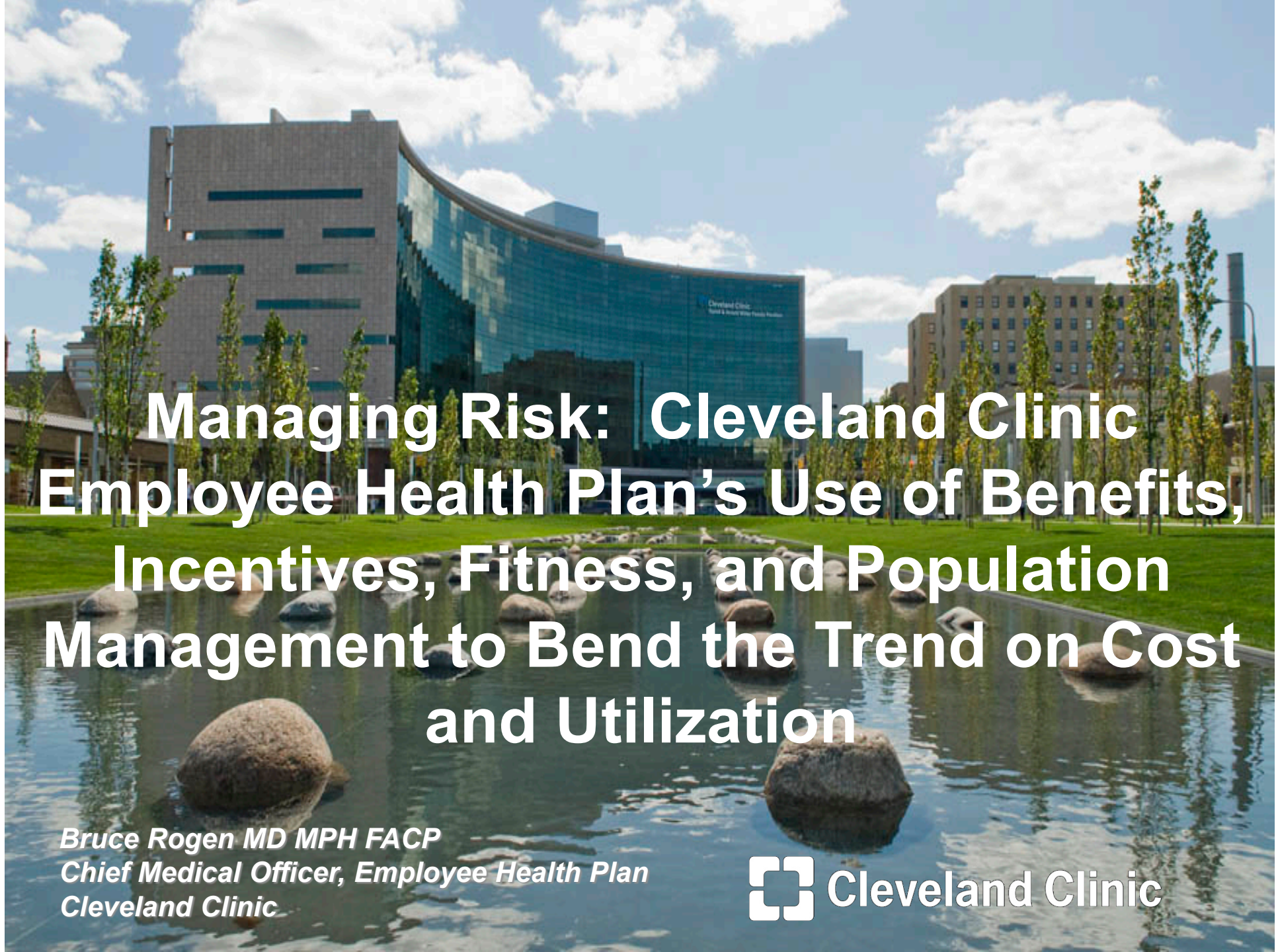


Managing Risk: Cleveland Clinic Employee Health Plan's Use of Benefits, Incentives, Fitness, and Population Management to Bend the Trend on Cost and Utilization

Bruce Rogen MD MPH FACP
Chief Medical Officer, Employee Health Plan
Cleveland Clinic

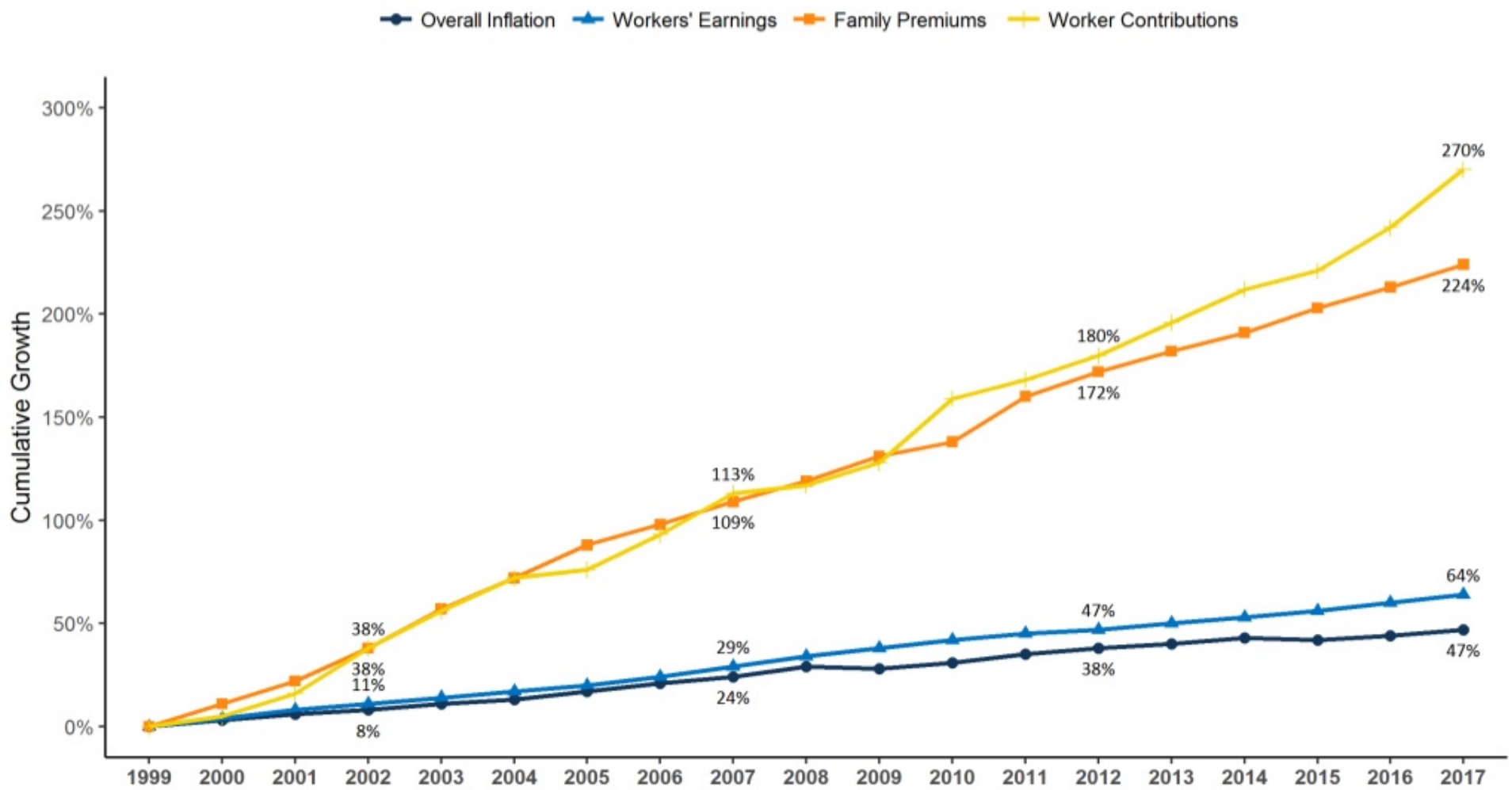
Cleveland Clinic

Cleveland Clinic Key Facts

- Not-for-profit multi-specialty group practice
- 4,200 employed physicians & 2,807 APP's
- Over 1,000 affiliated physicians (Quality Alliance)
- 16,590 employed nurses
- 66,000 employees nationally, largest employer in Ohio
- Physician leadership
- Tertiary care hospital, 11 community hospitals, 19 FHC's
- Statistics
  - ✓Clinical visits: 7.9 million
  - ✓Surgical cases: 245,000
  - ✓Admissions: 295,000
  - ✓Beds system wide: 5,895 (1,398 main campus)
  - ✓Revenue: $ 9.8 billion
  - ✓Self-Insured: Group/WC/Disability

Figure 5

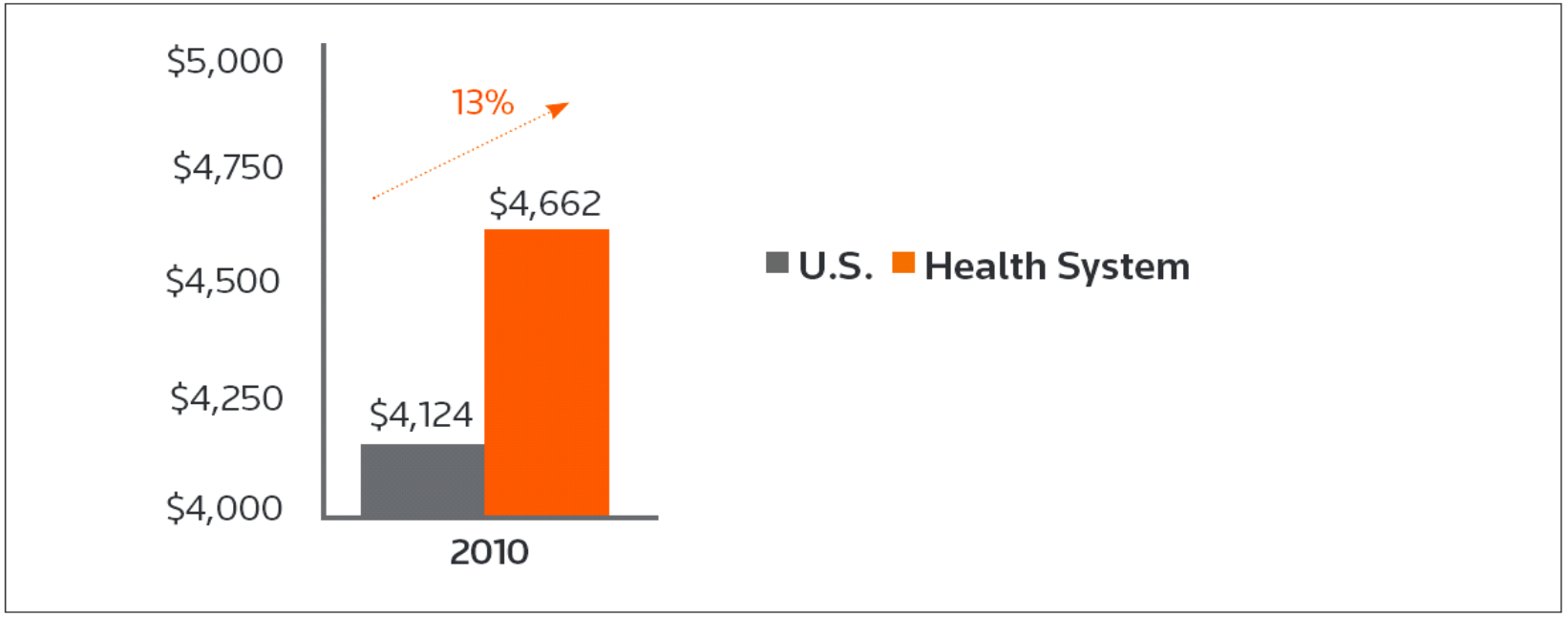
Cumulative Increases in Family Premiums, Worker Contributions to Premiums, Inflation, and Workers' Earnings, 1999-2017



SOURCE: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2017. Bureau of Labor Statistics, Consumer Price Index, U.S. City Average of Annual Inflation (April to April), 1999-2017; Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey, 1999-2017 (April to April).

Hospital System Employees Cost More!

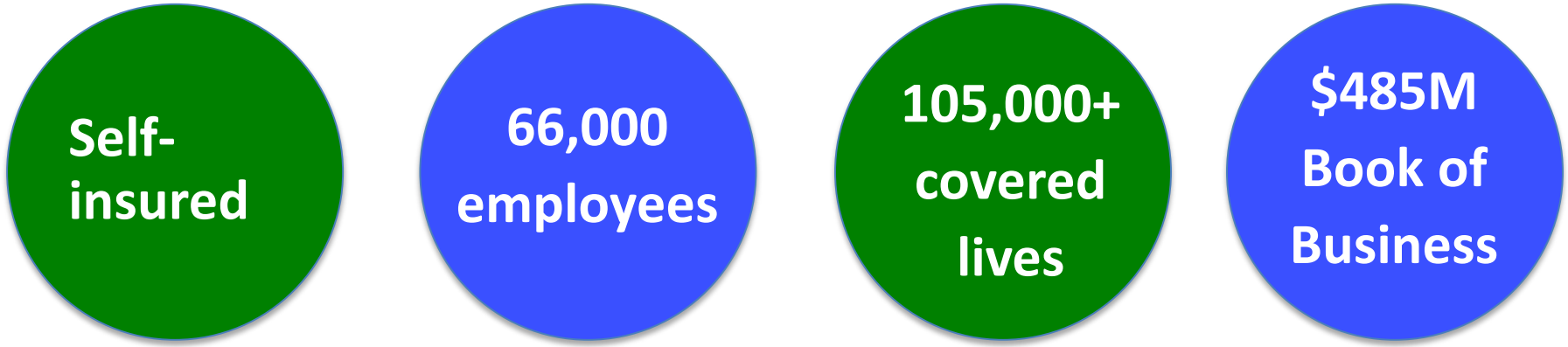
FIGURE 1: AVERAGE 2010 HEALTHCARE COSTS FOR HOSPITAL EMPLOYEES AND THEIR DEPENDENTS



The average annual cost of healthcare for hospital employees and their dependents in 2010 was $4,662 — 13 percent greater than the average cost for U.S. workers. Costs for employees only were 10 percent higher than average.

Thompson Reuters Research Brief, August 2011

Employee Health Plan & Mission



"To ensure that our employees receive high quality evidence-driven health care that includes both prevention and treatment at a sustainable cost to the employee and the organization."

Employee Health Challenges

- Build a Culture of Wellness
- Support Healthy Life Style Choices
- Promote Personal Responsibility
- Use Accurate Objective Data
- Control Costs

Employee Health Plan "Total Care"

- Medical, Pharmacy, Behavioral Health, Disease Management, and Fitness Programs
- Programs include chronic disease management, rare disease management, case management, pharmacy management, and utilization management
- Chronic disease management includes hypertension, diabetes, hyperlipidemia, asthma, tobacco cessation, weight management, CHF, CKD, COPD, depression, and migraine
- Weight management coordinated with fitness programs using wearable technology, collecting objective data, has become the keystone of our programs for those without a chronic disease: prevention is the start

Evolution of Total Care

2005-2007… Building the foundation

- Banning smoking on Cleveland Clinic property
- Not hiring smokers
  - ✓ All new hires undergo cotinine testing.
  - ✓ Positive test results…offer rescinded; free treatment; reapply in 90 days
  - ✓ Existing employees "grandfathered" in
  - ✓ Not legal in some states
- Banning transfats
- Beginning to integrate Fitness into Health Plan

2008-2009… Building the foundation

- Free fitness, weight loss, and smoking cessation programs to employees
- $100 rewards
- Banning candy and soft drinks (except diet)

Weight Watchers®

Evolution of Total Care

2010 - 2011… Expanding the scope

- Healthy Choice Premium Rebate
- Focus on chronic disease management of 6 key diseases
- Expand access to all programs for EHP dependents
- Physical Capability Evaluation for new hires in certain job categories

2012 – 2013… Premium Differential

- Levels : Gold, Silver, Bronze (or “base rate”)
- Premium based on
  - ✓ Historical Participation (15% discount)
  - ✓ Goal Attainment (15% discount)

Evolution of Total Care

2014 – 2015… adding spouses, wearable tech

- Premium Discount Levels : Diamond, Platinum, Gold, Silver, Bronze (or “base rate”)
- Premium based on
  - ✓ Historical Participation of employee and spouse each
  - ✓ Goal Attainment by employee and spouse each
- For the healthy and for weight management, wearable tech device (Fitbit, Garmin, and many others)

2016 – Now… online portal

- Online portal with employee and spouse separate logins that informs and educates on entire Healthy Choice program
- Portal to track medical conditions, program enrollments, personal goals, and device downloads with steps and exercise minutes

Healthy Choice Population Management Program: Incentives Focusing on 6 Chronic Diseases, and the "healthy"

Asthma
Diabetes
Hypertension
Hyperlipidemia
Smoking
Obesity

Those with none of the above- "The Healthy"

Healthy Choice Program – "The Guts"

- VOLUNTARY PROGRAM
- Health Visit Form with objective data (not a Health Risk Assessment with subjective data) that is filled out by provider and updated every 2 years, if there is insufficient data from EMR/claims
- Communication to join online portal which informs them of:
  - ✓ EMR/claims/HVF data indicates chronic condition(s)- portal will invite to join coordination program(s)
  - ✓ Data indicates no chronic condition- portal will invite to obtaining fitness tracking device and link to online program
  - ✓ Data incomplete- portal will instruct on submitting HVF
- Must participate each year to maintain premium discount status for the following year

Healthy Choice Program – "The Guts"

- EHP combines claims and clinical data and HVF's together to create disease registry, then adds fitness data from devices for those without a chronic condition.
- This data populated registries that programs and care coordinators use to manage members
- The registries are risk stratified so programs and coordinators can adjust and modify program based on risk
- Program related incentives include:
  - ✓ Premium discounts
  - ✓ Office Co-payments reimbursed
  - ✓ DME Co-Insurance reimbursed
  - ✓ Pharmacy Co-Insurance reimbursed

Programs That Help Members

Coordinated Care Programs (motivational interviewing and stages of readiness to change):

- Weight Management
- Diabetes
- Hypertension
- High Cholesterol
- Smoking Cessation
- Asthma

Physical Activity and Diet:

- Cleveland Clinic owned fitness centers
- Weight Watchers (50% subsidy)
- Approved weight loss programs
- Online Healthy Choice portal linked to device

Care Coordination Programs

- Risk stratification with program modification so that program requirements (phone contacts, follow up, referrals to specialists and programs) vary based on risk level.
- Review of lab and test outcomes and results in addition to whether they were done. Modification of medications and diet and lifestyle recommendations to alter outcomes in the future.
- Use of EPIC electronic medical record to communicate with physicians and providers and give updates, order labs and tests (pended), and inform.
- Use of phone and fax to communicate with community providers who are not on EPIC for updates, labs and tests, and inform.
- Access claims, clinical, and wellness databases to get information on patient's activities, incentives, and appeals.
- Health coaching component to provide support and encouragement.

Risk Stratification Shapes Management Program

High Risk Members	Medium Risk Members	Low Risk Members
• **Call once a week until compliant or when presents lower acuity** • **Call every month once compliant or when presents lower acuity** • **Consultation with medical director** • **Referral to dietitian or class** • **Referral to endocrinologist** • **Appointment with MD within one month of starting program** • **Needs assessment with case management** • **Monthly medication review until compliant** • **Quarterly medication review once compliant**	• **Call every month until compliant** • **Quarterly call once compliant** • **Referrals as needed** • **Appointment with MD three months after joining program** • **Quarterly medication review until compliant** • **Medication review twice a year once compliant**	• **In compliance or monitoring phase of program for one year** • **Two calls per year** • **Quarterly mailings** • **Annual medication review**

The concept of “hovering”: the more frequently the member does a behavior, the more frequent coordination contact is needed to alter the behavior

Health Coaching and Behavioral Health Tools

Stages of Readiness to Change and Needs:

- Pre-Contemplative (not consciously thinking about it) needs empathy
- Contemplative (considering it) needs active listening
- Preparation (getting ready to change) needs guiding with information
- Action (making changes) needs providing the tools to succeed
- Maintenance (supportive access) needs all of the above

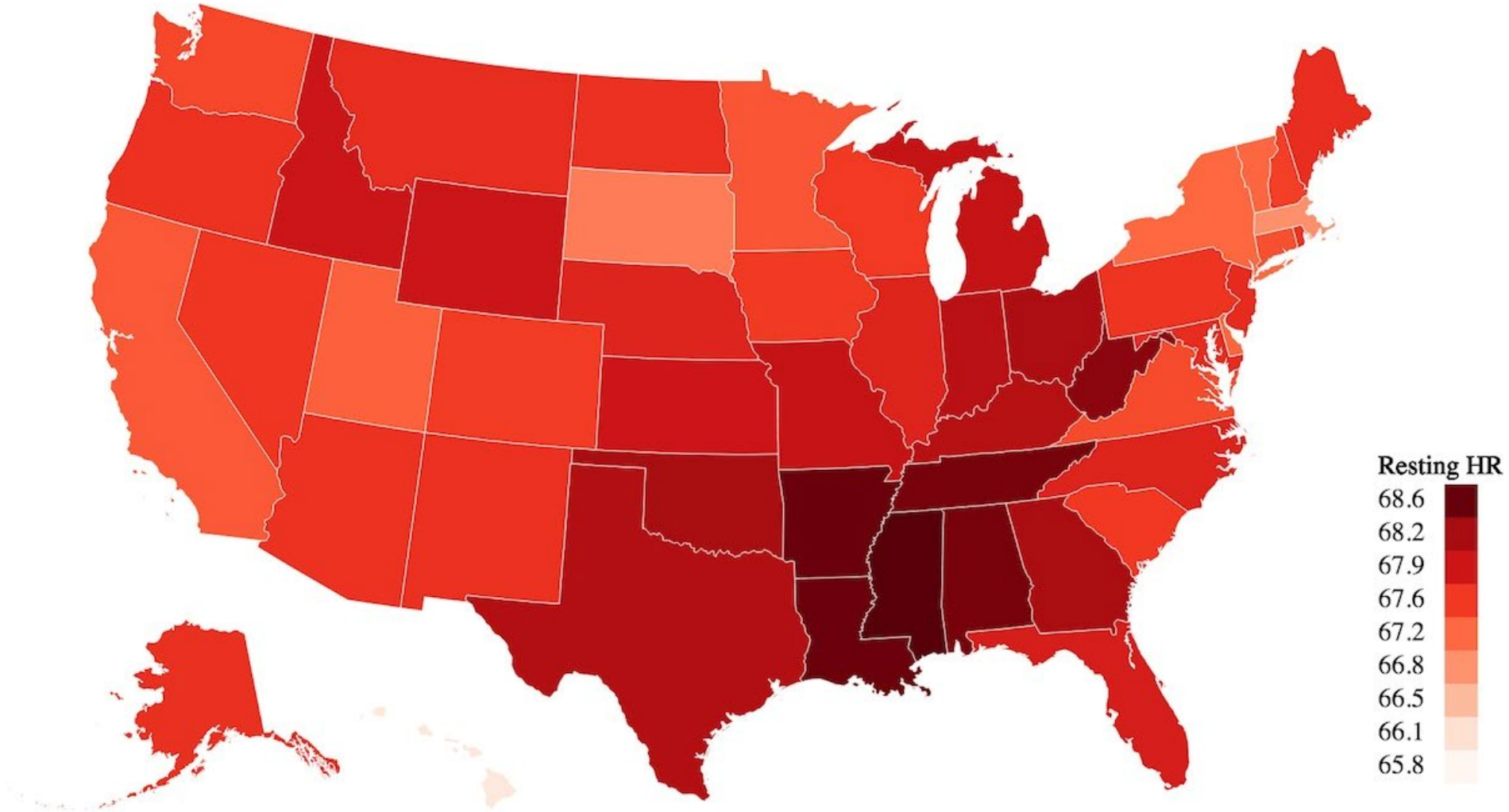
Motivational Interviewing:

- Key is getting someone to talk
- Evidence-based
- Addresses ambivalence to change
- Conversational
- Help people identify readiness, willingness and ability to change
- Helps patient envision better future

Wearable Device Trends

- 3% of adults in US had device in 2012
- 6% by 2014
- 21% in 2016
- 31% in 2017
- 51% in 2018
- Consolidation of manufacturers
- Fitbit and Garmin have majority of consumer market and have entered corporate wellness market

Resting Heart Rates



Fitness Tracker Logistics

- To participate all Healthy Choice members without chronic disease must have and use an approved synchronized device, which downloads into our online tracking program.
- To reach goal, they have to hit target of 150,000 steps a month, or 900 exercise minutes a month, for the six month program period.
- Exceptions are granted on appeal for those who have a limiting disability.

Some Results

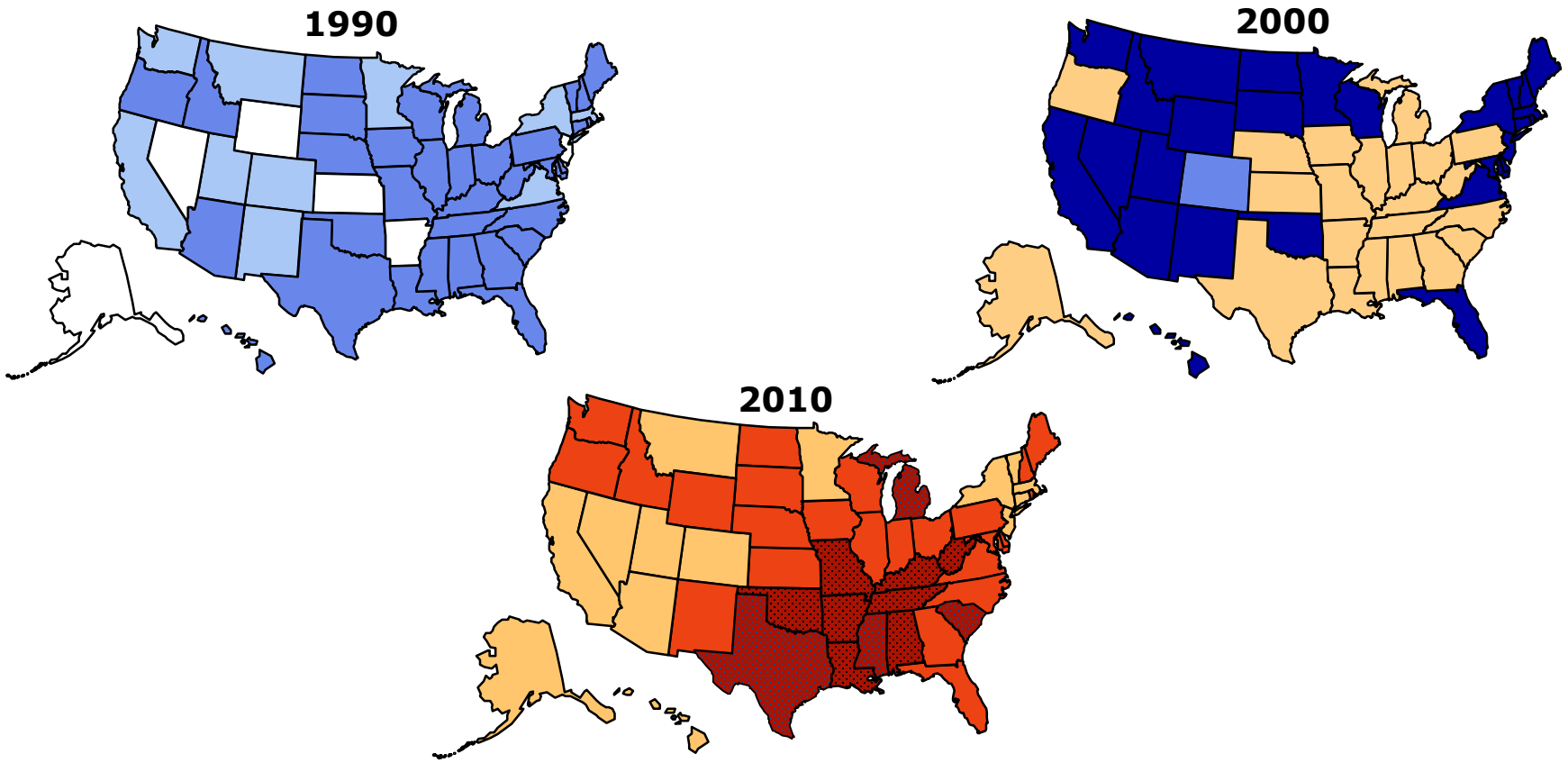
- We have 30,000 devices downloading to date…
- On-line objective data collection shows our members walk to the moon and back over 30 times- every year since we started tracking!


Why Target Obesity???

Obesity Trends* Among U.S. Adults

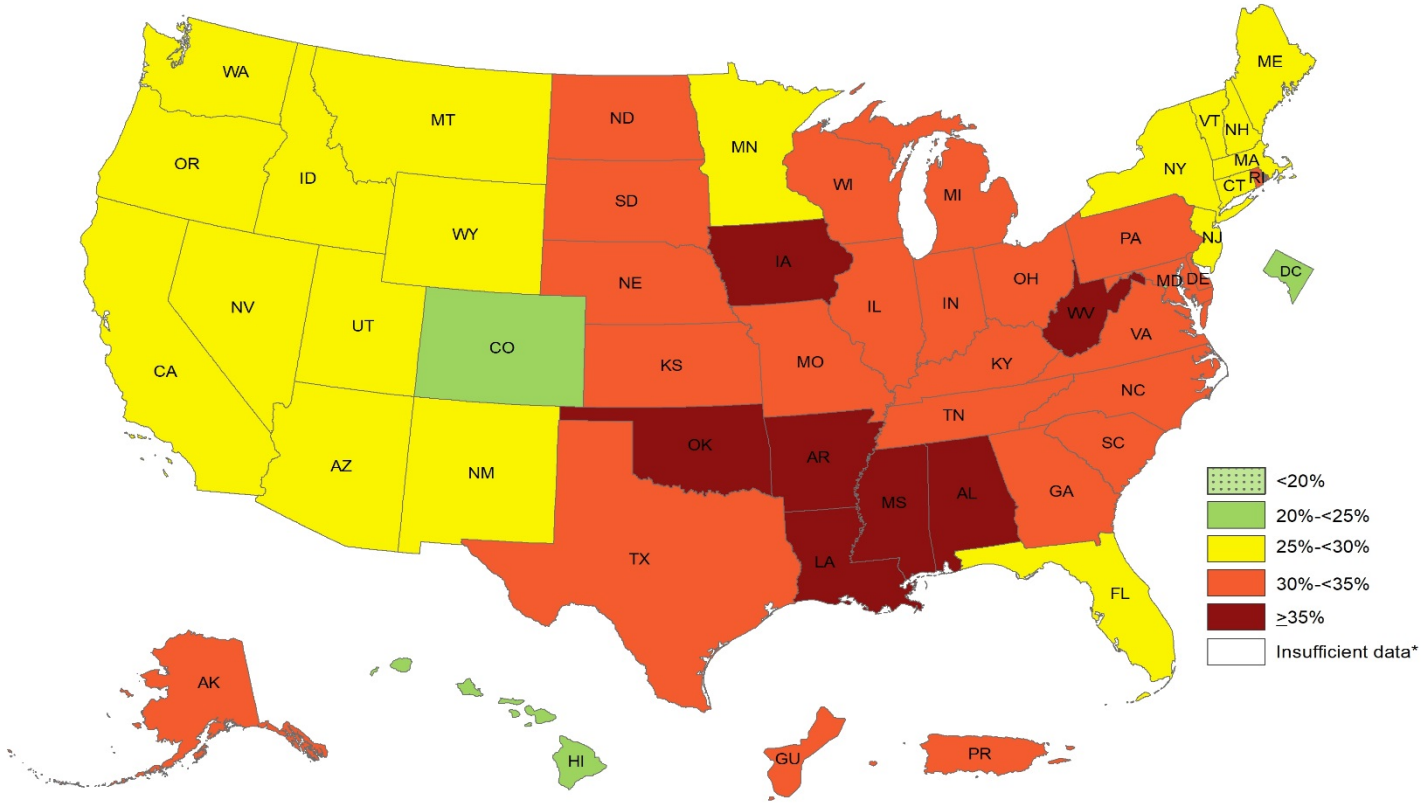
BRFSS, 1990, 2000, 2010

(*BMI ≥30, or about 30 lbs. overweight for 5’4” person)



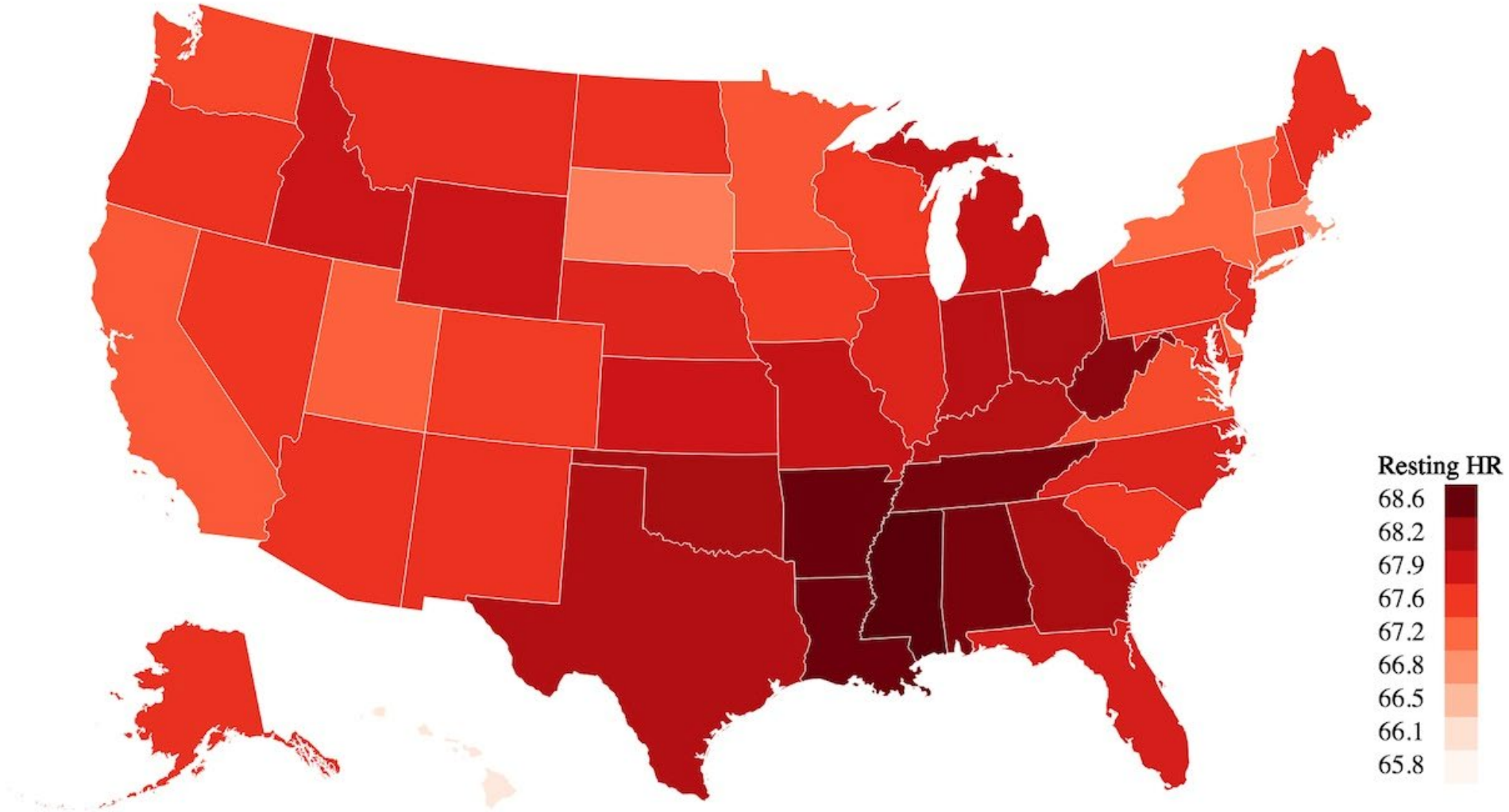
Prevalence of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2017

¶ **Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.**



***Sample size <50 or the relative standard error (dividing the standard error by the prevalence) ≥ 30%.**

Resting Heart Rates



National Economic Costs

- **$663 billion in annual total costs due to obesity in 2012 for the United States (4.3% of GDP).**
- **$316 billion (2010 dollars) in annual direct medical costs due to obesity- 27.5% of all health care expenditures for non-institutionalized persons.**
- **$3,508 more per year in medical costs for an obese person than for someone of healthy weight (2010 dollars).**
- **$5,530 more per year in medical costs for a worker with a BMI above 40. (By comparison, smokers' medical costs were only $1,274 a year higher than nonsmokers', who generally die earlier).**
- **$1,026: annual cost of absenteeism per Level III obese male worker (BMI > 40). $1,262: Annual cost of absenteeism per Level III obese female worker.**

Sources:

*Cawley, John. 2015. "An Economy of Scales: A Selective Review of Obesity's Economic Causes, Consequences, and Solutions." *Journal of Health Economics*, 43:244-268. September, 2015

*McKinsey Global Institute Report. "Overcoming Obesity, An Initial Economic Analysis". November 2014

*Finkelstein EA, DiBonaventura Md, Burgess SM, Hale BC., J Occup Environ Med. 2010 Oct;52(10):971-6. October 2010

Focusing on Weight

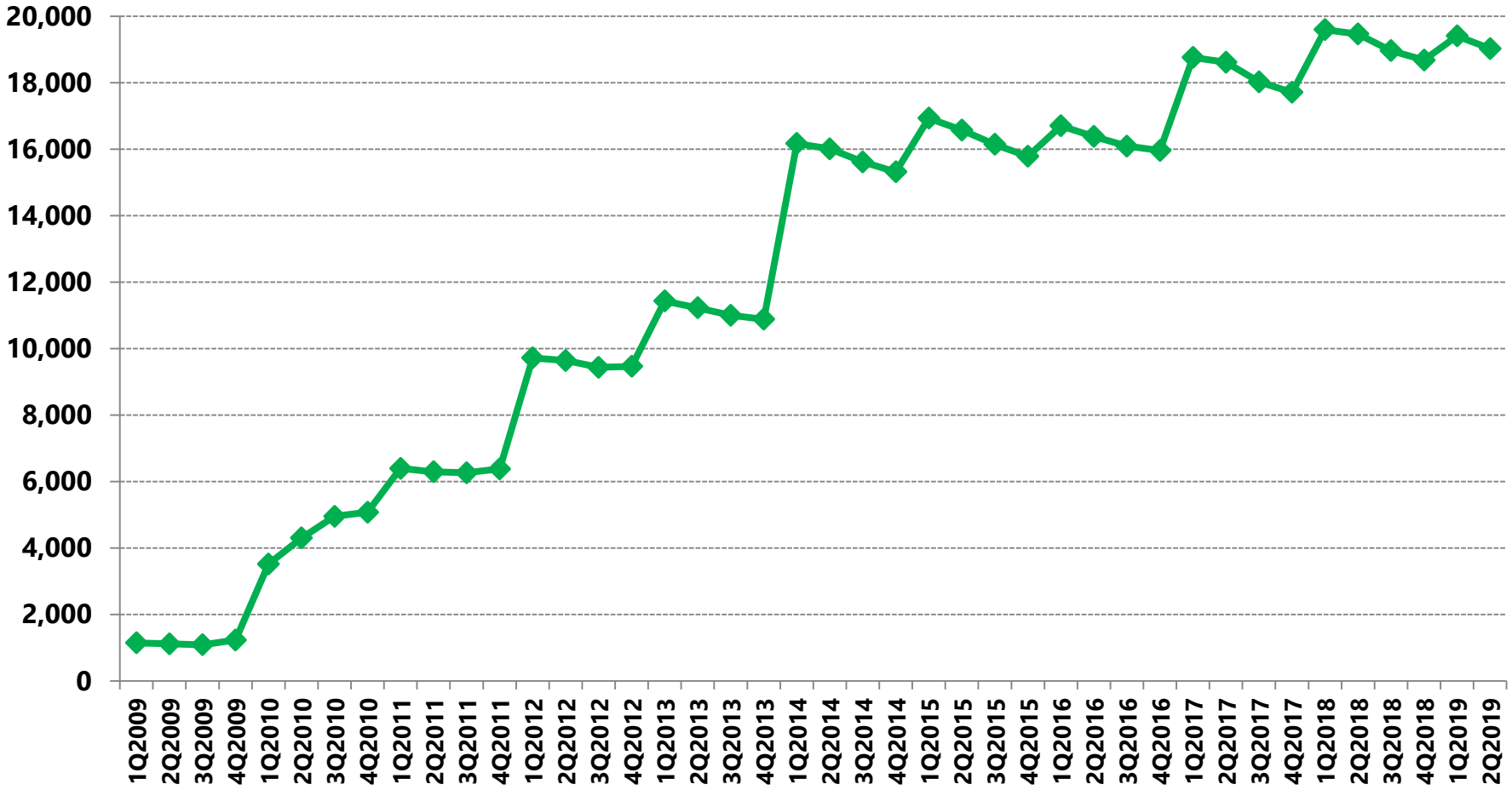
Overweight / obese adults are more likely to develop serious conditions…

	Increased likelihood for:	
	20.0 x	Diabetes
	2.0 x	Heart disease/ stroke
	2.5 x	Hypertension

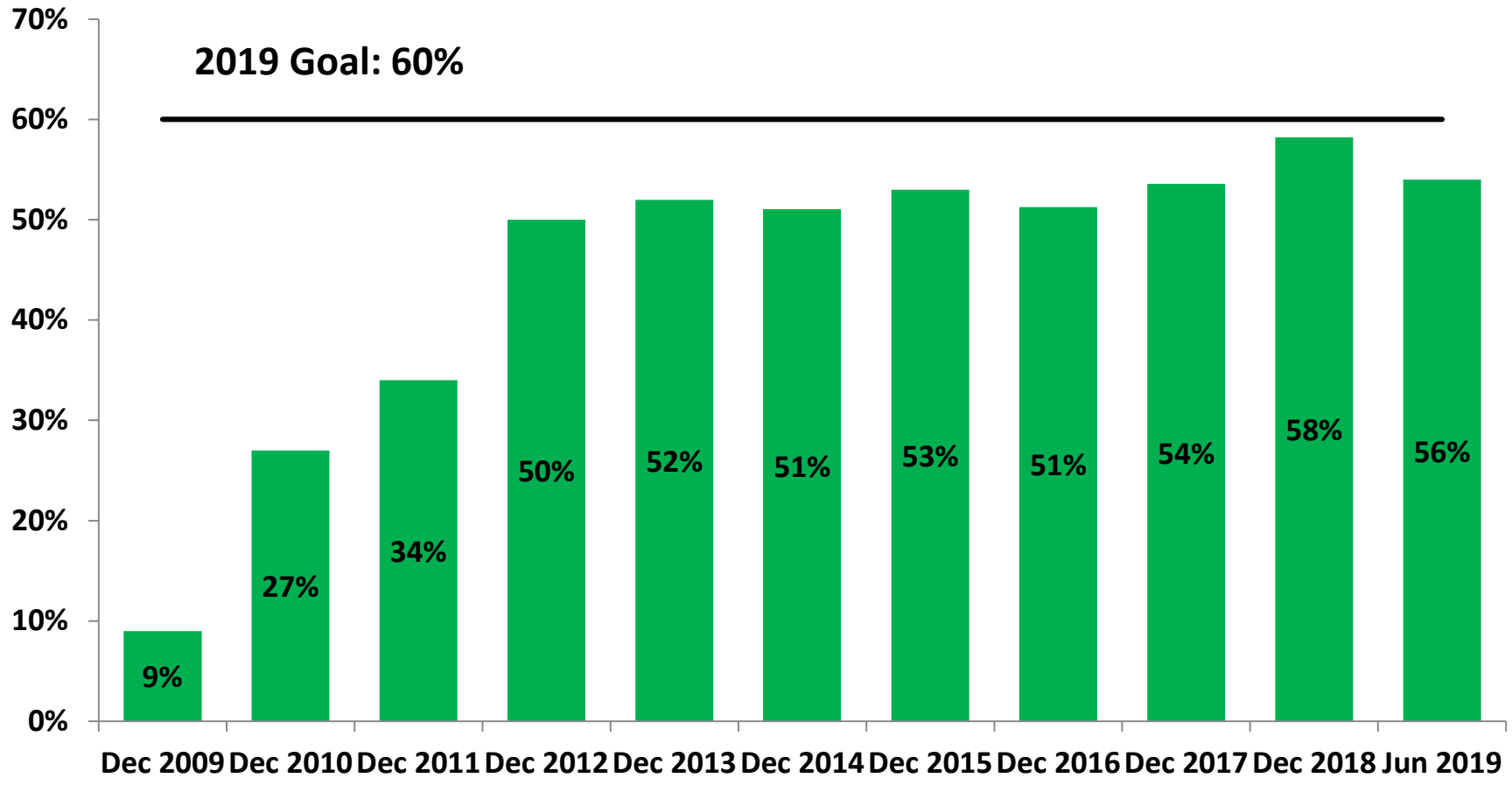
EHP Healthy Choice Results

- Improved participation
- Improved utilization
- Improved quality
- Improved cost trends
- Improved weight control

EHP Care Management Enrollment by Quarter
Unique Employees and Spouses Enrolled in:
Asthma, Diabetes, Hypertension, Hyperlipidemia or Weight Management

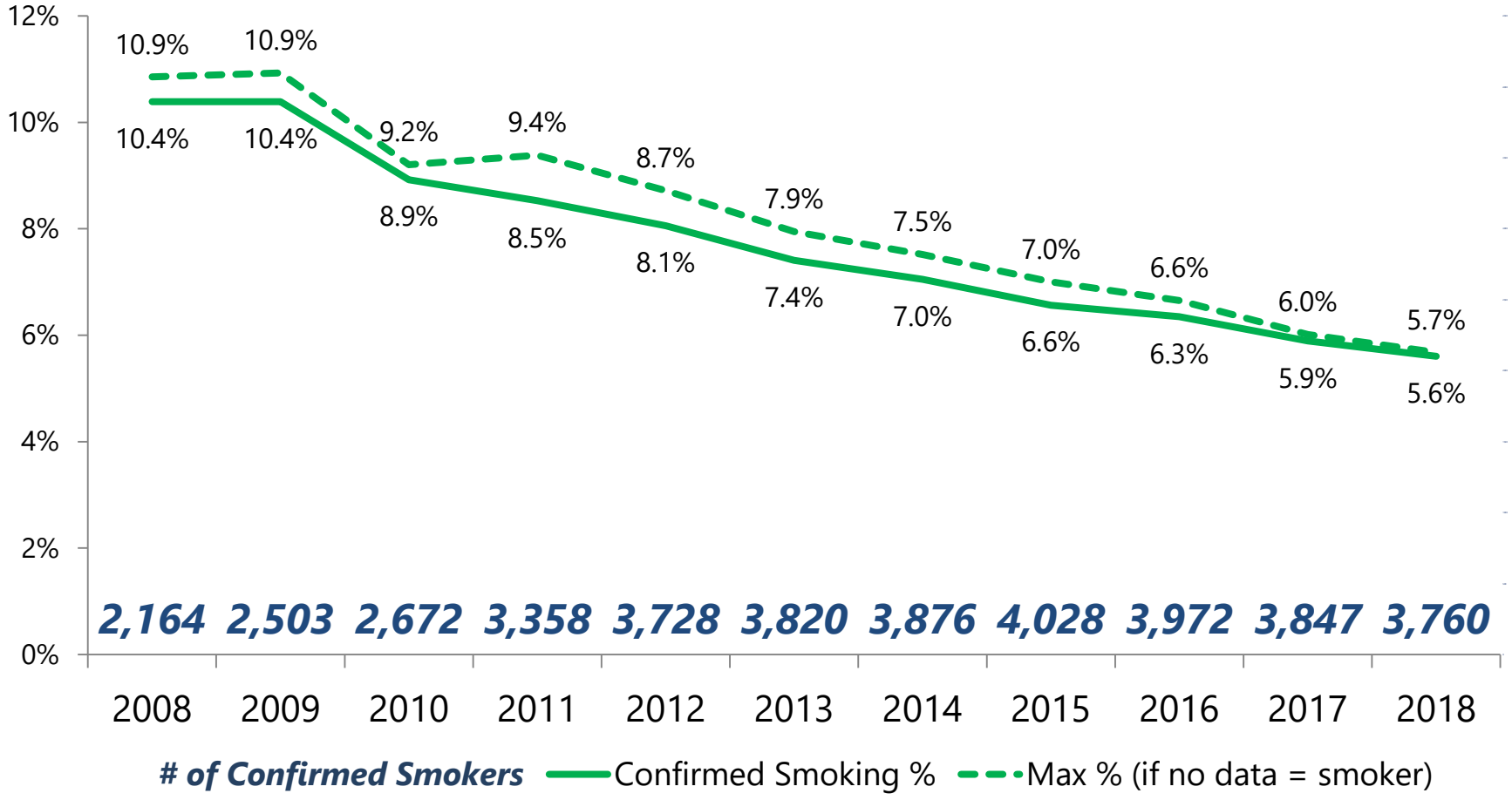


Disease Management Enrollment: EHP Employees (2009-2013) and EHP Employees + Spouses (2014-2019)



Percent of Unique Employees and Spouses with Diabetes, Hypertension, Asthma, Hyperlipidemia or BMI >27 enrolled in Care Management

Estimated Percent of Tobacco Users
EHP Employees and Spouses by Year

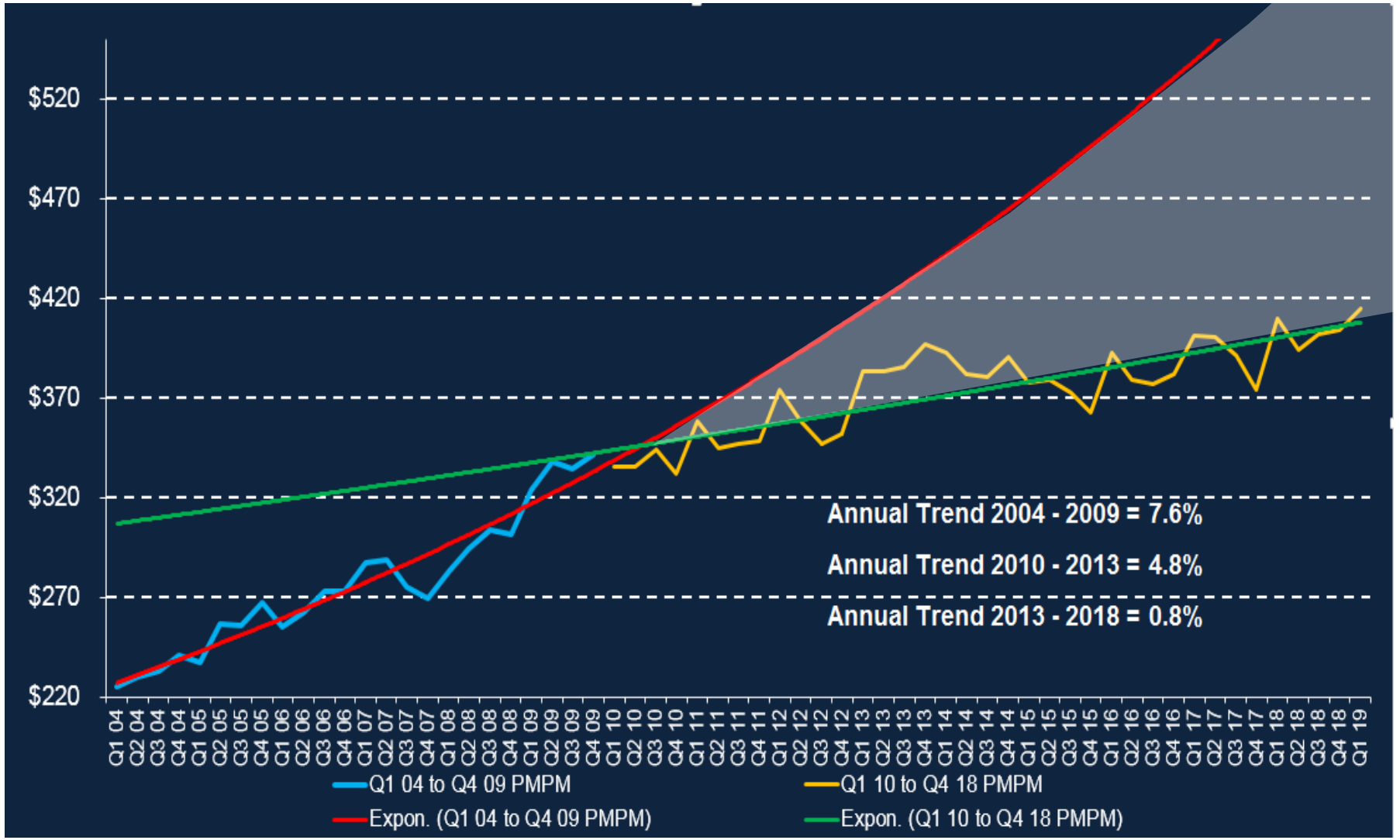


Sources: Enterprise Data Vault (EDV)
"Maximum Percent": Assumes that members "Not Asked" **are** smokers

Our EHP Experience

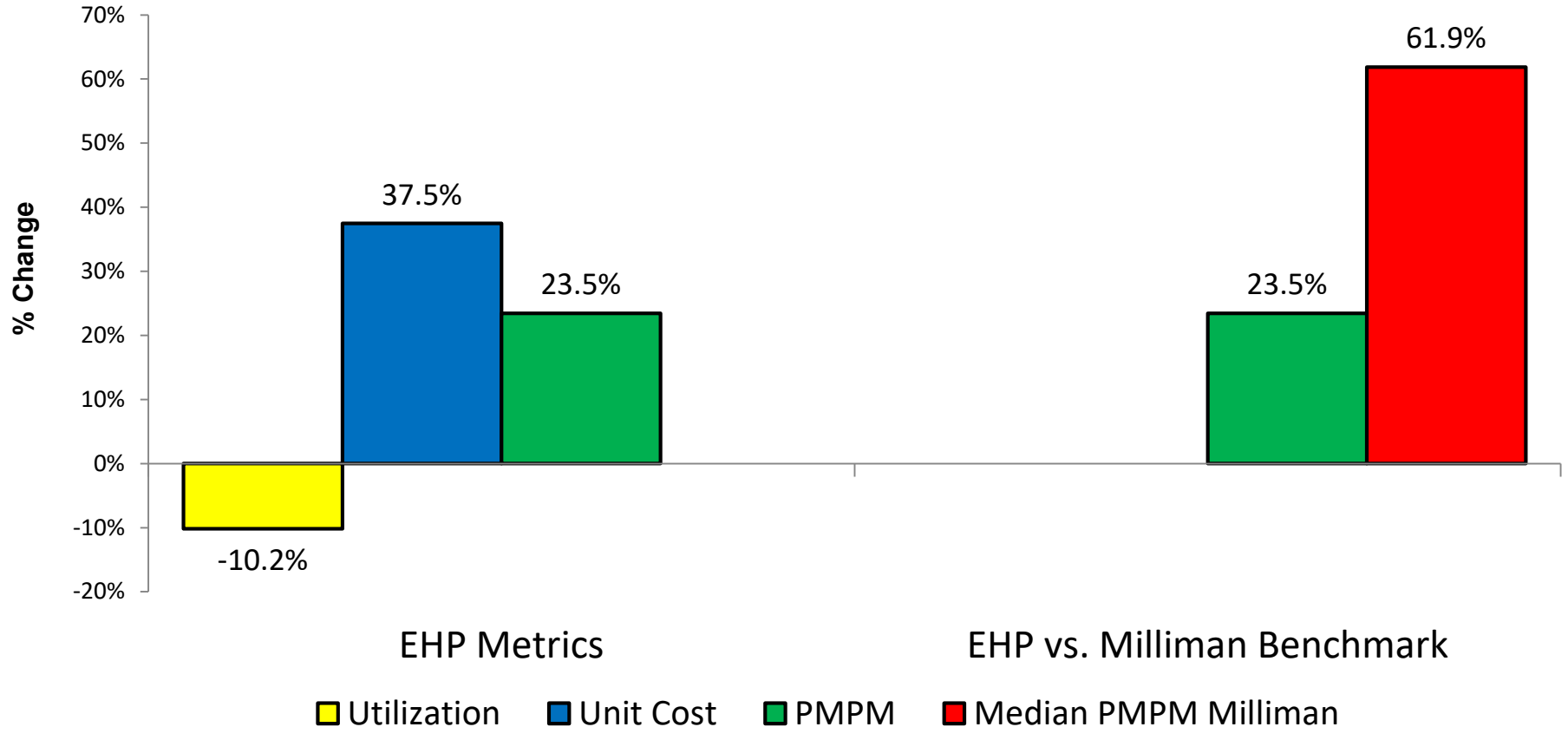
- **Results (clinical measures or ROI):**
- **Overall enrollment across all targeted chronic disease is 58%**
- **Diabetes (2,209 in cohort)**
  - **Inpatient utilization down 18%**
  - **HgbA1c in control percentage (<8%) up 22%**
  - **LDL in control percentage (<100) up 50%**
  - **PMPM total cost of diabetics even at 0%**
  - **PMPM cost of diabetics after removing pharmacy costs (which go up with coordination) down 27%%**
- **Hypertension (2,730 in cohort)**
  - **Inpatient utilization down 20%**
  - **ED utilization down 10%**
  - **Percent compliant on medication up 6%**
  - **PMPM total cost of hypertensives down 12%**
  - **PMPM cost of hypertensives after removing pharmacy costs (which go up with coordination) down 29%**
- **Asthma (2,486 in cohort)**
  - **Inpatient utilization down 21%**
  - **ED utilization down 16%**
  - **Percent compliant on medication up 7%**
  - **PMPM total cost of asthmatics down 8%**
  - **PMPM cost of asthmatics after removing pharmacy costs (which go up with coordination) down 29%**

Trended EHP Paid PMPM by Quarter (Medical and Pharmacy Claims)



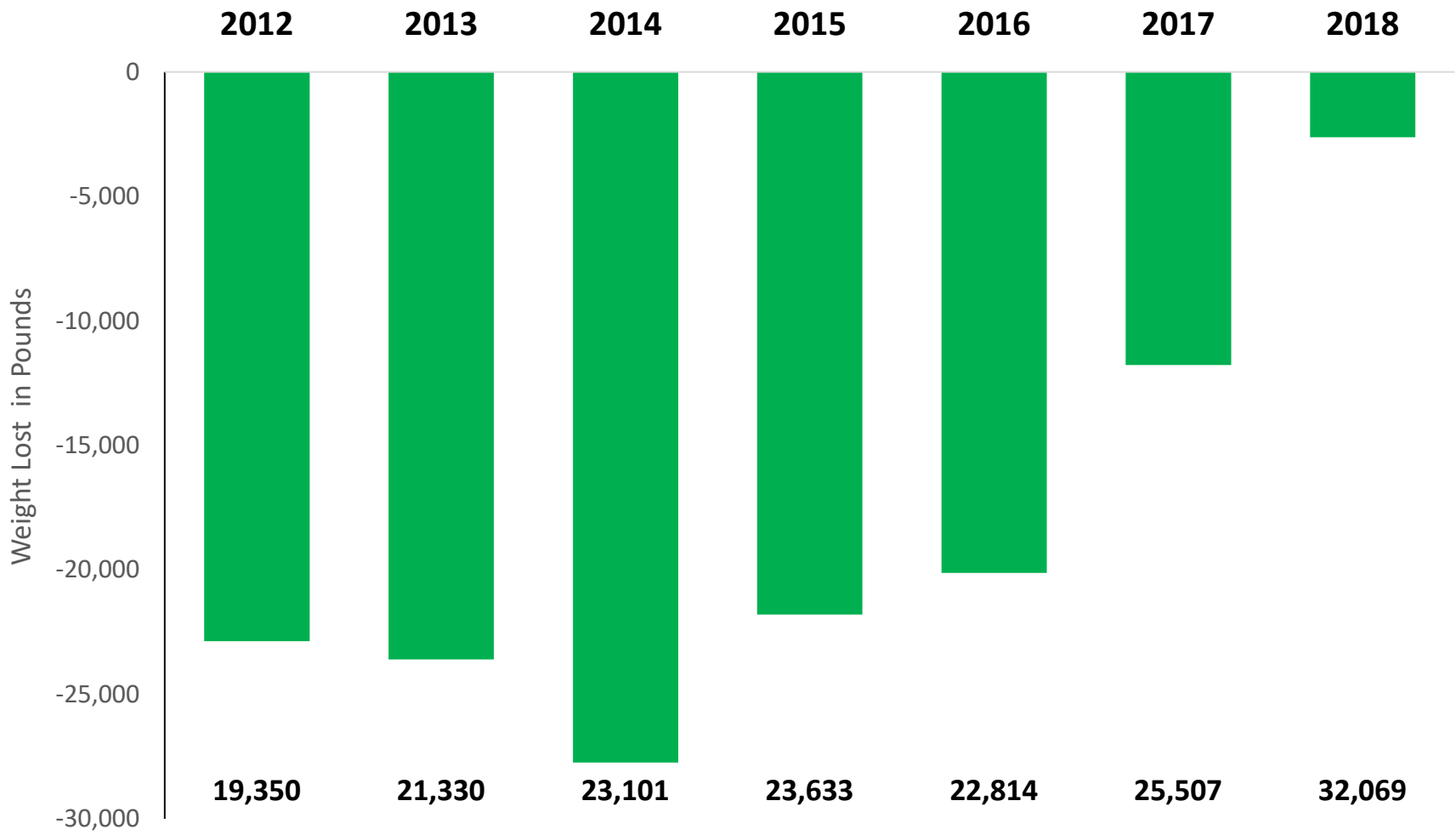
EHP Cleveland, Akron, Florida (2Q2011) and Out of Area (1Q2012); claims paid through 7/31/18; Data Sources: EHP Warehouse, HCTA, EHP Financial Summary
PMPM normalized for ASC Grouper, PBB , 09/01/2010 rate change and rate exception (April 2012 – March 2013)
Includes pharmacy CMS subsidy, rebates, internal savings and error adjustment
PBB = Provider Based Billing ASC = Ambulatory Surgery Center

2009 vs. 2018
Change in Utilization, Cost and PMPM
(Medical and Pharmacy Claims)



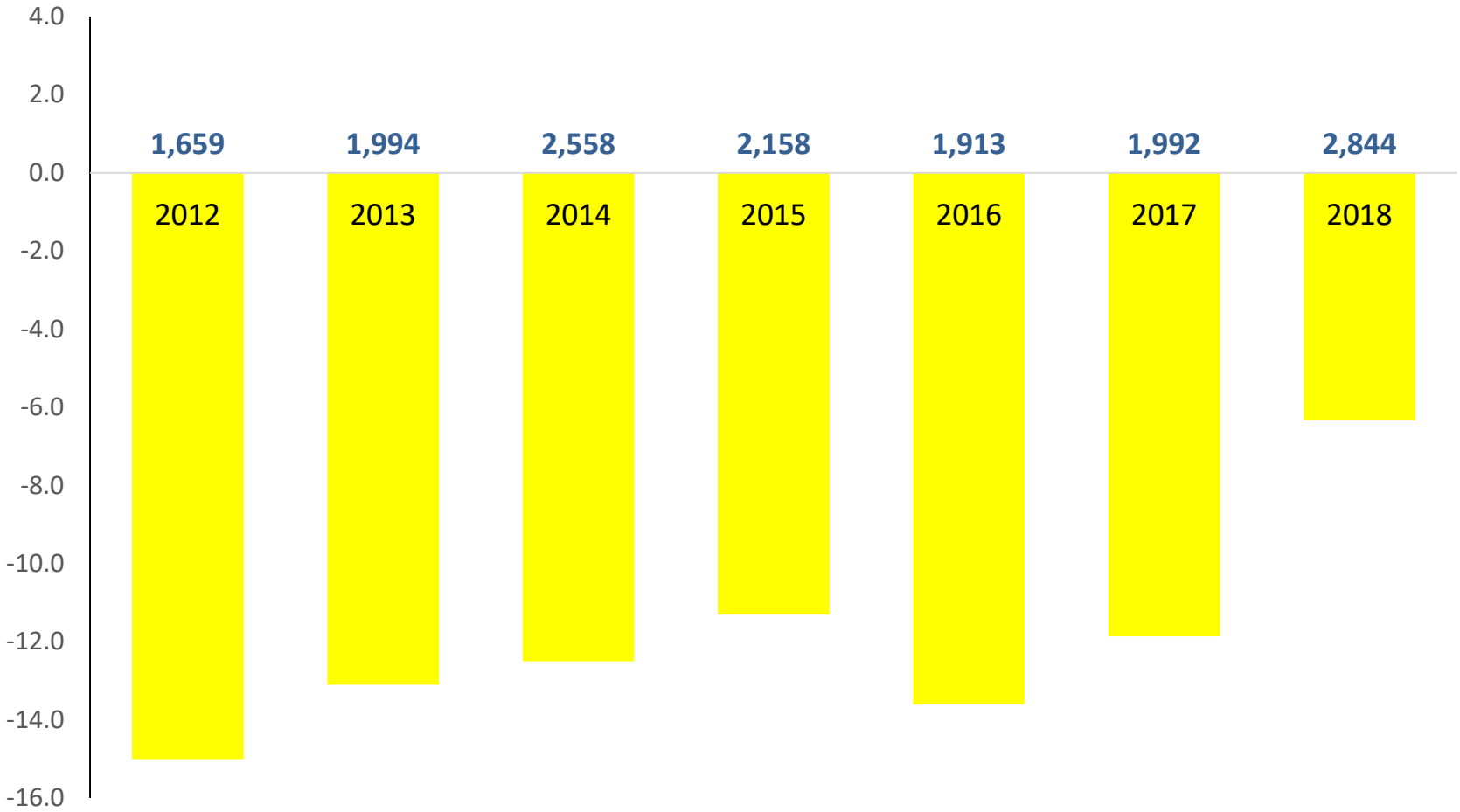
EHP primary members only; claims paid through November, 2018
PMPM normalized for ASC Grouper, PBB and 09/01/2010 rate change
Includes pharmacy CMS subsidy, rebates and internal savings
PBB = Provider Based Billing
ASC = Ambulatory Surgery Center
Milliman median commercial benchmark

Total Weight in Pounds Gained or Lost by EHP Population with BMI > 27



Sources: Wellness database; Weight data from COACH, Epic, Fitness centers
Weight data collected and aggregated with Ingenix Reports
Number of Members in Blue

Average Weight Gained or Lost by EHP Population Meeting the Gold Level Status in Healthy Choice



Sources: Wellness database; Weight data from COACH, Epic, Fitness centers
Weight data collected and aggregated with Ingenix Reports
Number of Members in Blue

Key Messages to Employees

Healthy Choice participation

- ✓ Helps you stay healthy
- ✓ Helps you reduce your risk for chronic illnesses
- ✓ Provides access to free exercise and wellness programs and discounted activity device
- ✓ Provides accessible medical resources
- ✓ Helps you save on healthcare premiums
- ✓ Allows you to do your part to help keep healthcare premiums down

Key Points for Population Health and Wellness Success:

- **Integrate** all employee health programs as much as possible (Occupational Health, Health Plan Design, Disease Management, Fitness, Prevention, On-Site Clinic's) to leverage maximum gains.

- Use claims data (medical and pharmacy), clinical data (from providers), HR data (from employers) and fitness data (from devices) to identify and risk stratify the population and create registries that allow management.

- Care coordination needs to include coaching, behavioral health tools and training, access to the stratified population registries, and cover both current high risk and rising risk members.

- Treat obesity as a chronic disease

- Remove financial barriers and ensure access to care to drive to desired behavior.

- Use significant patient centered financial incentives to ensure participation and outcomes. Do not try to tie too many other things outside of population health to incentives (e.g. flu vaccines, advance directives, etc)

- Communication is key- it's a carrot not a stick.

- Implement in a slow stepwise approach.

Thank You!!

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Cleveland Clinic

Every Life Deserves World Class Care