuminated you might say. For instance, the breaking the cycle was an eye opener and just getting back to exercising and eating better.

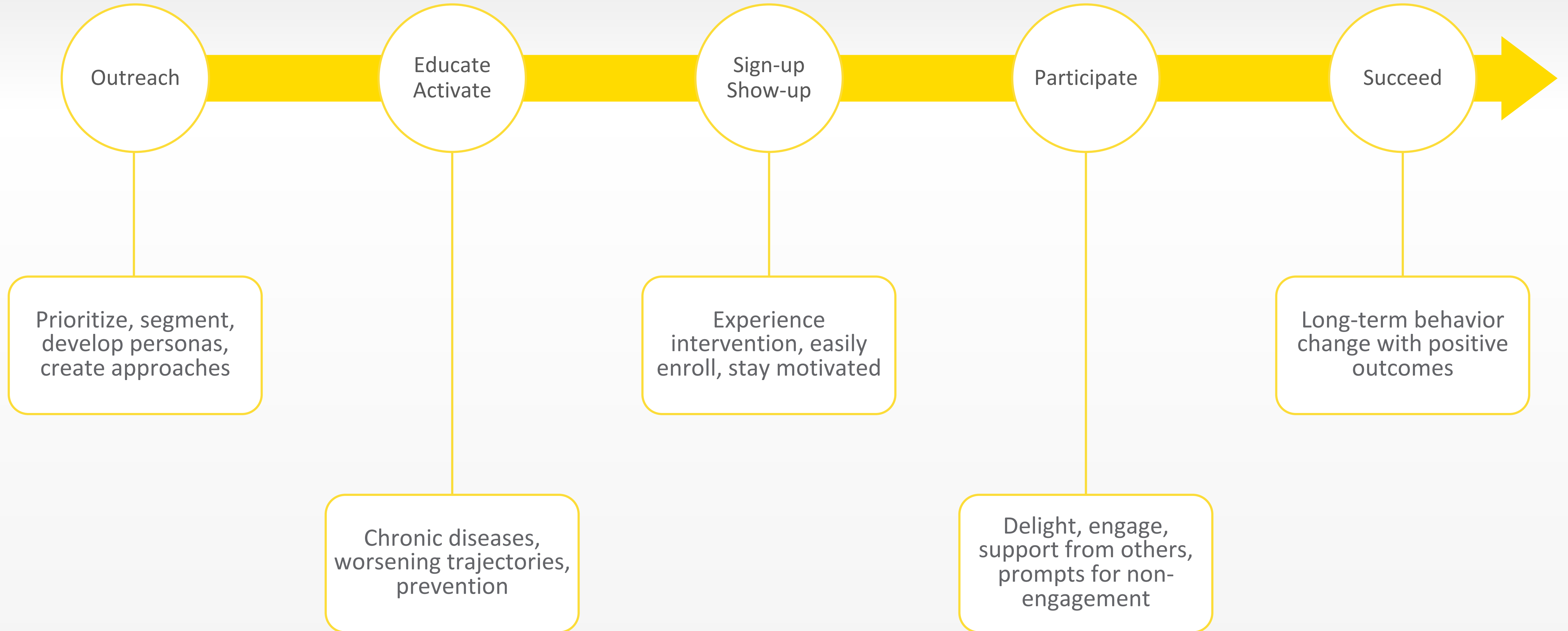
I did not realize how emotions from our chronic diseases were creating an attitude that we just wanted to stay in bed. The pain management things were so helpful.

Better understanding about the health team and medications have all been helpful in helping me to see things in a different light.

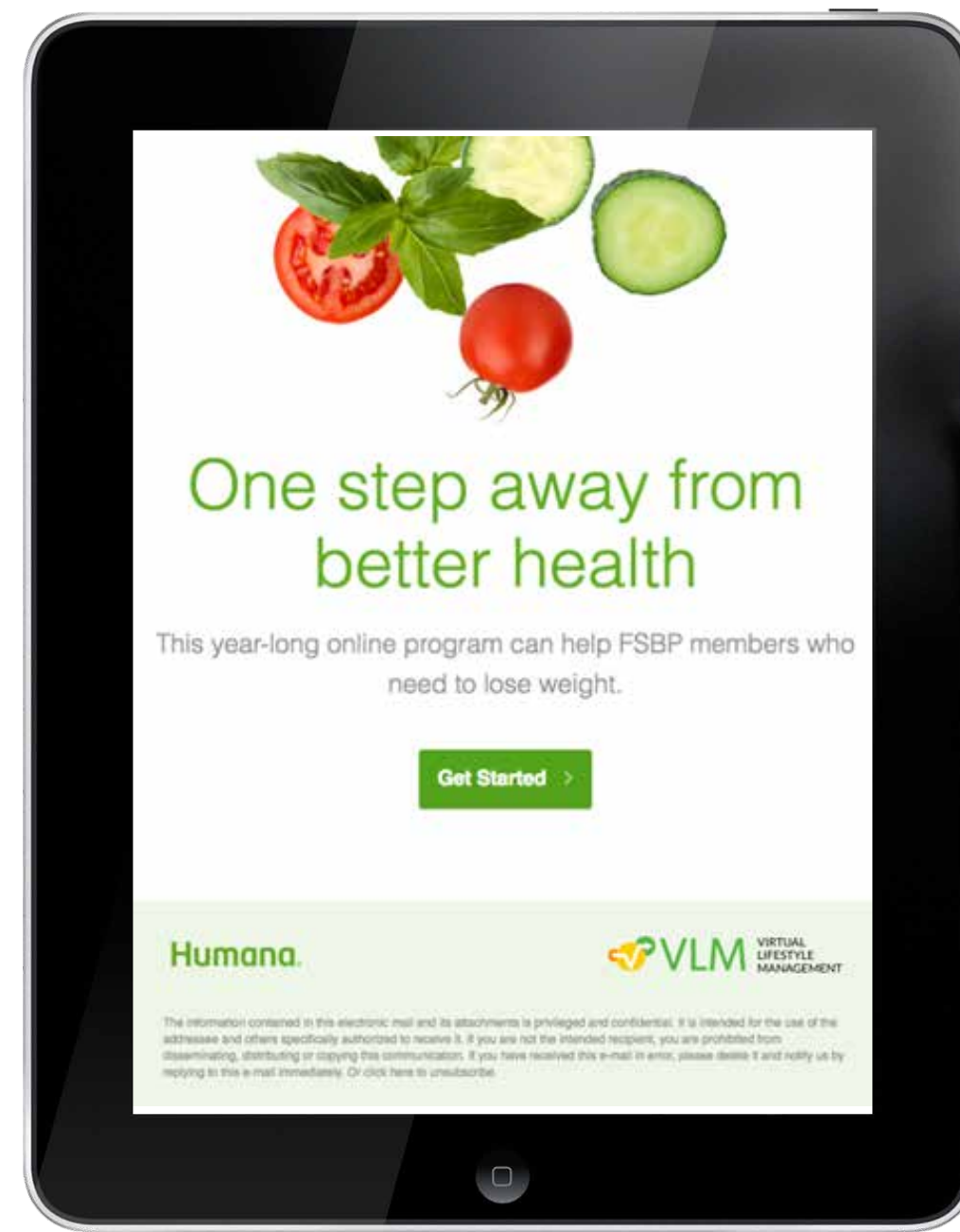
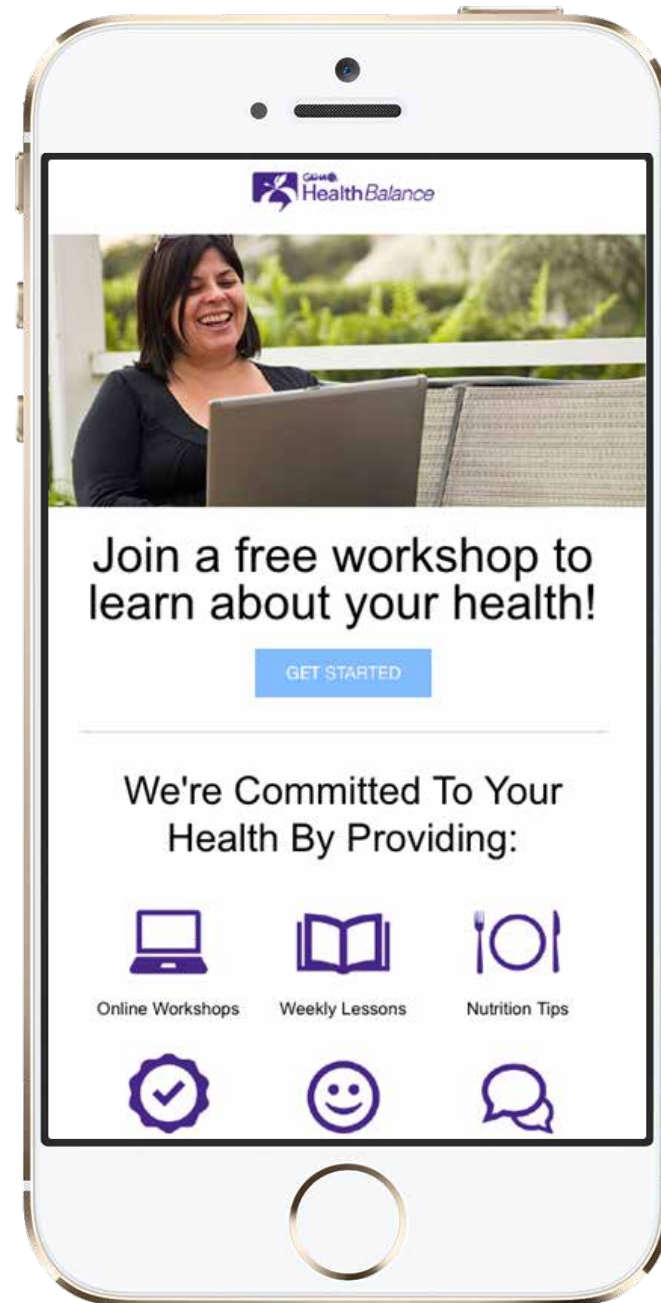
It has helped me and my wife as well. Thank you so much!”

**Paul, 60 year old enrolled in BCBH with his wife**

# Outreach to Outcomes



# Outreach to Outcomes



“I was very interested because it was designed by professionals to help people overcome second stage diabetes. I was attracted to it because it was online and you could go at whatever pace you wanted to.”

Frank Faecke, Age 68,  
Lost 30lbs with VLM



# Outreach to Outcomes



**GEHA** The Benefits of Better Health

### A simple internet-based program to help you live a healthier life – at no cost to you!

Frank dreamed of working as a baseball usher ever since he was a kid. After retiring from a career with the federal government, he finally got his chance. But extra weight he accumulated over the years caused wear and tear on his joints, making climbing stairs at a baseball stadium nearly impossible.

Then Frank discovered the Virtual Lifestyle Management Program (VLM). He lost 30 pounds, and continued to lose weight, even after hip replacement surgery.

Today Frank is living his dream as an usher at Anaheim Angels Baseball Stadium.

*"It's very well designed. The tips that they give you are very practical and the coach you're assigned is great."*

— Frank Faecke, age 68, lost 30 pounds with VLM  
[Click here](#) to see how he did it.

Jeff, start living your dream with help from these VLM services:

- Access to a personal health coach
- An online program with weekly lessons
- Health tools, including a free pedometer

[Join Frank and thousands of others who have lost over 50,000 lbs. with VLM ... at no extra cost to you.](#)

**It's free! Sign up today**

In good health,  
GEHA Care Management

If you've already joined VLM, congratulations on starting your journey toward a healthier lifestyle. Remember **VLM and your coach are always available** to help you stay on track.

Better Choices, Better Health

### The momentum of my life has changed as a result of this workshop...

— Patti, workshop completer

*"...Doing it each week, even if I didn't complete every action plan, prompted me to take other action steps that are very important. The six weeks prompted me to really focus on me, on self love and self care. I've had a mental/emotional shift, this workshop was definitely a big part of that."*

Join a completely internet-based workshop designed by researchers at Stanford University and led by peers who face similar ongoing health challenges. In just six weeks, you will learn important new skills to help you live healthier.

This program is available at no cost to you by GEHA.

**Select your Free Workshop >**

HealthBalance

"I'm in my 60s and when you get to a certain point you really don't have that much control over your weight and I really wanted a tool to control weight. I started realizing at the very beginning that it was very well designed and the tips they give you are very practical."

Frank Faecke, Age 68,  
Lost 30lbs with VLM



# Outreach to Outcomes



“My wife and I both wanted to lose weight but all the programs we’d been through before really weren’t that effective. I trust GEHA very much and I figured if they sponsored it, it was safe to go along with.”

Frank Faecke, Age 68,  
Lost 30lbs with VLM





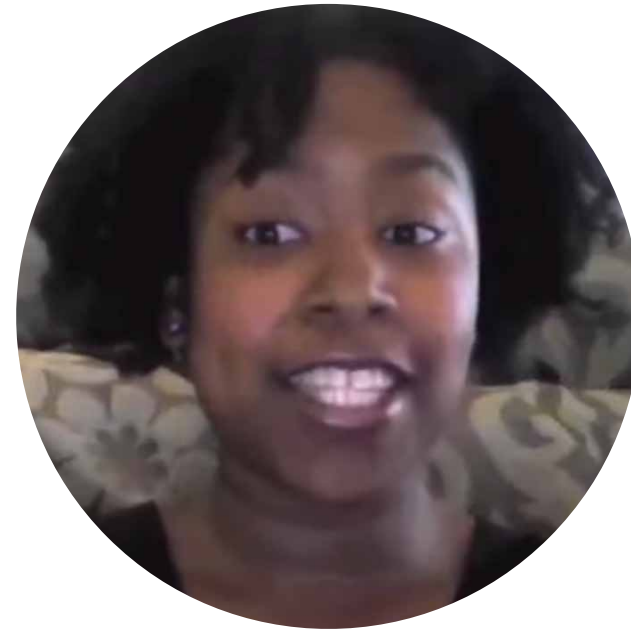
# Outreach to Outcomes



Dedicated Coaches  
Offers encouragement,  
solve problems, and  
celebrate successes



Peer Groups  
Discuss and share  
solutions that have  
worked within their lives



User Testimonials  
Highlight struggles and  
success achieved with  
behavior change

“It gives you some great tools to choose which foods to eat and the tools to control your weight loss or gain. If you like social media, there’s a chat where you can ask any question to help resolve your particular issue. Plus the coach they assign you at the beginning of the program is great!”

Frank Faecke, Age 68,  
Lost 30lbs with VLM



# Outreach to Outcomes



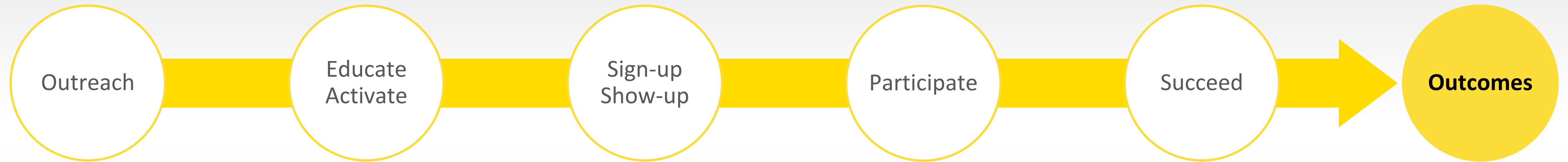
- Algorithmic weight loss goals can be customized by the user's coach
- Routine progress reports allows adjustments to optimize results
- Track weight, food consumption and physical activity to ensure success

“I’m still on the program to the extent that, even though I’ve completed all the lessons, I still record every day calories, grams of fat and exercises. I lost 30 pounds. It wasn’t enormous, but it had a big effect.”



Frank Faecke, Age 68,  
Lost 30lbs with VLM

# Impact on ROI



Frank underwent hip replacement surgery during his enrollment in the year long program. Since he had already lost a significant amount of weight, he experienced a quick recovery, reducing utilization costs.

Without intervention, Frank was likely to progress toward diabetes. With the added complication of hip replacement surgery, the cost of his healthcare would have been significantly greater had he not been physically, mentally and emotionally prepared for the recovery process.

“Thank God I had been involved in this program and lost this weight because what it enabled me to do is to do the exercises before the surgery, and just gradually go back into them after surgery.”

Frank Faecke, Age 68,  
Lost 30lbs with VLM



# Where We Started

Frank's success is our success.

When we address the whole person by putting the individual back in the center of their health journey, everyone reaps the rewards.



And that's our story...so far. We're at the beginning of a journey, much like the patients we impact.

Now we invite you to join our story and **start impacting your population.**



**Adam Kaufman, PhD**

CEO and President

[akaufman@canaryhealth.com](mailto:akaufman@canaryhealth.com)

**For more info, visit**

[www.canaryhealth.com](http://www.canaryhealth.com)