

# SESSION III: PREDICTIVE MODELS & PRODUCTIVITY

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# A fresh look at some old ideas

- Identification
- Engagement
- Stratification
- Measurement
- Outcomes
- New Ideas



## Employers rely on predictive models

- Vendor partners
  - Identify members at highest risk for admission or readmission
  - Identify members for greatest impact in CM, DM or LM programs
- Know your numbers campaigns
  - Increase self awareness
  - Drive behavior change to lower costs for reversible conditions
- Creating new programs to increase
  - Access to care
    - Employee retention
    - Employee health

# Behavioral Economics

New ways of looking at what drives and motivates us to make decisions

Tailoring the programs to meet these needs

*Obesity isn't a result of a lack of information; instead, economists argue that rising levels of obesity can be traced to falling food prices, especially for unhealthy processed foods.*

(G. Lowenstein & P. Ubel, Economics Behaving Badly, <http://www.nytimes.com/2010/07/15/opinion/15loewenstein.html>)

# Optimal engagement requires more than financial incentives

- While financial incentives are an important and valuable motivational tactic, other effective components can also help drive engagement and sustained behavioral change.



- Financial incentives can be aligned with other program elements that support engagement and activation to super-charge behavioral change.

Source: Graphic from Insignia Health, 2009

# Behavioral economics

## Tailor incentives to influence individual decision making

Decision element	Status quo bias	Optimism bias	Loss aversion	Hyperbolic discounting
<b>Employee application – incentive examples</b>	Tendency to stick with one’s current situation	Tendency to be overly optimistic about one’s abilities and the outcomes of one’s own actions	The pain of giving up an item is more than the pleasure of receiving it	Future events feel less important than events today; prefer sooner payoffs to later payoffs
<b>Considerations for strategy</b>	<ul style="list-style-type: none"> <li>• When presented with many options, people tend to settle with the default option. Set the default at the desired behavior.</li> <li>• A group’s response is highly sensitive to the first impression/reaction.               <ul style="list-style-type: none"> <li>– You never get a second chance to make a first impression, so make it count.</li> <li>– Develop an appealing and user-friendly communication campaign.</li> <li>– Be sure that all processes are in place to ensure a positive experience.</li> <li>– Collect and share employee testimonies.</li> </ul> </li> <li>• Frame messages in a manner that communicates positive outcomes. Offering a “healthy person” premium discount is logically equivalent to surcharging an “unhealthy person,” but the message is perceived more positively when it is framed as a discount.</li> <li>• Requiring people to pay more for nonparticipation leverages the power of loss aversion.</li> </ul>			

# Incentives beyond the individual

## Other delivery channels

- **Gain Sharing** – Group targets are established and if achieved the entire group gains the incentive; groups can be at the company wide level or subgroups
  - Targets include participation in health assessments, levels of utilization in preventive care/screenings, involvement in lifestyle or disease management, and broad based wellness campaigns
  - Incentives can include reduced premium levels, premium holiday for a month, richer plan design, cash, gift cards, or contributions to health related accounts
  - Disadvantage: delayed gratification
- **Social Recognition** – Participants are acknowledged by peers and senior management for their participation or health achievements
  - Recognition could be done on an individual or group/department basis
  - Targets can include a program participation, level of physical activity, weight loss or other health improvement measures
  - The recognition might be acknowledgement in company newsletter, emails, lunch with senior leadership or peers
- **Social Contribution** – Provide reward to the community or charity organization
  - Incentives are rewarded based on individual or group targets
  - Incentive can take the form of cash or product/service related contribution to a qualifying charitable organization
- **Rewards** – Non-financial rewards can provide valuable acknowledgement and motivation
  - Incentives are rewarded based on individual or group targets
  - Rewards can include token branded items (tee-shirts, water bottles, mugs), Wellness Day off, premier parking, or casual dress/jeans day

# Incentive strategy components

<b>Behavior/ Outcome</b>	Health Risk Assessment	Screenings and Exams	LM/DM Program Completion	Exercise, Treatment Compliance	Health Status/ Bio-Metric Levels
<b>Incentive Trigger</b>	Incentive per Activity	Points-based Incentive	Minimum # of Activities	Required plus Minimum # of Activities	Required Activities
<b>Incentive Type</b>	Competitions and Contests	Cash/Giveaways/ Raffles	HSA Contribution Premium Differentials	Plan Design (i.e., lower deductible)	Medical Coverage
<b>Target Population</b>	Covered Active Employees	Covered Spouses/DPs	All Full Time EEs	Part Time EEs	Retirees
<b>Population Level</b>	Individual	Team/Department	Location	Business Unit	Corporate



## Progress report: encouraging involved & informed health participants

<b>Tactic</b>	<b>20,000+</b>	<b>500+</b>
Offer account-based plan	43%	20%
Percent of employees enrolled in account-based plans	9%	8%
Expect to offer account-based plan 5 years from now	73%	61%
Use coinsurance for one or more drug categories	51%	25%
Vary premium contribution based on smoker status	23%	9%
Provide tool to help select the most appropriate plan	66%	47%
Provide individual provider cost / quality	38/49%	41/31%
Use high performance networks	32%	14%
Use evidence based design	24%	16%
Use incentives to encourage use of health management programs*	48%	21%

\*Among employers that offer disease or care management programs

Source: Mercer National Survey of Employer-Sponsored Health Plans 2009

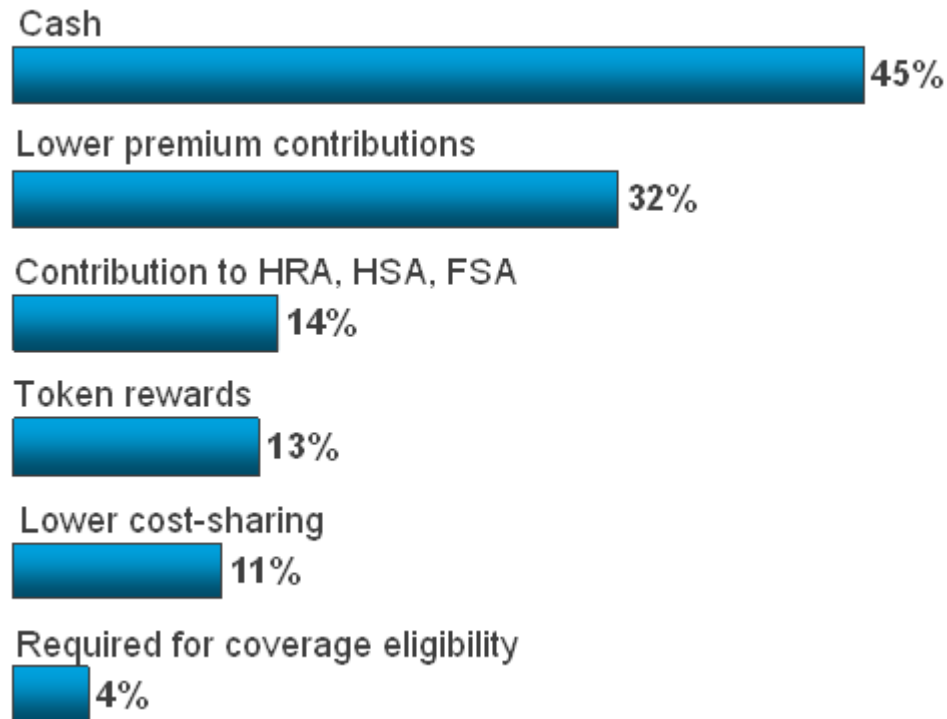
# Type of health management incentive used

Among large & jumbo employers with offerings and incentives in each area

	Health Assessment	Behavioral Modification	Disease Management	Preventive / Screenings
<b>Incentive Offered</b>				
<b>Large</b>	23%	19%	15%	13%
<b>Jumbo</b>	51%	52%	37%	37%
<b>↑ Participation</b>	67%	67%	60%	72%
<b>Value &lt; \$100</b>	56%	67%	48%	72%
<b>Value &gt; \$200</b>	84%		74%	

Lower cost-sharing = deductible, copay, coinsurance; Token rewards = tee-shirts, hats, etc.

# Types of Incentives for HRA Completion



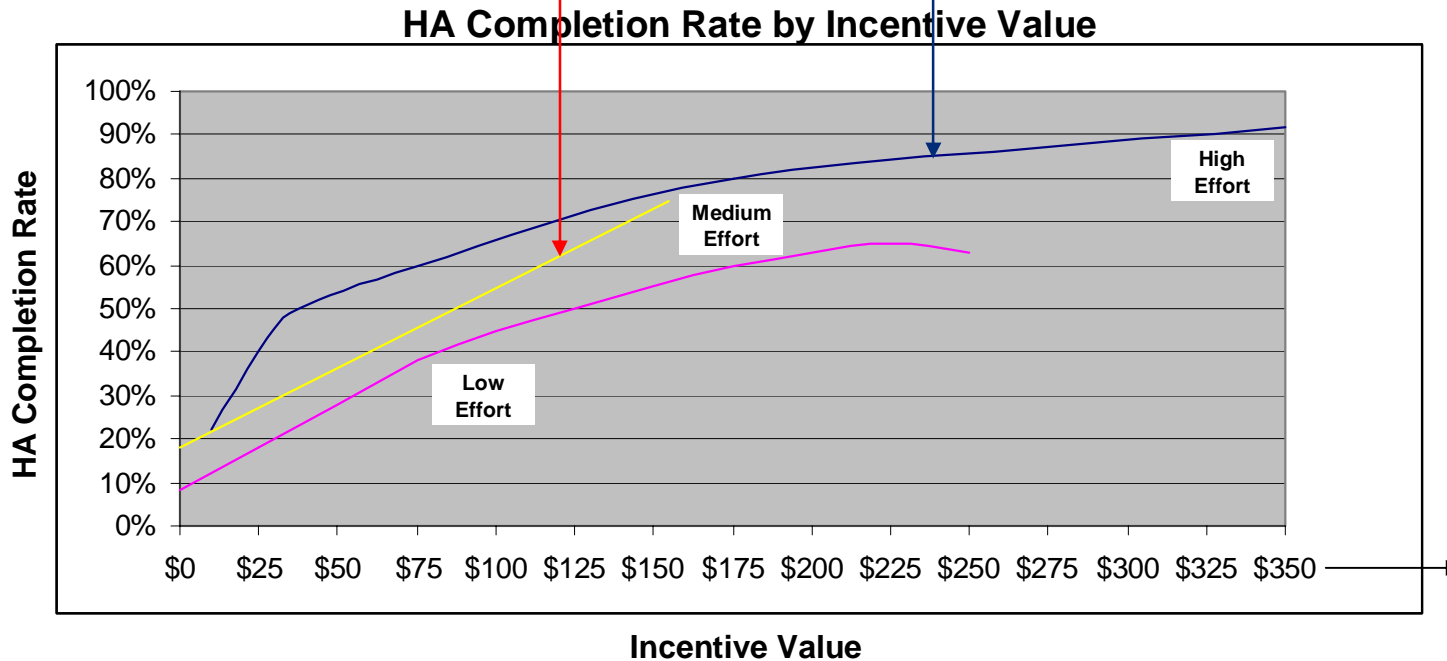
Source: Mercer's *National Survey of Employer-Sponsored Health Plans 2010*.

# Financial incentive amounts

The “right” amount of financial incentive will vary greatly from situation to situation and over time. What works well now or for one employer may not be successful for the next.

\$120 premium differential may yield about 60% HA participation with medium communications and organizational commitment

\$240 premium differential may yield above 80% HA participation assuming high communications and organizational commitment. With lower communications and organizational commitment, HA participation might be in the 60% range

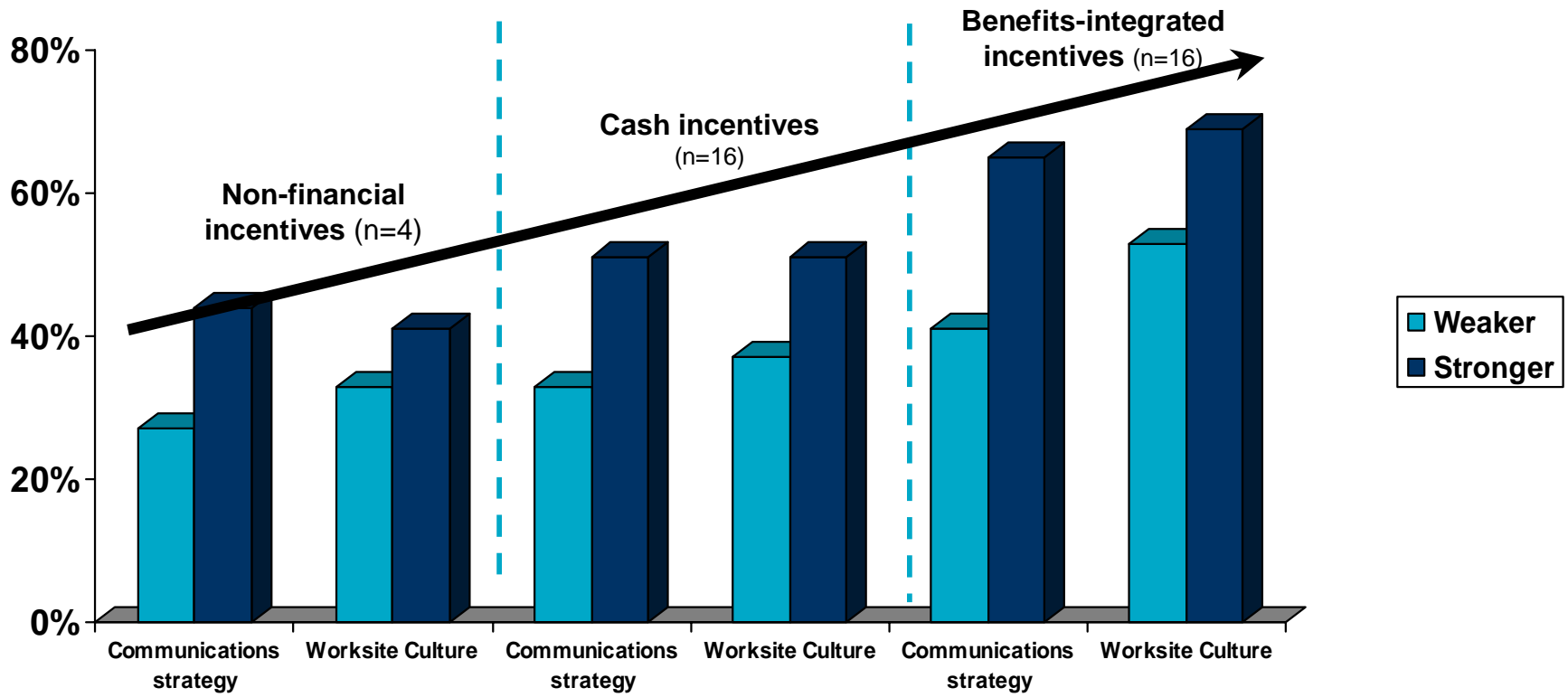


Source: *Incentives and Other Factors Associated with Employee Participation in Health Risk Assessment*, Taitel, et. al., *JOEM*, Volume 50, #8, August, 2008

# Incentive delivery channels

## Benefit-integrated incentives stronger than cash or non-financials

Health Assessment Participation by Incentive Channel, Communications, and Culture



Source: Seaverson, E., Grossmeier, J., Miller, T., and Anderson, D. The role of Incentive design, incentive value, communications strategy, and worksite culture on health risk assessment participation. *American Journal of Health Promotion*. 23(5) 342—351, May/June 2009.

## Impact of behavior change

### Considerations for awarding incentives

Key behaviors	Financial ROI	Impact on employees
<b>Being aware of health status</b> – health assessment (HA) and screenings	Low	Low
<b>Preventing illnesses</b> – immunizations and maintenance of healthy lifestyles	High return; short- and long-term payback	Low
<b>Reducing risks</b> – mitigating or eliminating unhealthy behaviors	Moderate to high return; mid- to long-term payback	Moderate
<b>Accessing proper care</b> – access and use of the right care, at the right time, from the right providers	High return; short-term payback	Moderate
<b>Complying with treatments</b> – following through with what is prescribed / recommended	High return; short-term payback	High
<b>Returning to work</b> – timely RTW from disability absences	Moderate return; short- to mid-term payback	Moderate

## Incentives Drive Behavior

- Employers are recognizing that one size fits all model doesn't work
  - Must tailor needs to workplace culture
- As healthcare costs continue to rise, employers are reevaluating their short and long term strategies
- Need to continue to monitor behavioral economics and predictive models to make sure the programs are timely and actionable



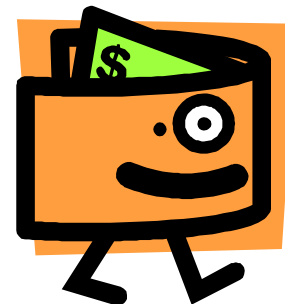
## Health Risk Assessments: a good starting point

- Provide value for understanding the population trends
- Give the individual the tools needed to change behavior
- Increase efficacy when combined with teaching and education to explain what the data mean
- Incentives drive behavior and participation, but amount needed can vary widely



# Incentives Beyond the HRA

- Pharmacy management
  - Switching from brand to generic
  - Switching from retail to mail order
- Participation in Disease Management programs
  - Holding vendors to HEDIS like measures
- Participation in Lifestyle Management programs
  - Gym memberships
- Participation in Onsite Clinics
  - Reduced co-pays for non preventive services for HDHP members



# Engagement: The Carrot, the Stick or Something in Between?

- Incentives
  - How much is the right amount for engagement
- Penalties
  - Many are chosen but only some will come
  - Realization that many of the sicker people who could benefit from the most may still opt out
  - Payroll deductions being used for those who decline



# Incentive Considerations for Employers

- Depending on how the incentive program is structured
  - HIPAA
  - GINA
  - ADA
  - State Laws



## Measurement & Evaluation

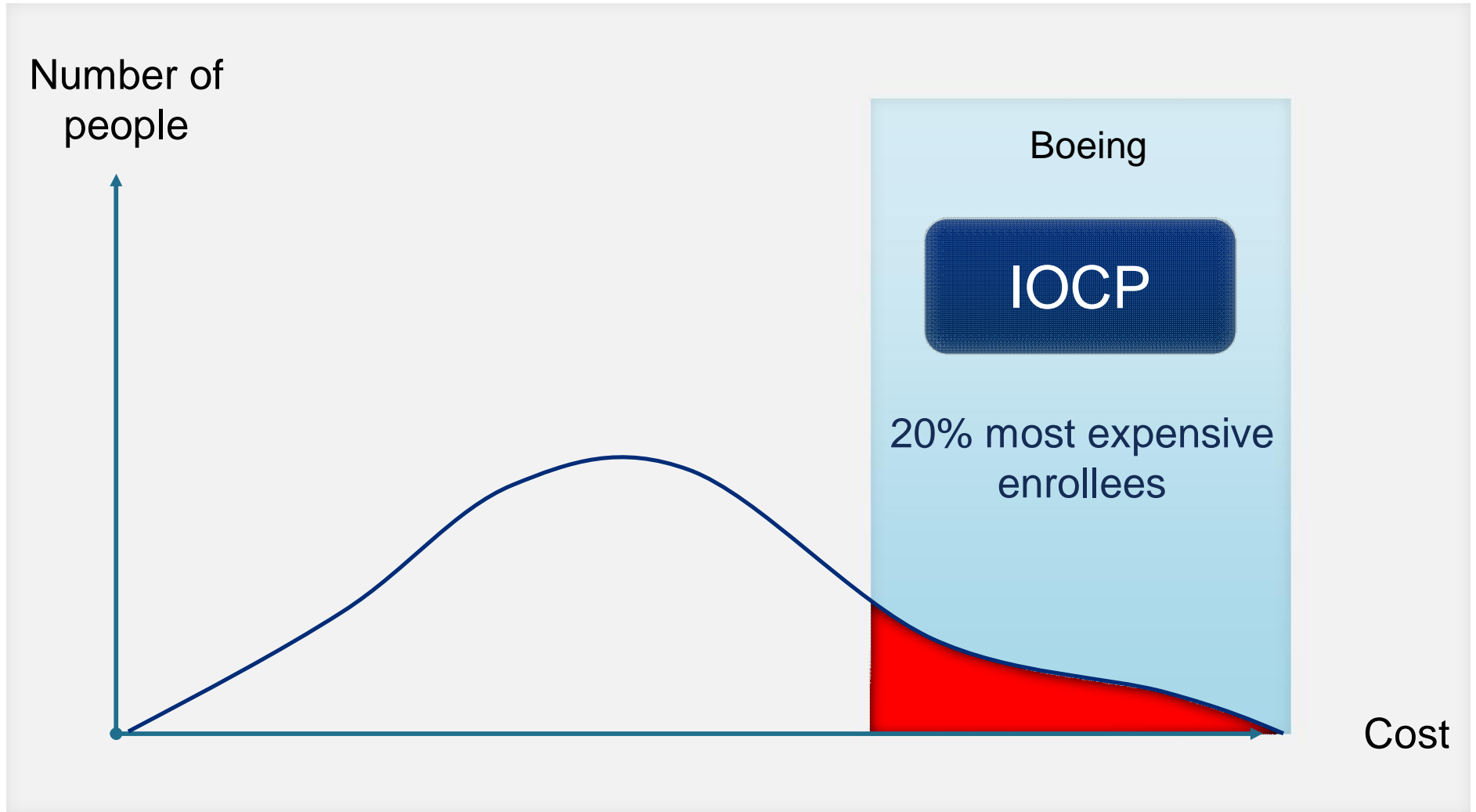
<b>Process Evaluation</b> <b>(0 to 12 months)</b>	Engagement	Program Participation	Knowledge Motivation Medication Adherence
<b>Impact Evaluation</b> <b>(12 to 24 months)</b>	Self esteem Self efficacy	Lifestyle changes Health risk changes	Clinical outcomes Utilization shifts
<b>Outcome Evaluation</b> <b>(2 to 5 years)</b>	<b>Reduction</b> <ul style="list-style-type: none"> <li>•Healthcare costs</li> <li>•Absenteeism</li> <li>•Disability</li> <li>•Gaps in care</li> </ul>	<b>Increase</b> <ul style="list-style-type: none"> <li>•Adherence</li> <li>•Productivity</li> <li>•Retention</li> </ul>	ROI Impact on trend Impact on culture

Grossmeier et al. 2010, The Art of Health Promotion

## New Strategies

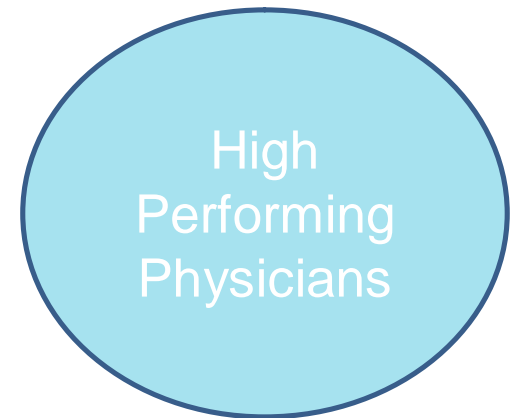
- Getting sickest people to the appropriate level of care at the right time
  - Use of predictive models to identify eligible patients
  - Use of quality and efficiency models to identify providers
- Creating incentives to get individuals to change providers & have providers accept them

# Boeing's Intensive Outpatient Care Program (IOCP)

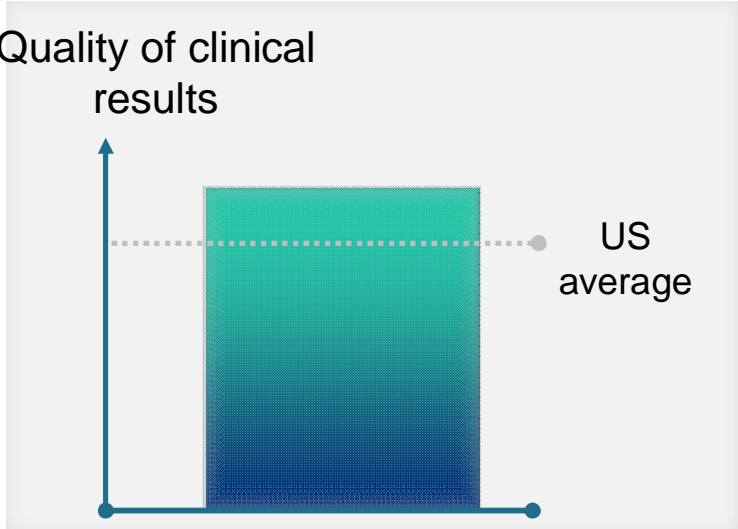


## Assess Methods to Identify Potential Physician Partners

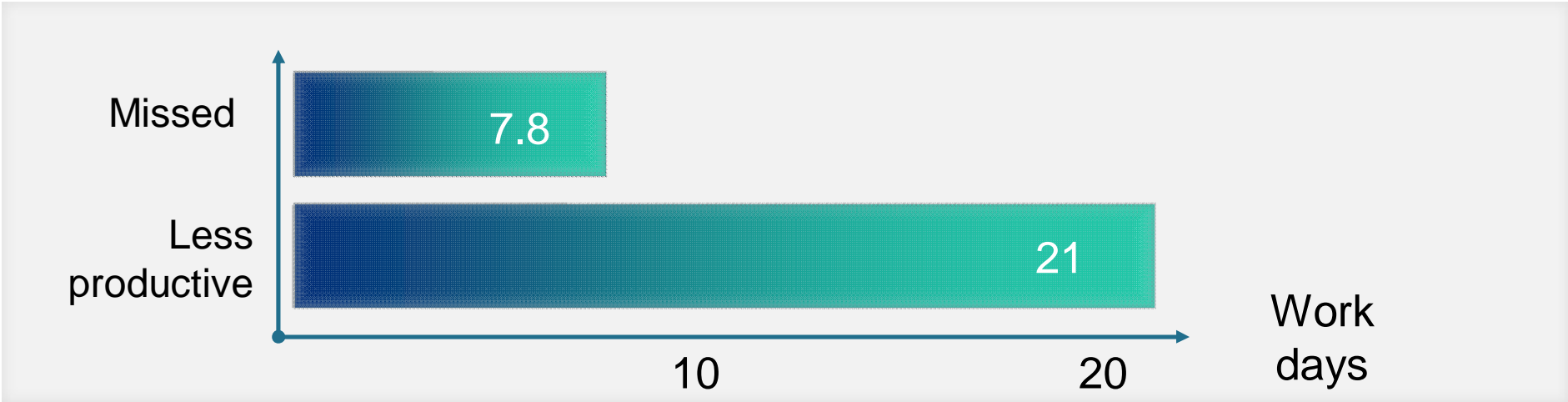
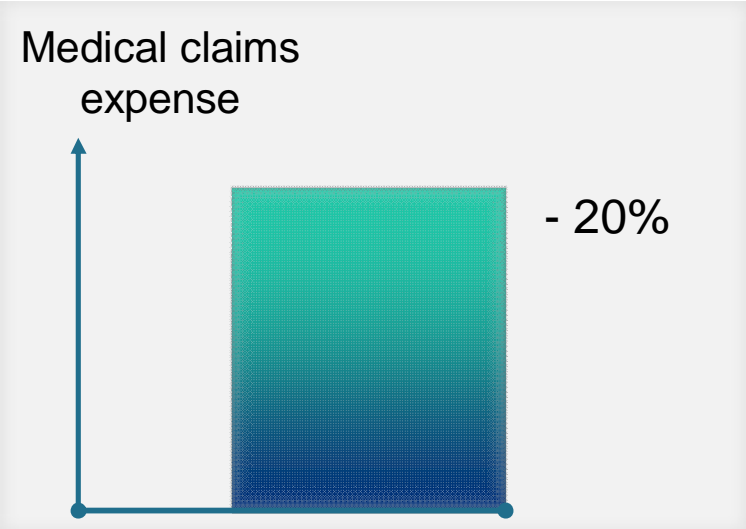
- Assess available methods for identifying high performing physicians
  - Predictive modeling by vendor partner
  - Evaluate/select likely predictive modeling approach
  - Assess data needs & availability
- Establish criteria for accepting physician practices
  - Practice experienced in medical home model and proven reduction in costs
    - Top ranked physicians, both cost and quality
    - Close support from caring nurse
  - Willing to accept upside and downside risk
  - Willing to closely partner with Boeing & other large employers
- Identify target physicians (Implementation)
- Contract with physicians (Implementation)



# IOCP Results



**IOCP**





# Getting Improved Health Outcomes at Lower Costs

No

- Large delivery system scale — just a few good personal care teams

No

- Costly IT
- Many years of waiting for results

No

- Reduction in provider fees

Yes

- Leadership of at least one large payer
- Consortium of medium employers/Trusts

Yes

- Robust provider incentives

Yes

- Shared savings model

# Expanding the Model

- Need to have several employers in one location to achieve a critical mass
- Negotiate with carriers
- Communicate to employees
- Partner with physicians

# Travel Surgery

- Overseas
  - People coming here for care at COE
  - People traveling to other countries for lower costs
- Domestic
  - Creating a model for costs and quality
  - Elective treatments



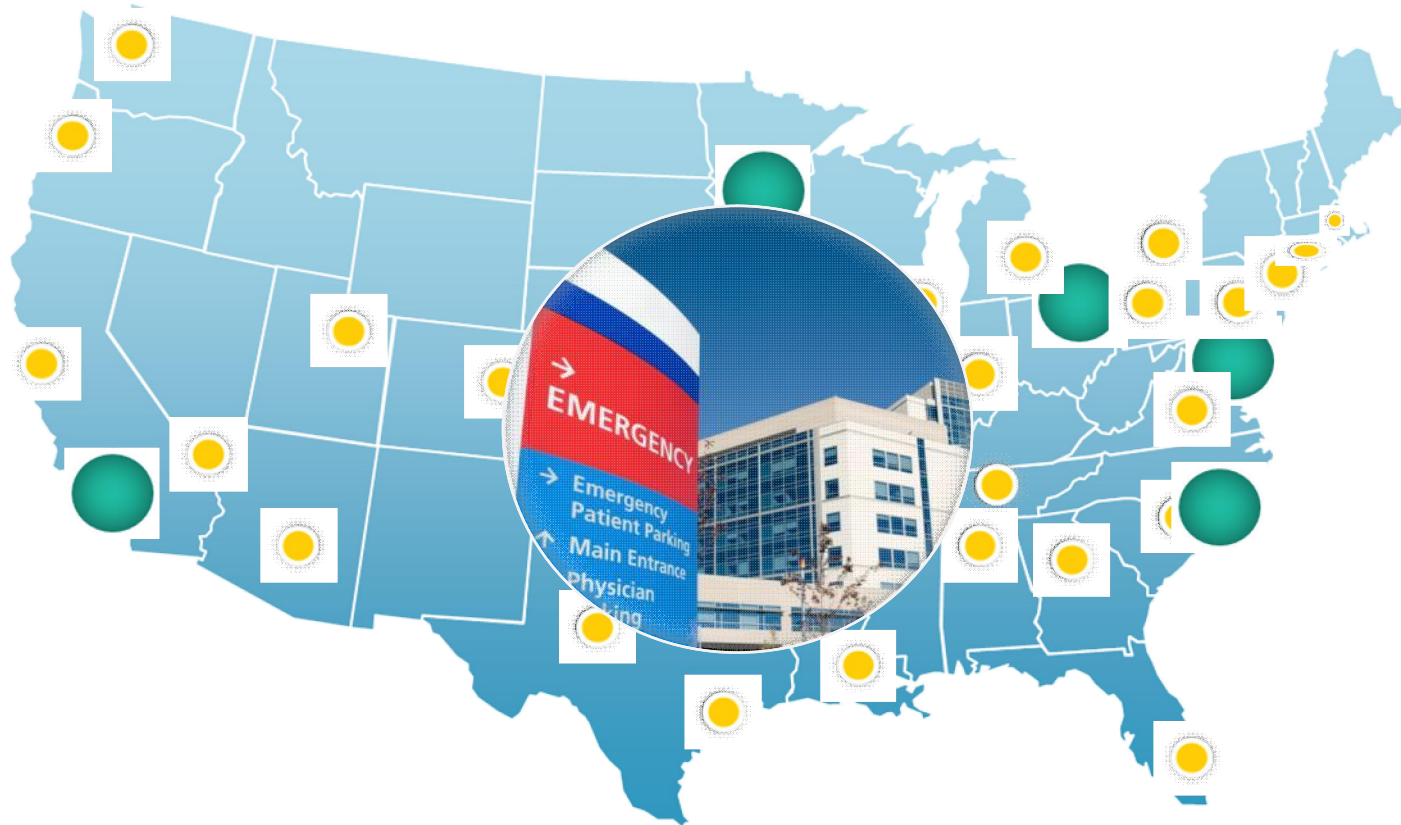
# Lowe's Travel Surgery Program

- Designed as part of Lowe's initiative to specifically address members with high risk and high cost health problems
  - The 20% of members driving 85% of health care costs
- Evaluated three travel surgery options
  1. Out of country surgery—good quality with greatest cost reduction
  2. US travel surgery networks—good quality with some cost reduction
  3. Single center of excellence—highest possible quality, cost neutral
- Selected Option 3—Single Center of Excellence
  - Provide members with best possible chance of excellent outcomes for high risk surgical procedures

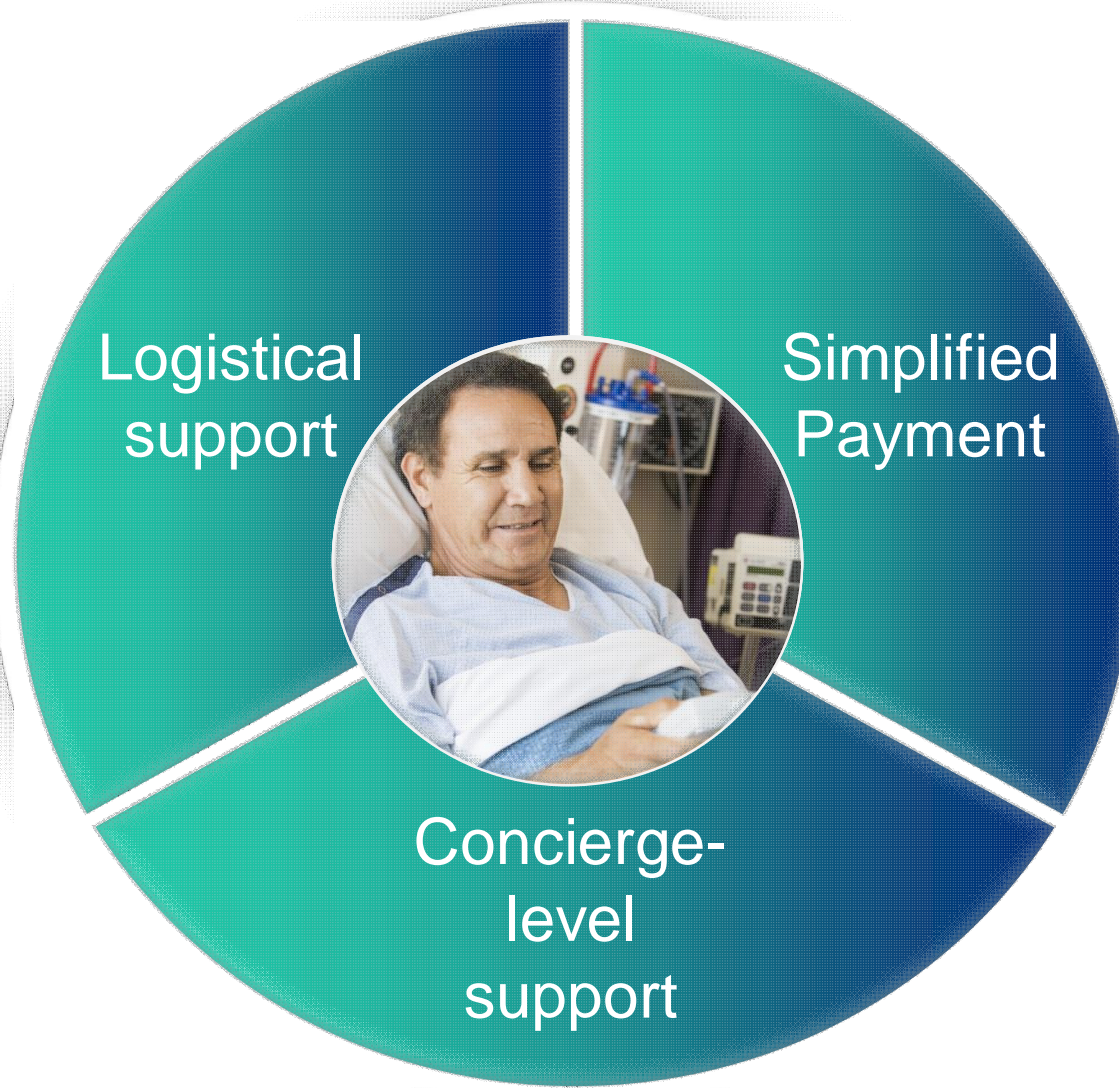
## How the Lowe's model works

- Identify elective procedures for high risk individuals
- Contract with facilities to get a case rate prior to sending employees to the center
- Create travel incentive that allows employees to travel to center with no out of pocket expenses
- Monitor progress and outcomes

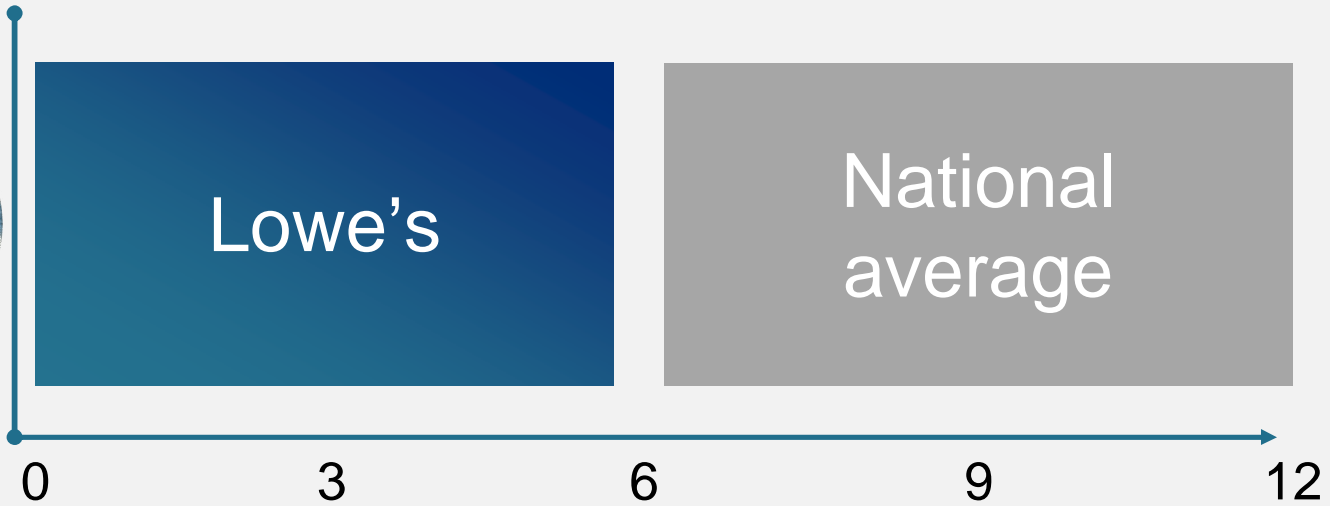
# Centers of Excellence



# Centers of Excellence



# Centers of Excellence



Time take to return to work (weeks)



## Expanding the model



- Who will participate
- What types of procedures to include
- When to launch
- Where to provide the care
- How to communicate with providers & patients

## Other new initiatives that employers are researching

- Reference based pricing
- Accountable care organizations (ACOs)
- Increased use
  - Onsite clinics
  - Video coaching models
  - 24/7 MD lines



## Wrapping it up

- What size employer is optimal
- Best practices for incentives
- Adults learn differently from children
- Need to monitor progress



## Size does not matter

- All employers want to keep their employees healthy and productive
- Vendors focus on larger employers as target market
- However, smaller employers have similar issues and should not be ignored

A small business with committed leadership, effective program design, and proper use of incentives was able to attain a high level of participation in a comprehensive wellness program.

(Merrill, et al. *JOEM*, February 2011)

# Guiding principles and best practices for incentives

- **Actionable**
  - Incentives encourage participants to take action to reduce health risks and improve consumer behaviors to control costs.
  - Incentives should result in meaningful actions and rewards.
- **Timely**
  - Incentive rewards should be immediate to maximize participation and perceived value.
- **Valued**
  - The incentive itself needs to be valued by the targeted participant to result in action.
- **Accessible**
  - All employees are provided equal opportunities to receive the incentive (if applicable).
- **Trackable**
  - Incentive awards must be tracked on an individual basis.
- **Simple**
  - Incentive programs should not cause confusion for employees or HR/benefits staff.
  - Administration of incentives should be simple and cost-effective.
- **Return on investment (ROI)**
  - Incentive programs need to provide ROI over time.

# Apply adult learning principles to incentive communications

Adults ...	Methods
<b>Must overcome inertia</b>	<ul style="list-style-type: none"> <li>• Provide a “big bang,” which can occur only once.</li> </ul>
<b>Are personal learners</b>	<ul style="list-style-type: none"> <li>• Use door-to-door canvassing, campaign rallies and live voices on the phone.</li> </ul>
<b>Have different learning preferences</b>	<ul style="list-style-type: none"> <li>• Involve a variety of media.</li> <li>• Administer web-based learning style assessments.</li> </ul>
<b>Are motivated by self-interest</b>	<ul style="list-style-type: none"> <li>• Personalize materials.</li> <li>• Emphasize how behavioral change will make them smarter, healthier and wealthier.</li> </ul>
<b>Want the straight story and resent condescension</b>	<ul style="list-style-type: none"> <li>• Don’t sugar-coat the message. Provide the rationale for change and what’s in it for both the employer and employee.</li> <li>• Direct employees to the most objective and reliable sources of information.</li> <li>• Provide examples of winners and those who may pay more if they stay with the status quo.</li> </ul>
<b>Follow leaders, crowds and early adopters</b>	<ul style="list-style-type: none"> <li>• Get executives and senior sponsors to take ownership of the program before aiming it at the masses.</li> </ul>

## Don't stop evaluating the process & tools

- Employers are continuing to use the output of predictive models to establish, monitor, measure their health care activities & expenditures
- Employers are relying on predictive models to increase participation and shift care to appropriate places of service
- Results have demonstrated
  - Lower costs
  - Decreased absenteeism & presenteeism
  - Increased retention & satisfaction



Humans, even  
when we know what  
is best, sometimes  
lack self-control.

(R. Thaler, <http://www.econlib.org/library/Enc/BehavioralEconomics.html>)



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