



Evidence - Based Strategy

The Importance of Data Integration

Experiences of King Ranch and Montana Municipal Interlocal Authority



*Data is EVERYWHERE,
but what do you do with it?*

Panelists



Melissa Rodriguez

Wellness Coordinator
King Ranch

As the Wellness Coordinator for King Ranch, Melissa utilizes data to influence, motivate, educate and inspire members to make lifestyle and behavior changes. She promotes a healthy culture by maintaining constant communication with members throughout the organization and traveling to more than 30 sites across Texas and Florida.

Panelists



Will Herold

VP of Employer Solutions
DHS Group

With years of experience in the HR and benefits industry, Will leads the Employer Solutions Team at DHS Group with employer product vision and an understanding of customer and market needs.

Will's primary duties include: providing solutions that improve the health of populations while mitigating future health care spend, creating proactive and strategic plans for wellbeing programs and increasing employment engagement by being a proactive partner.

Panelists

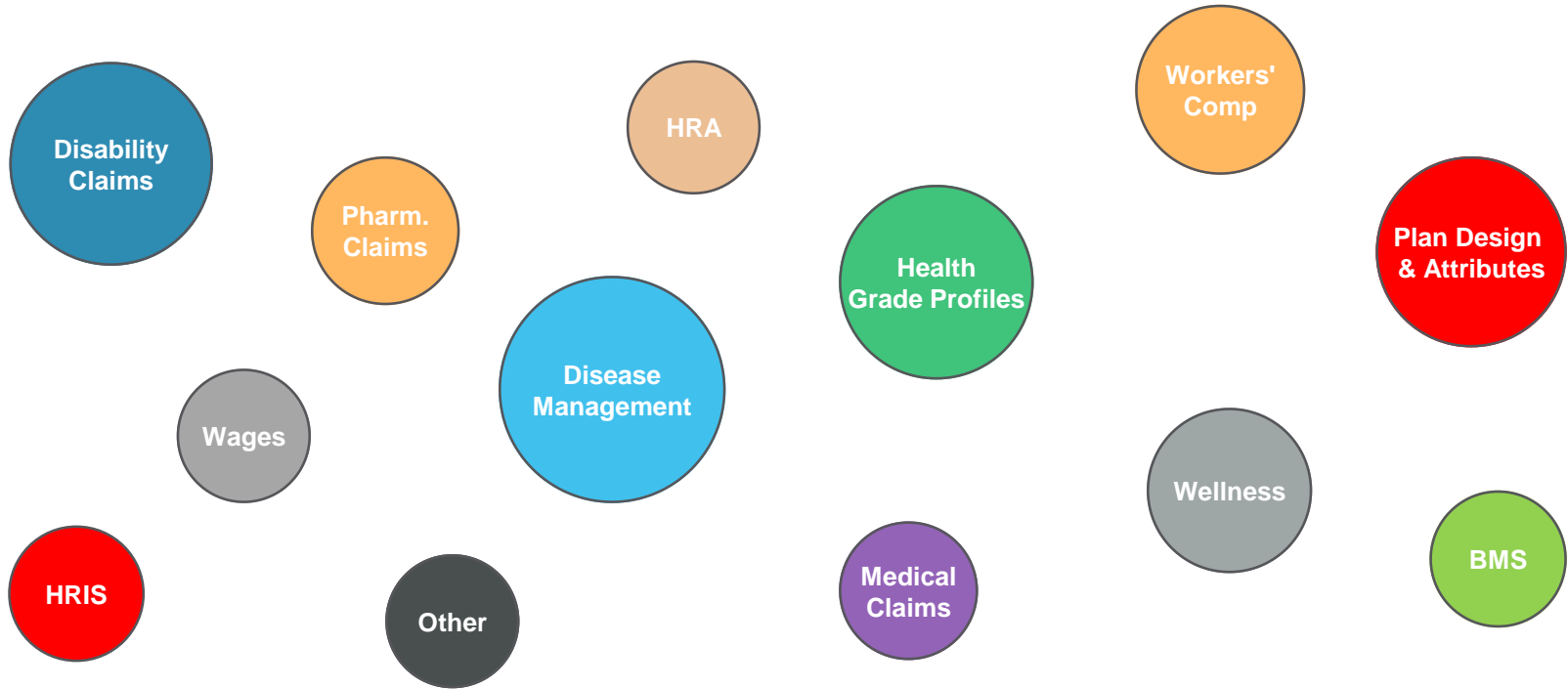


Sirine Jazi, MPH, CPH
Director, Client Engagement & Analytics

Sirine has cross-functional expertise in population health analytics, program management and client relations. Bridging the gap between technology and business needs, Sirine works with large employers and their consultants to utilize technology to simplify complex health analytics and transform it into useful and actionable information.

Sirine leads DHS Group's Health Analytics Team in the delivery of turnkey solutions and plays an integral role in both product design and innovation. She is passionate about an employers vital role in healthcare and supporting them in identifying strategies that help elevate health and wellbeing.

What data should I be reviewing?



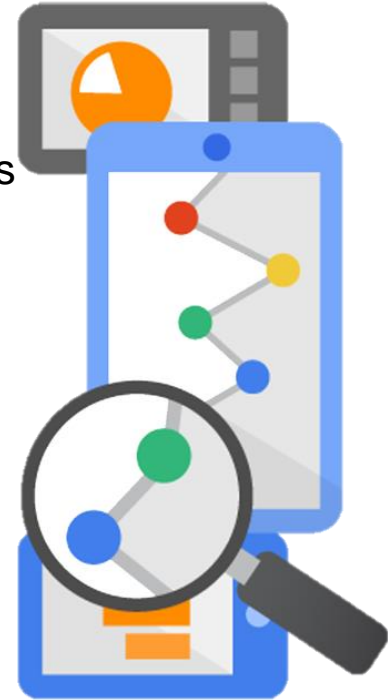
Where can I get all this data?

- Broker/Consultant
- TPA/Carriers – Medical, Pharmacy, Dental, Vision
- Wellness Vendor
- Biometric Screening Vendor
- Payroll System
- HRIS
- Leave Management Vendor/Internal Reporting
- Workers Comp Vendor



What metrics should I be reviewing?

- Per Subscriber/Member Per Year/Month Cost
- High Cost Claims
- Chronic Conditions
- Prevention Screening Compliance
- Utilization of Plan
- Incidence Rates
- Prevalence Rates
- Audit/Fraud
- Gaps of Care
- Motor Vehicle Injuries
- Cost of Tobacco Users
- Specialty Drugs
- Wellness Participation
- Incentive Compliance
- Wellness ROI
- Biometric Screening Results
- Health Risk Assessment
- ACA Compliance
- Enrollment Reports
- Carrier Eligibility Files
- Workers Comp
- Absence Management
- Talent Management
- Budgeting
- Employee Surveys



What key metrics should I focus on?

- Financial
- Program Participation
- Health Risks
- Biometric Screenings
- Employee Health Engagement
- Utilization
- Gaps in Care
- Chronic Conditions
- Avoidable ED Visits
- Lost Productivity
- Lost Work Time



How do I review all of this data?



What is integrated data?

Data integration involves associating data that reside in different sources and then providing users with a unified view of the data.

How it relates to benefits:

- Benefit data comes from a variety of sources.
- It can be tied together (“integrated”) by finding a common element in each source (like “employee number”) and linking the data in a database.
- This can then give you a way to analyze integrated benefit costs to help in strategic planning.

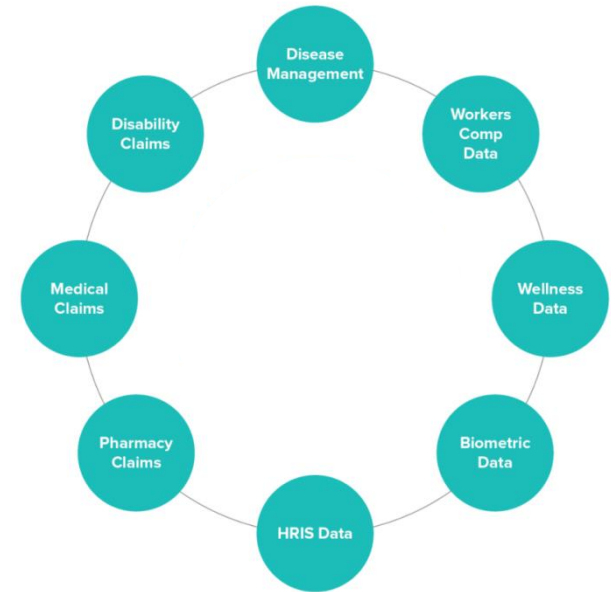


Why is it so hard?

There are technical issues and business issues

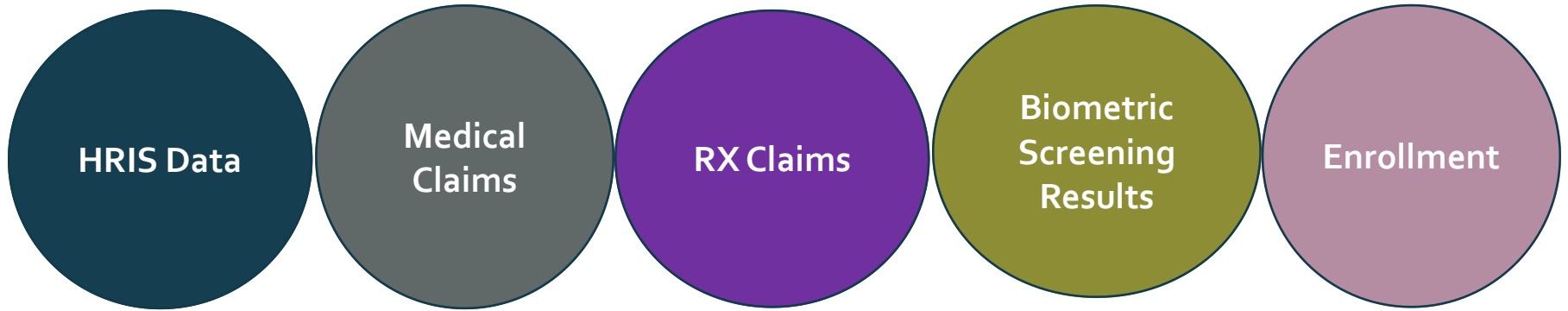
There is no common data model that all vendors use to capture and manage information. So when you merge data you have a difficult matching problem.

- Data sources have different data definitions or semantics; What is an “employee” in one system may be a “member” in another.
- This matching is further complicated by the different timeframes vendors use to capture the data and the timing is becoming more frequent.
- Vendors may be reluctant to share the data.
- Privacy Fears.



Population Health Analytics Initiative

- Integrated data from multiple facets:



- Data aggregation → Data analytics → Evidence-based strategies

King Ranch

King Ranch is an iconic Texas company with a rich history. With nearly 700 active employees across 30 locations focusing on cattle ranching, farming, commodity marketing and processing, luxury retail goods and recreational hunting.



Challenges in Managing Chronic Conditions

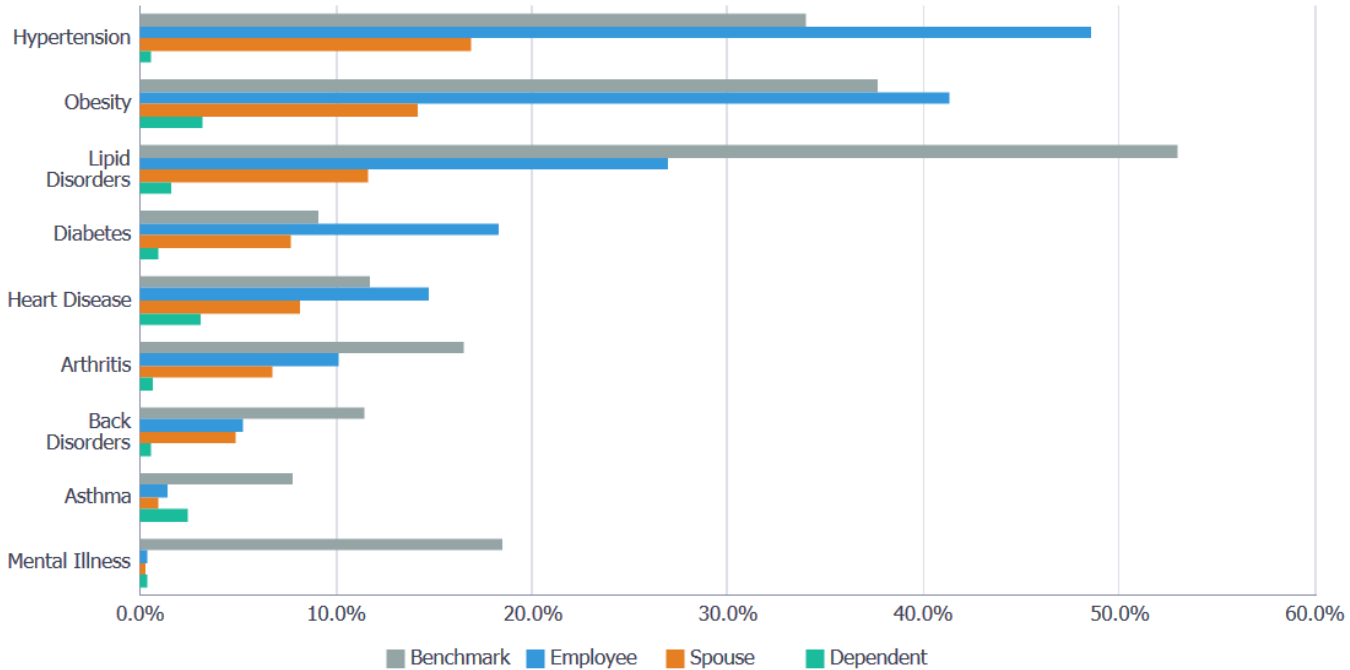
- Lack of access to various components of the data
- Inability to analyze by specific sub-groups in the population
- Inability to analyze special cohorts of the population through time (Diabetics, Hypertensives, Obese members, etc.)
- Difficulty tracking high risk members and over utilizers
- Measuring medication adherence

Tackling Chronic Conditions

- Integration provides insight into all aspects of population health
- King Ranch is able to easily identify members with chronic conditions
 - Utilization across all programs and facets of the data
 - Trends in risk
 - Prevalence of chronic conditions by wellness location
 - Untreated chronic conditions

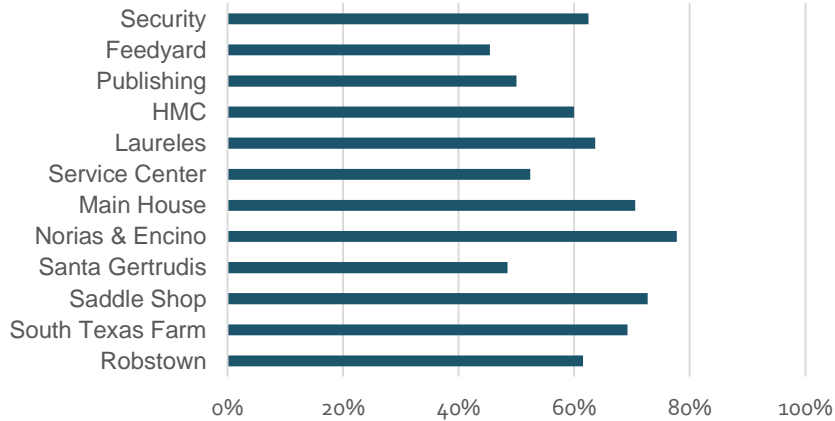
Prevalence of Chronic Conditions

Prevalence of Chronic Conditions
Filtered on select common chronic diseases

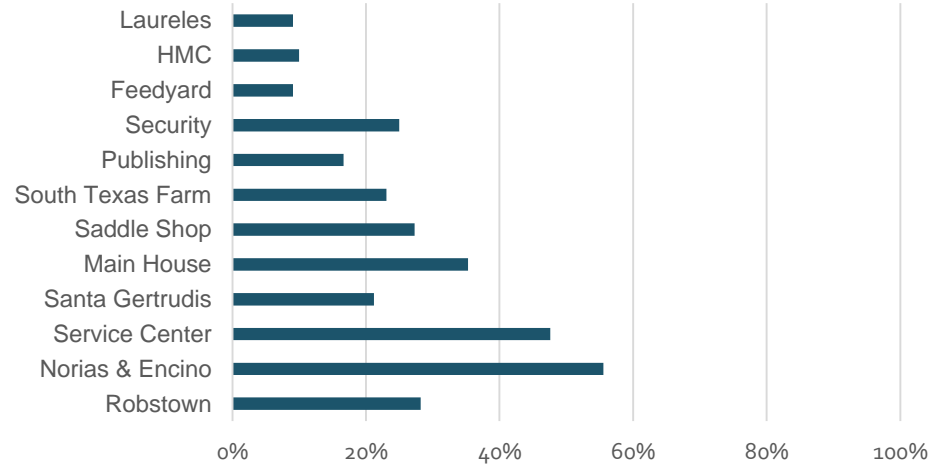


How King Ranch uses Data to Manage Wellness

% Obese Employees

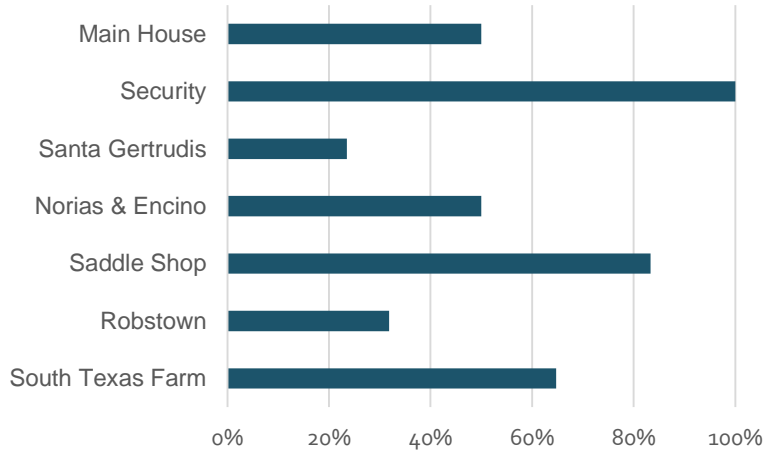


% Diabetic Employees

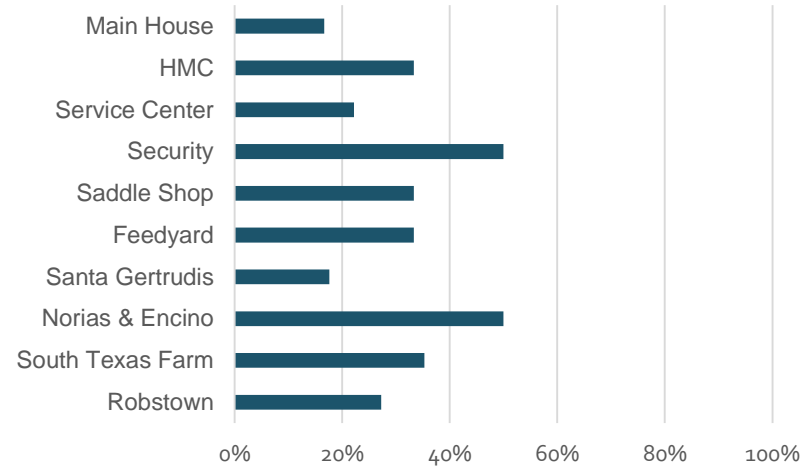


Spouses also need Wellness Interventions

% Obese Spouses



% Diabetic Spouses



Adjusted Program Initiatives

- Targeted wellness campaigns and interventions
- Working closely with our South Texas locations
- Shifting focus from just employees to include families
- Roll-out of Disease Management program focused on diabetes
- Additional integration of Disease Management data in order to monitor and measure effectiveness

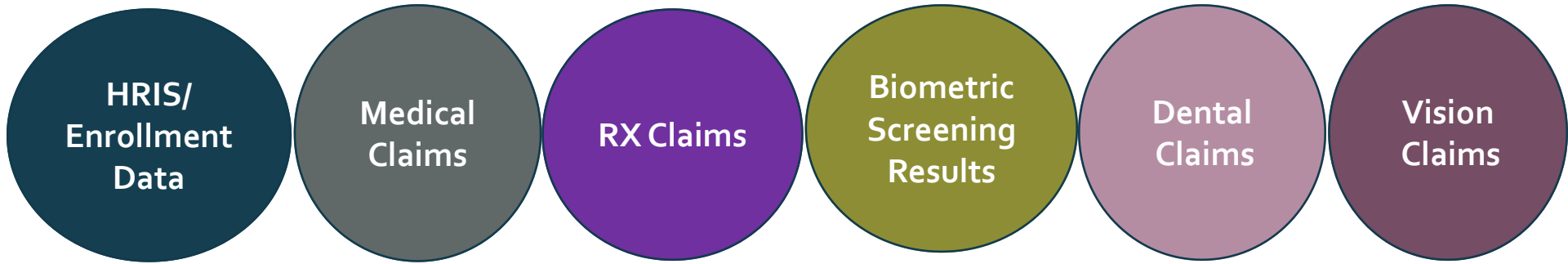
Montana Municipal Interlocal Authority (MMIA)

- Provides self-funded employee benefit, liability, property, and workers' compensation coverage to incorporated cities and towns of Montana.
- Pool of 78 municipalities in Montana
- 6,100 members



Population Health Analytics Initiative

- Integrated data from multiple facets:



- Data aggregation → Data analytics → Evidence-based strategies

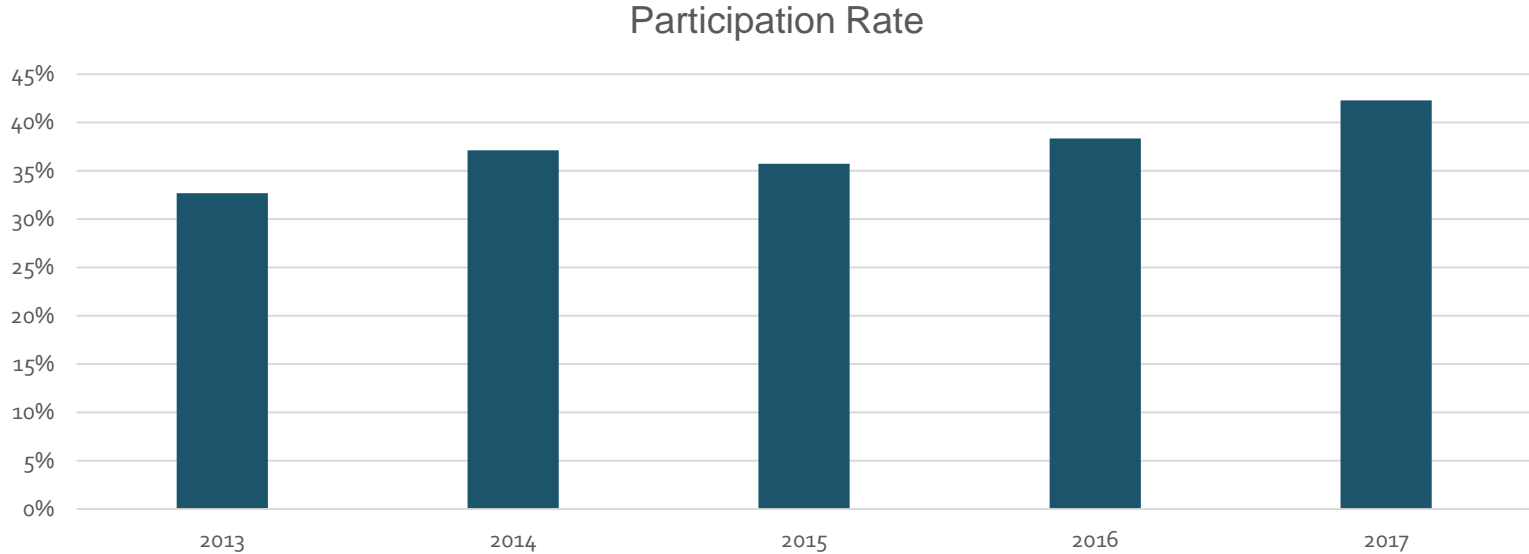
Assessing Program Effectiveness

- Outcomes based financial incentives between 2013 and 2017:
 1. Tobacco
 2. BMI
 3. HBA1C
 4. Cholesterol
 5. Blood Pressure
- Goal – understand participation and impact (if any) of outcomes based program and use this information to design 2018 incentive/wellness program

Participation in Wellness Programs

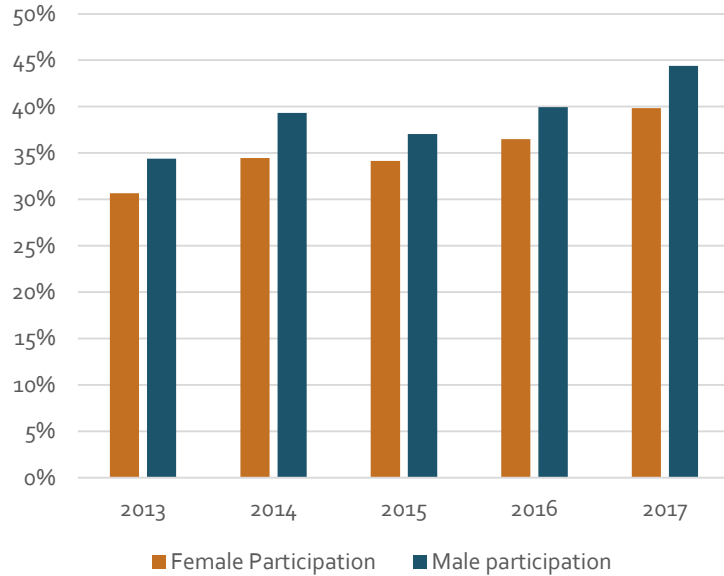
- Participation trends and demographics
 - Who is participating in wellness programs?
 - What conditions are most prevalent among members?
 - How to determine if incentives are working to drive participation?
 - Is the prevalence of conditions and cost/utilization different among those who participate in wellness programs vs. those who do not?
- Understanding program effectiveness
 - Impact on average member costs
 - Impact on cost of treating chronic disease
 - Impact on decreasing risk of chronic disease

Participation Trends and Demographics

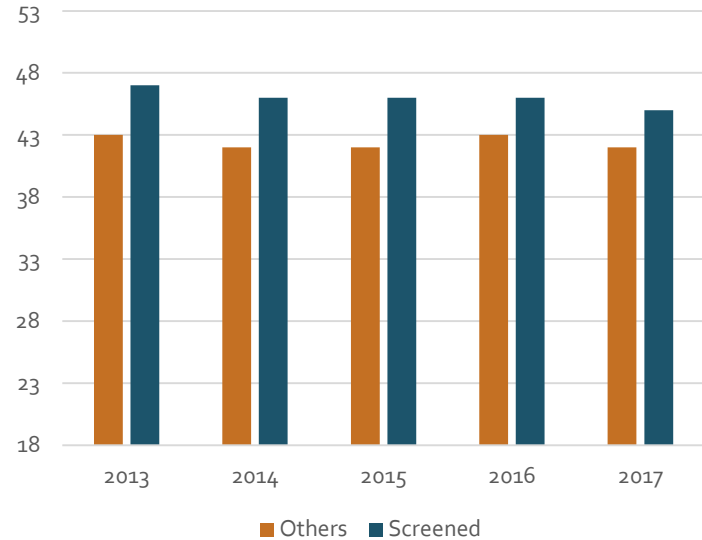


Participation Trends and Demographics

Participation Rate by Gender

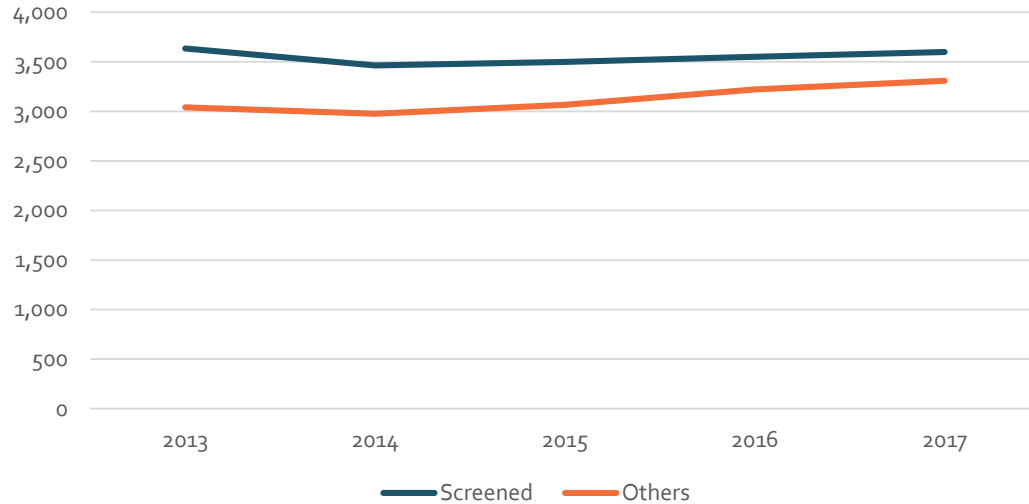


Avg Age by Participation



Participation Trends and Demographics

Participation by Avg Risk Score



% Change in Avg Risk

	Screened	Unscreened
2013		
2014	-5%	-2%
2015	1%	3%
2016	2%	5%
2017	1%	3%

Preventing Hypertension

- In 2016: 1,125 people were identified as pre-hypertensive based on screenings – with no prior medical diagnosis of hypertension in previous years
- In current plan year, out of the 1,125 pre-hypertensives:
 - 184 dropped off or have no screening yet in 2017
 - Reduced sample n = 941
 - 322 returned to Normal blood pressure (34%)
 - 57 became diagnosed hypertensive (6%)
 - 481 remained pre-hypertensive (51%)
 - 75 moved to Stage 1 hypertension based on biometric, remain undiagnosed in Med (8%)
 - 6 moved to Stage 2 hypertension based on biometric, remain undiagnosed in Med (1%)

If out of the 322 individuals who returned to normal blood pressure levels, 20% of them (64) were the result of wellness initiatives, the plan benefited from an estimated cost avoidance of \$225,000* from the wellness initiatives

*Based on an average hypertensive cost of \$9,000 per year and an average cost of \$5,500 per screened member per year

Impacting BMI

- In 2016: 674 people were identified as obese based on screenings
In current plan year, out of those individuals:
 - 104 have dropped off or have no screening yet in 2017. Reduced sample n = 570
 - 1 returned to Normal weight (0.2%)
 - 49 moved to 'Overweight' BMI (9%)
 - 520 remain obese (91%)
- In 2016: 783 people were identified as overweight based on screenings
In current plan year, out of those individuals:
 - 121 dropped off or have no screening yet in 2017, new n = 662
 - 55 returned to Normal weight (8%)
 - 552 remain 'Overweight' (83%)
 - 55 moved to 'Obese' BMI (8%)

If out of the 105 individuals who went from obese or overweight BMI to lower BMI ranges, 50% of them were the result of wellness initiatives, the plan benefited from an estimated cost avoidance of \$44,000* from the wellness initiatives

*Based on an average obese screened person's cost of \$6,700 per year and an average cost of \$5,700 per normal BMI screened person per year
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Adjusted Program Initiatives

- Move from outcomes based to participation based incentives
- Implement central health engagement platform accessible to all employees and spouses
- Incentivize screenings follow up with a health coach to educate and funnel members to other appropriate resources:
 - Disease Management
 - EAP
 - RX Mail Order Program
 - Telemedicine
 - PCP
- Incentivize preventive cancer screenings and relevant immunizations
- Utilize peer-pressure/group participation rates as one of the incentive levers

Integrated Data Supporting a Population Health Approach is Key

- Capturing the data is just the beginning, each data feed is a piece of the puzzle. An integrated population health analytics approach allows using the integrated information to derive evidence-based strategy.
- For King Ranch, integrating demographics from their HRIS system to their biometric and traditional claims data allowed them to better understand the variances in health status and gaps among their key locations – allowing for a more focused and effective wellness and communication strategy
- For MMIA, understanding participation in their wellness program and its effectiveness on participants and costs allowed them to make strategic program adjustments based on data.

Thank you!

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