

Today's Discussion

Health Service Board Business

Opening Remarks

- Welcome, Review Agenda
- Goals and Objectives, Expectations, Overview of Strategic Planning Process

■ Today's Realities

SFHSS Historical Perspective, Workforce of Tomorrow, State of Health Care,
 Innovation — AI, Retiree Health, Consumer Mindset, Imagine the Future

Culture of Wellbeing

 SFHSS Wellbeing Historical Perspective, Trends and Emerging Areas, Wellbeing Framework, Emotional and Financial Health

Clinical and Care Management

- Primary Care Alternatives, Value Based Systems, Provider Optimization
- Lightning Rounds Vendor Presentations
- Specialty Topics
 - Pharmacy, Data, Regulatory
- Close



Opening Remarks — Welcome

- 40+ attendees representing HSB, SFHSS leadership, CCSF Departments (Controller's Office, Aging and Adult Services, City Attorney, Human Rights Commission), Employers, Retirees, Unions, Current Vendors, Guests including PBGH and CPR
- Bring together broad set of thinkers and perspectives into the conversation of health to help shape the future programs and services to best meet the needs of the populations represented by SFHSS
- There are complex sets of problems to solve for and it will require creative and innovative solutions
 - We will spend the bulk of the day hearing from subject matter experts who will help set context and frame the problem for discussion with the group to gain your thoughts and feedback
 - Additionally, we have 10 vendors presenting their solutions in the areas of engagement and wellbeing, provider optimization, expert opinion, care management and specialty vendors



Opening Remarks — Welcome

- We have provided a Feedback Guide to capture your thoughts, ideas, concerns and questions throughout the day we will be collecting them at the end of the day and will return to you if you provide an email address
 - There are Sticky Notes on the table and Flip Charts throughout the room to make sure your voices be heard
- Logistics for the day
 - Agenda and Feedback Guide (copies on the table)
 - Presentation will be posted and available
 - Meals are in the next conference room
 - Feel free to stand, move and contribute to Sticky Notes and Flip Charts
 - Stephanie will engage us in RECHARGE activities throughout the day
 - Take restroom breaks as needed
 - See Aon for parking validation

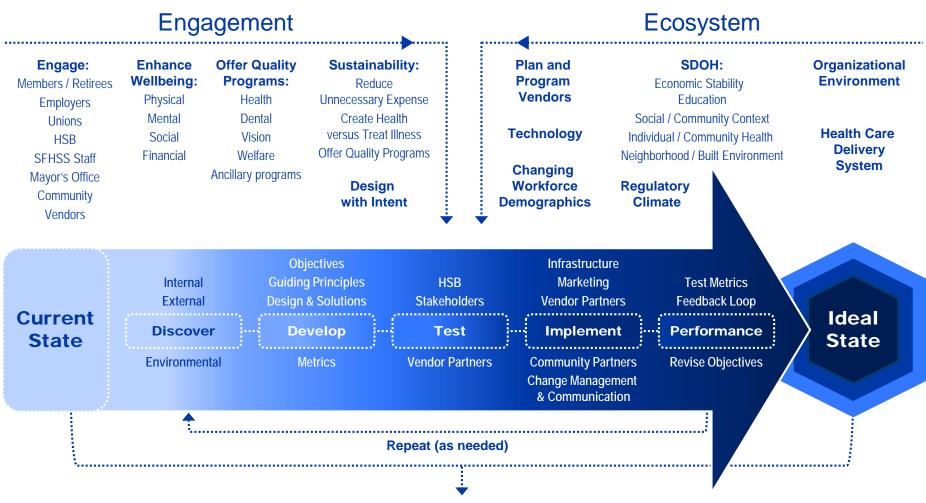


Goals and Objectives for Today

- Expose the audience to a myriad of dynamics in the health industry that is accelerating the need to think differently about how plan sponsor's offer and deliver health benefits
- Opportunity to hear from Aon's subject matter experts in the areas of clinical, delivery system transformation and provider optimization, wellbeing, and retiree health
- Opportunity to hear from 10 emerging health companies and their solutions
- Expectations from the audience **Engage** provide your feedback, insights, ideas, suggestions, and concerns
- Ground Rules
 - Think outside the box and let your imagination run do not be constrained by today's construct
 - Ask questions keep track of them in your workbook, sticky wall, and during feedback breaks
 - Provide feedback throughout the day in your workbook, sticky wall, and feedback sessions
 - NO solution-ing! Today is purely to allow us to imagine and see outside our four walls
- Review the strategic planning process and timeline



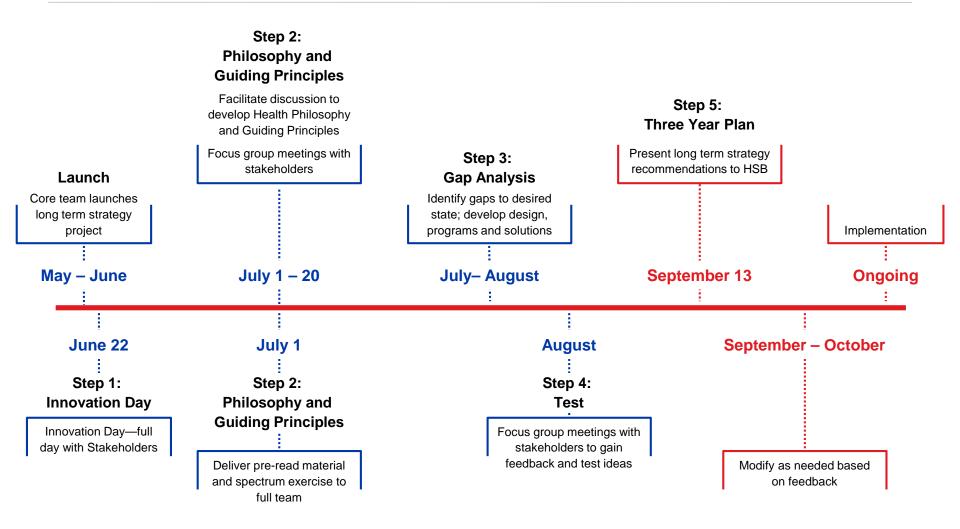
Overview of Strategic Planning Process



"Create physical and social environments that promote good health for all" — HP2020



Three Year Health Care Strategy Development Milestones







Today's Realities



SFHSS Historical Perspective



SFHSS Historical Perspective

Plan Design and Vendor Changes

- Minimal plan design changes
- No vendor changes in recent decade

New Offerings

- Best Doctors (expert medical case review)
- Expanded
 coverage for
 reproductive
 benefits and
 gender dysphoria
- Voluntary benefits, surrogacy and adoption
- Kaiser multi-state program for retirees

Other Influencers

- Affordable Care Act (PPACA)
- Vendor funding changes

Innovation

- ACO and Trio strategies
- Data analytics
- EGWP and Medicare Advantage PPO



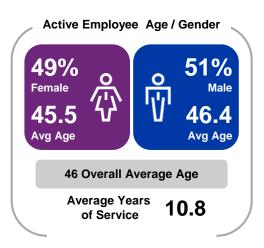
SFHSS Workforce Profile

Key Stats

	CCSF	CCD	USD	CRT
Count	34427	1605	8222	485
% Female	43	58	69	65
Average Years of Service	11	12	10	13
Average Age of New Hire	37	45	35	38

New Hire Profile

	<25	25-29	30-34	35-39	40-49	50-59	60+	Average Age
CCSF	8%	19%	21%	16%	21%	12%	3%	37
CCD	0%	16%	13%	9%	22%	27%	13%	45
USD	20%	23%	22%	6%	16%	7%	5%	35
CRT	8%	8%	31%	8%	31%	15%	0%	38

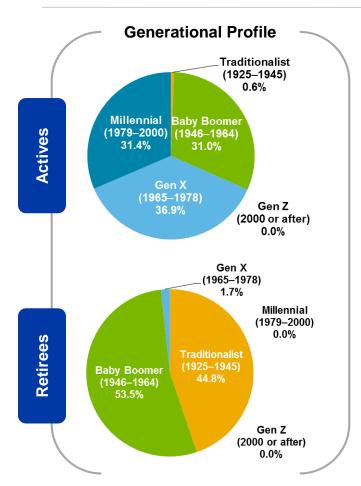




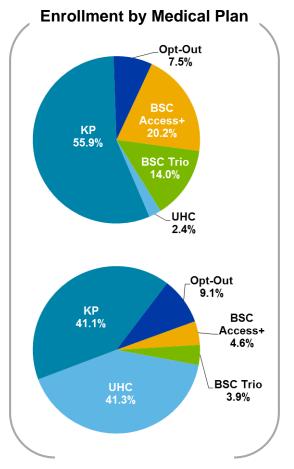




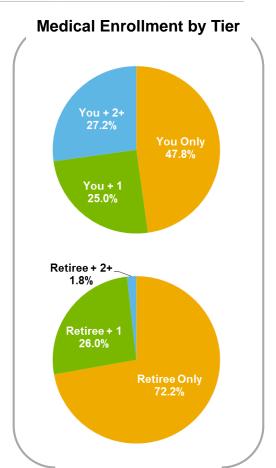
SFHSS 2018 Population Profile



The majority of the millennials are within USD (36.2%) while there are very few within CCD (13.5%)



▶ USD has the highest optout rate at 11.9% while only 5.7% of CCD employees optout



 USD has the highest Employee only enrollment of 62% while CCSF has the lowest at 39.2%



SFHSS 2017 Employee Health Profile

Risk Profile

	Acti	ves	Early R	etirees	Medicare	
Carrier	Lives	Risk Score	Lives	Risk Score	Lives	Risk Score
Blue Shield	31,232	1.113	3,568	2.190	2,446	4.765
UHC	1,474	1.765	802	3.154	10,213	5.510
Kaiser	46,647	0.896	4,016	1.869	10,003	5.989
Total	79,353	1.006	8,385	2.128	21,846	5.673

Risk Profile based on lives and concurrent risk scores presented on April 12

Top Chronic Conditions

- Hypertension is one of the most common condition across all 3 carriers, followed by Diabetes
- Mental Health spend continues to be above norm

Top Conditions	Blue Shield	UHC	Kaiser		
Top Conditions	Claimants per 1,000				
Hypertension	102.76	169.15	54.87		
Diabetes	49.98	127.30	53.48		
Asthma	36.83	38.25	12.63		
Obesity	23.77	Unknown	329.47		
Depression	19.86	70.2	37.09		
Heart / Circulatory	18.29	5.05	8.18		

Top Cost Drivers

Blue Shield

Diagnosis PMPM	Active	Early Retiree
Osteoarthrosis	\$11.95	\$35.20
Unspecified Aftercare	\$12.00	\$35.10
Septicemia	\$10.05	\$30.35
Neoplasm—Breast	\$6.60	\$15.00
Cardiac Dysrhythmia	\$6.10	\$20.80

 Single Liveborn (\$14.60) was the leading diagnosis for Actives and Cardiomyopathy (\$40.95) for Early Retirees

UHC

Diagnosis PMPM	Active	Early Retiree
Musculoskeletal	\$100.00	\$175.00
Neoplasms	\$75.00	\$185.00
Circulatory System	\$75.00	\$180.00
Other Conditions	\$75.00	\$75.00
Mental Health	\$65.00	\$24.30

- Mental Health and Cardiovascular Complications are most common drivers of spend increase for Actives and Early Retirees
- All of SFHSS leading cost drivers for UHC are above Book of Business

Kaiser

Diagnosis PMPM	Active	Early Retiree
Vaginal Delivery (w/o complications)	\$9.24	\$0.00
Premature Baby	\$5.98	\$0.00
Cesarean Section	\$5.11	\$0.00
Joint Replacement	\$4.52	\$15.49
Vaginal Delivery (with complications)	\$3.47	\$0.00

- Birth Related Claims account for half of all Kaiser's top claims
- Early Retirees claims were primarily attributed to ECMO / Trach (\$53.05) and Septicemia (\$19.92)

Kaiser data through September 2017



SFHSS 2017 Employee Health Profile

High Cost Claimants (HCCs)

Coverage / Case Rank	Medical Spend	Conditions	Active Status
Blue Shield #1	\$2,672,664	Neonatal ICU	Active
Blue Shield #2	\$2,060,372	Heart Transplant	Non-Medicare Retiree
Blue Shield #3	\$1,713,928	Neonatal ICU	Active
Blue Shield #4	\$1,675,207	Respiratory Failure	Active
Blue Shield #5	\$1,581,695	Ulcerative Neoplasm	Active
UHC #1	\$533,932	Heart Valve Disorder	Non-Medicare Retiree
UHC #2	\$485,379	Peritonitis	Active
UHC #3	\$453,555	Septicemia	Active
UHC #4	\$429,827	Cancer Respiratory	Active
UHC #5	\$418,842	Cerebrovascular	Non-Medicare Retiree
Kaiser #1	\$1,305,147	Atresia of Bile Ducts	Active
Kaiser #2	\$1,105,229	Burns	Active
Kaiser #3	\$1,034,991	Neonatal Newborn	Active

Top Kaiser Rx Classes

Ton Theremoutic Classes	Actives	Early Retirees	
Top Therapeutic Classes	Paid PMPM		
Analgesic / Anti-inflammatory	\$3.02	\$1.27	
Anti Infective	\$16.77	\$22.60	
Multiple Sclerosis	\$2.18	\$2.69	
Antineoplastic	Unknown	\$10.74	
Gastrointestinal Therapy	\$1.36	\$1.31	

 Respiratory and Cardiovascular therapy are the highest volume scripts for actives and early retirees

Kaiser data provided through September 2017

Top Blue Shield Rx Classes

- The top 10 classes represent 69% of active Rx costs and 75% for early retirees
- Specialty drugs account for 33% of spend for actives and 39% for early retirees

Ton Thoronoutic Classes	Actives	Early Retirees	
Top Therapeutic Classes	Paid PMPM		
Antivirals	\$28.33	\$49.95	
Antarthritics	\$11.37	\$24.86	
Diabetic Therapy	\$10.73	\$24.38	
Antineoplastic	\$6.37	\$17.77	
Multiple Sclerosis Agents	\$3.69	\$12.92	

Top UHC Rx Classes

- Psychostimulants account for the largest volume of scripts, over 2,500
- Specialty medications account for 50.8% of Rx spend

Ton Therenoutie Classes	Actives	Early Retirees	
Top Therapeutic Classes	Paid PMPM ^[1]		
Antivirals	\$50.00	\$30.00	
Antarthritics	\$13.00	\$2.00	
Diabetic Therapy	\$7.00	\$9.00	
Antineoplastic	\$3.00	\$6.00	
Psychostimulants	\$4.00	\$2.00	

[1] PMPM amounts are rounded to nearest whole dollar amount



Key Take-A-Ways from SFHSS Historical Perspective and Food for Thought Questions

- Key levers to manage cost:
 - 1) Funding
 - 2) Negotiations
 - 3) Medicare Innovation
 - 4) ACOs
 - 5) Wellbeing Programs
- Demographics
 - Demographics vary widely by employer including generational distribution, plan enrollment, and tier enrollment
- Chronic and Other Key Conditions
 - Diabetes, musculoskeletal, cardiac-related, cancer, maternity
- Health Risks
 - Aging workforce, obesity, tobacco use

Food for Thought Questions

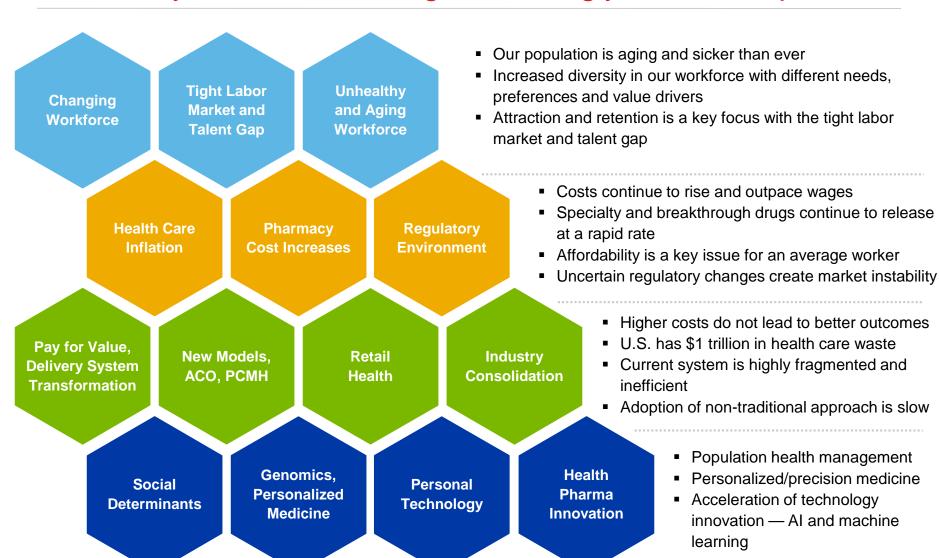
- How do we catch diseases and conditions earlier?
- How do we slow the progression of disease and maybe even reverse?
- How do we get ahead of / alter negative health progression from active to early retirees to post-65 retirees?



Workforce of Tomorrow



The Ecosystem is Becoming Increasingly More Complex



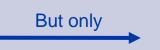
Dynamics Reshaping Total Rewards are Accelerating

WORKFORCE CHANGES

Employers know change is needed, but unsure of path

70%

believe total rewards strategy must change for 2020 workforce



7%

have significantly evaluated the impact of Millennials



Benefits will comprise
nearly half
the average earner's total
compensation by 2024

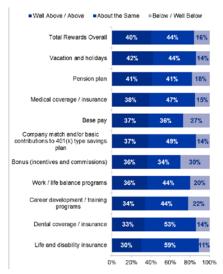
By 2024, benefits costs will drive **net pay below CPI** for average employee

25%

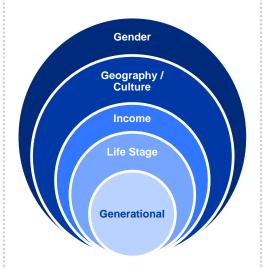
CPI net compensation after benefit costs

Differentiation

Compared to what I think other employers are offering, this reward is:



Expectations



Engagement

4 of 10

employees are **not** engaged

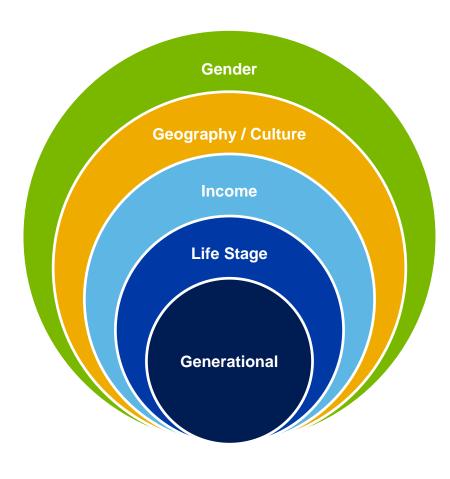






15%

Expectations and Value Drivers are Multi-Faceted



* U.S. Census Bureau

- Gender roles are converging
- Women will become majority of the workforce by 2020
- 60% of college students are women
- Workforce is diversifying and limited in technical talent
- New majority: by 2045 non-Hispanic whites will no longer be the majority of the U.S. population, in California this is already true*
- Growing income inequality
- Middle class lifestyle harder to achieve
- Delayed retirement
- Delayed adulthood
- Evolving family
- Increasing variety: people no longer "acting their age"
- Millennials will comprise 50% of the U.S. workforce by 2020
- Increasing diversity and ethnicity
- Broader variation in values across generations



Broadening Employee Values and Expectations

General Workforce (2020)	1%	22%	20%	50%	7%
Born	Traditionalists (1925–1945)	Baby Boomers (1946–1964)	Gen X (1965–1978)	Millennials (1979–2000)	Gen Z (after 2000)
Core Values	Duty Victory Teamwork	Individuality Self-Absorption Youth	Savvy Diversity Entrepreneurship	Authenticity Autonomy Authorship	Openness Resilience Realism
Managing Life	Work and Life	Work/Life Balance	Work/Life Balance	"Weisure"	"Weisure"
Tobacco Use	8.3%	18.4%	22.1%	26.5%	21.2%
Obesity Level	26.3%	33.3%	32.8%	30.9%	14.7%
Average Debt	\$23K	\$29K	\$30K	\$23K	N/A
Student Debt		<u> </u>	\$9K	\$27K	
% Female Coeds	_	42%	55%	_	60%
% Married in 20s	65%	48%	36%	26%	N/A
% Non-White	<u> </u>	25%		40%	50%
SFHSS Active Employees	0.6%	31%	36.9%	31.4%	0.0%

Sources: 2020 forecast data based on Future Workplace Survey; CDC BRFSS 2012; Experian; Aon Hewitt 2015 Universe Benchmarks



Evolving Generational Preferences and Values

	Traditionalists	Boomers	Gen X	Millennials	Gen Z
Born	1925–1945	1946–1964	1965–1980	1981–2000	2000 or after
Values	ConformityStabilitySecurity	Personal and social expressionIdealismHealth and wellness	Free agency and independenceStreet smartsCynicism	CollaborationSocial activismTolerance for diversity	Resilience and gritPractical intelligencePersonal privacy
Incentives	Appreciation and recognition	Individual rewards	Rewards for resultsTeam rewards	Constant feedbackSpot awards	Personalized
Benefits	 Embrace defined benefit retirement programs 	 Make employment decisions based on benefits 	Self-relianceFlexible benefit options	 Creative benefits and time off 	Create my own package
Rewards	Satisfaction of a job well done	Money, title, recognition	Flexibility and autonomy	Meaningful work	Divergent experiences
Base Salary	Loyalty to organization	Internal competitiveness	Hired guns/mercenaries	Accessing opportunity	■ Tailored to me
Pay Increases	 Cost of living adjustments 	 Seniority and internal equity 	Pay increases tied to performance	 Likely to share pay increase information Entire group likely to leave if perceives as unfair 	 Keep pay increase information private

Source: Future of Workplace Survey



Benefit Programs that Matter to Generations and Life Stages



Test Programs that Matter to Multiple Generations and Life Stages







MILLENNIALS

Professional Development Personal Development Work/Me Balance Environment

GEN-X

Career Advancement Work/Life Balance; Flexible Work Arrangements Performance-Based Rewards; Team Rewards

BABY BOOMERS

Money and Title Internal Equity Recognition

EARLY

Financial Wellness Tools and Advisement College Loan Tools and Match; Debt Repayment Home-Buying Assistance Enhanced Maternity/Paternity Policies

MID

Child's Education Savings
Benefits for Parents
Parental Leave
Enhanced Maternity/Paternity
Policies

LATE

Reverse Mentoring Phased Retirement Benefits for Parents Parental Leave Benefits for Grandchildren Elder Care

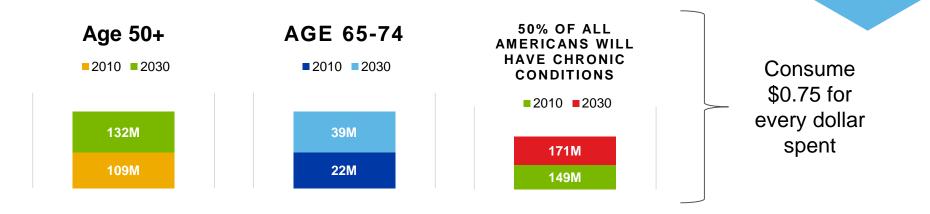
Source: Aon Total Rewards Trends/Best Practices Database

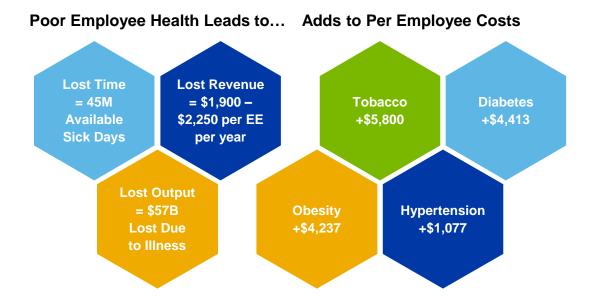


Our Population is Aging and Sicker than Ever...

POPULATION HEALTH

and our Unhealthy Workforce Burdens our Economy and Plan Sponsors





Top 3 Group	% Obese	By 2040
African American	33.5%	
Ages 45-64	33.0%	50%
Annual Income <\$35K	31.9% _	
Youth	17%	

Depression magnified by social isolation will be the most costly disease burden in the world by **2030** — **\$1 Trillion**



State of Health Care



Health Care Cost Continues to Rise and Pharmacy will Double by 2020 yet....



- "Our costs are among the highest and our outcome near the worst in the world."
- "Medical errors are the third-leading cause of death after heart disease and cancer."
- Each day, according to the Centers for Disease Control and Prevention, more than 140 Americans die from drug overdoses, 91 specifically due to opioids.
- Health care spend as a % of GDP has risen from 6.2% in 1970 to 17.9% in 2016 nearly 60% higher than the next highest spend country.
- National health care expenditures will exceed \$5T by 2022.
- Prices increased for every brand-name drug of the top 20 most-prescribed brand-name drugs for seniors in the last five years. On average, prices for these drugs increased 12 percent every year for the last five years—approximately ten times higher than the average annual rate of inflation.
- 1 in 4 have a difficult time affording their medicine.
- The number of Americans age 65 and older is expected to nearly double over the next four decades, from 43.1 million in 2012 to 83.7 million by 2050. Over the same time period, the number of people age 85 and older is projected to nearly quadruple, from 5.8 million to 19 million.
- Studies show a rising prevalence of burnout among clinicians (over 50 percent in some studies) which has led to questions on how it affects access to care, patient safety, and care quality.



High Health Care Cost Does Not Mean Highest Quality



The U.S. is 34th in terms of life expectancy among the 198 countries of the world.

The amount of U.S. health care waste (\$765B) is equivalent to the Netherlands GDP

- \$210B in unnecessary services
- \$130B in inefficient delivery of care
- \$55B in prevention failures
- \$105B in inflated prices
- \$75B in fraud
- \$190B in excessive administrative system costs

U.S. chronic disease hospital admissions compared to peer countries

Asthma: 2.5x

Congestive heart failure: 3.0x

■ Diabetes: 6.7x

Hospital acquired infections (HAI) kill nearly 99,000 Americans annually; more than breast and prostate cancers combined

■ HAI: 99,000

■ Breast cancer: 41,000

■ Prostate cancer: 28,000

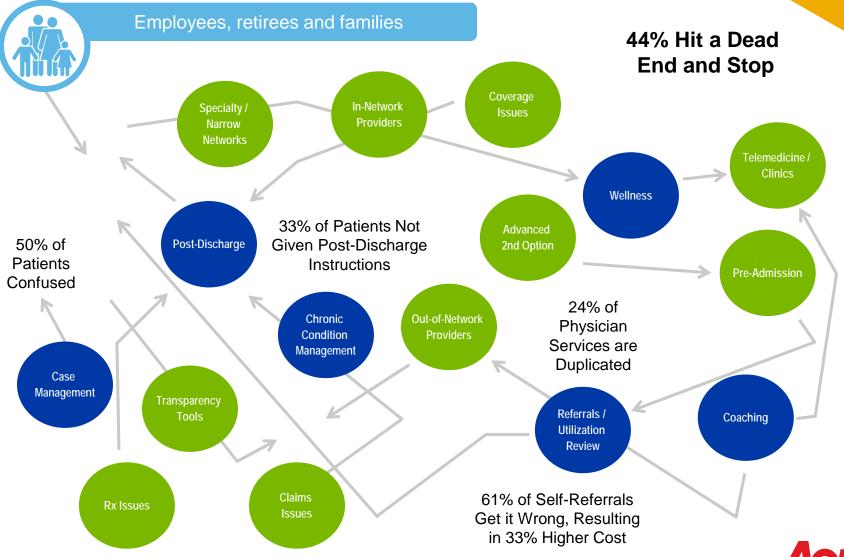
Northern California outperforms Central and Southern California on clinical quality measures, however all Northern California regions have higher annual per-enrollee costs than the statewide commercial average of \$4,300, while all Southern California regions fall below the statewide average.



The Health System is a VERY

STATE OF HEALTH CARE

Fragmented System without a Consistent Approach



Innovation



Impacting Health with Broader Perspectives

Social, Race, Community



Health Behaviors PREDICT



- Genetics
- Diet & exercise
- Tobacco use
- Alcohol & drug use
- Sleep
- · Risky behavior

Clinical Care TREAT



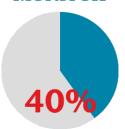
- Access to care/services/ therapies
- Pay for value, not volume
- Quality of care

Physical Environment **MANAGE**



- Air & water quality
- Housing
- Food sources
- Workplace safety

Macro Factors MONITOR



- Education
- Employment
- Income
- Family/social support
- Community health & safety

Source: RWJF



Our Current System is Ripe for Innovation

Personalized Medication

- Geisinger Health is utilizing personalized or "precision" health as a new approach to deliver care
- Through genome sequencing (MyCode), patients and their providers have detailed information on which disease risks a patient may have
- Goal is to increase anticipatory care and better forecast a patients health, rather than today's typical responsive care after the diagnosis
- The program also looks beyond the CPT code at other social determinants of health such as food insecurity, transportation barriers, and housing issues

Retail Care

- CVS acquisition of Aetna is focused on delivering consumercentric, retail health
- Using population health management, integrated digital data platforms and the high-touch nature of a pharmacy, CVS will target five disease states: COPD, asthma, diabetes, hypertension and depression
- Through the insurance mechanism of Aetna, CVS' retail clinics (Minute Clinic) and the high-touch of the pharmacy the goal is to provide patient-centric care to medically fragile patients

Accountable Care Organizations

- ACOs are groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high-quality care to their patients
- The goal of coordinated care is to ensure that patients get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors



Disruptive Technology

Genomics

- There are around 4,000 inherited diseases caused by single gene disorders
- The study of the genome can provide information on biomarkers or predispositions to preventable health outcomes as well as identify potential metabolic reactions at the genome level to different prescription pharmaceutical drugs
- Testing for DNA sequencing is accessed by individuals, providers and health plans

According to the FDA, More than 550 gene therapies are currently being studied

Pharma

- Proteus Discover is the world's first digital medicine and attempts to address issue by tracking when and how often the patient is taking their medication. Doctors are able to see patterns of adherence as well as the activity level of the patient
- Patients are provided with an ingestible sensor and a small wearable sensor patch that tracks the when the medication was taken as well as the patient's activity, which a digital record is provided to the patient and provider

Medication non-adherence costs \$290B annually to the health care system

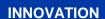
3D Printing

- Since 1983 3D printing has come a long way from printing a small cup to creating personalized prosthetic devices
- The future of 3D printing may include creating organs by printing with stem cells, human skin tissue in lieu of skin grafts for burn victims, and pharmaceuticals that contain multiple drugs with timereleased features

With precision, speed and a major slash in cost, the way we treat and manage the health of our bodies will never be the same.



The World of Medical and Rx Genomics



10K
Conditions that can be identified

70Drug labels mention pharmacogenomics

\$475K

First Gene Altering Leukemia Treatment

550

Gene therapies being studied today

\$25B

Billion in genetic testing by 2022

Many gaps in knowledge about organization, clinician, and patient needs must be filled to translate basic and clinical science advances in genomics of common chronic diseases into practice.

Sources: Centers for Disease Control and Prevention, American Institute of Stress, U.S. Department of Health and Human Services; SAMHA, WHO



Explosion of Artificial Intelligence (AI) Use by Health Vendors



Surgery Networks

Bridge Health, Surgery Plus, eSurgery, Carrum Health

High Performance Networks / COE

Imagine Health, Grand Rounds, Progyny (infertility)

Transparency Tools / Provider Guidance

Castlight, ClearCost Health, Healthcare Bluebook, Compass, Change Healthcare, Amino, Zest, Grand Rounds, TopDoc Connect

Concierge Physician / Mobile Physicians

Dispatch Health, One Medical, Pager, Forward

Telemedicine

American Well, MD Live, Teledoc, FirstDerm, Grand Rounds, Simple Therapy

Reference-Based Pricing

AMP, ELAP, HS Technology, 6 Degrees

Digital Navigation

Castlight, eVive, Mobile Health, Welltok, b.well

Advocacy / Concierge Services

Accolade, Alight, Compass, Health Advocate, Quantum, HealthJoy

Information Aggregators

Medlio, Capsihealth, Orderly

Provider Quality and Cost

Amino, Mpirica, Quantros, CedarGate

Personalized Data Aggregation and Insights

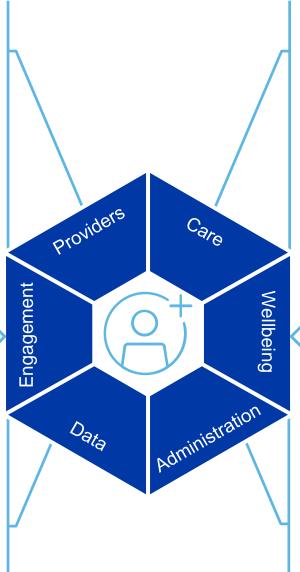
Health Gorilla, Human API, Apple

Predictive Analytics

Medalogix, Health Reveal

Data Warehouse

Artemis, Truven, Nuna, Optum Insights



Expert Opinion

Best Doctors, Grand Rounds, 2ndMD

Virtual Assistants

Sensely

Immersive Condition Management

Hello Heart, Hinge Health, Livongo, Ovia, Physera, PureSomni, Sleepio, Virta Vivante Health, WellDoc

Behavioral / Emotional Support

Big Health, Lantern, Lyra, LifeDojo

Diagnostic / Personalized Medicine

23andMe, Color, Counsyl, Gene by Gene, Helix

Women's Health

Progeny, Maven, Ovia

Immersive Health Risk Interventions

Retrofit, Omada, Solera

Wellbeing Engagement Platforms

Limeade, Optimity, Rally, Redbrick, ShareCare, Vitality, Virgin Pulse, Welltok

Individual Health Insurance Marketplace

Health Sherpa, HIXME, Stride Health

New Health Plan Models

Bind, Bright Health, Collective Health, Imagine Health, Oscar

Plan Selection Decision Support

JellyVision, PicWell

Benefits Administration

Alight, Maxwell Health



Medical Benefits — Early Al Applications

DECISION SUPPORT



Optimal Benefit Selection

- Benefit recommendations based on predictive algorithms and clustering
- Intelligent questionnaires
- Consumer perception modeling



- Matching providers based on experience, patient fit and availability
- Local market expertise on cost and quality

Intelligent Provider

 Real-time site-of-care recommendations

Networks

TARGETING



Patient Risk Stratification

- Risk adjustment using thousands of variables
- Predicting high-cost claimants
- ER "Frequent Flyers"
- Chronic condition targeting

Engagement

COMMUNICATING



Navigation / Concierge Service

- Al-powered call center scripts
- Chatbots replacing IVR
- Natural language processing and voice assistants

Real-Time **Monitoring**

Wearable → Medical Device

- 24/7 health alerts
- Fraud detection



Targeting

- Incorporating consumer data and socioeconomic variables
- Geolocation data
- Behavior clustering

DATA AVAILABILITY

EXPLAINABILITY

PRIVACY

EXTRAPOLATION



The Increasingly Complex Health Care Technology Evolution

INNOVATION

Provider

Electronic Health Records
Treatment & Care Coordination
Population Health Management
Data Analytics / Predictive Modeling

Employer

Plan Administration Network Delivery Care Management Navigation

Consumer

Payor

Administrative Tools
Consumer Tools
Provider Connectivity
Data Analytics / Predictive Modeling

HELP ME

Measure Me

Advise Me Motivate Me Diagnose Me Treat Me Connect Me



Specialty Vendor, Device and App Boom

INNOVATION



DoseSpot

iTriage

Zipnosis

Key Take-A-Ways from Today's Realities and Food for Thought Questions

- Workforce diversity brings different needs, preferences and value drivers
- Unhealthy workforce adds cost to the system and has negative productivity impact
- Cost does not equate to quality and significant inefficiencies are in the system today
- Employees, retirees and families are left in a quandary when care is needed
- Technology is bringing new innovation into the entire health supply chain
- Social determinants have a significant impact on health

Food for Thought Questions

- What changes are needed to meet the needs of the changing workforce?
- What mechanisms need to be in place to leverage emerging technology, solutions and/or vendors?
- How can SFHSS impact the delivery system?
- What infrastructure, programs and services can better support a member's experience through the health system?



Retiree Health



Post PPACA "Efficient Frontier" of Retiree Health Care Strategy

Health Care Reform

- RDS and Medicare program changes
- Benefit design requirements and coverage mandates
- Health insurance exchanges
- Excise tax

Universal Sponsor Objectives

- Support overarching organizational and HR strategies
- Manage cost, risk, and ongoing program management burden
- Simplify administration

Modified Group-Based Sourcing Strategies

Two Fundamental Approaches

Individual Market-Based Sourcing Strategies

Confluence of new challenges, new opportunities, and common plan sponsor objectives are dramatically reshaping the retiree health care market into two primary benefit sourcing strategies



Medicare Advantage — Market Overview

- UnitedHealth Group and Humana support approximately 44% of the Medicare Advantage market
- UnitedHealth Group is the largest in the group space (EGWP)

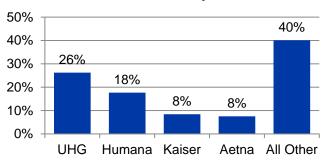
Carriers with at Least 250,000 MA Members (1/2018)

Carrier	2018 Enrollment	2018 Market Share	
UnitedHealth Group, Inc. (UHG)	5,200,072	26%	
Humana Inc.	3,501,425	18%	
Aetna Inc.	1,674,733	8%	
Kaiser Foundation Health Plan, Inc.	1,497,933	8%	
Anthem Inc.	703,494	4%	
Blue Cross Blue Shield of Michigan	526,296	3%	
WellCare Health Plans, Inc.	500,787	3%	
CIGNA	429,751	2%	
Highmark Health	261,924	1%	
Centene Corporation	253,095	1%	
Subtotal >250,000	14,549,510	73%	
All Other	5,266,847	27%	
Total	19,816,357	100%	

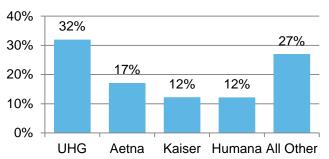
Carriers with Largest Group-Based MA Members (1/2018)

Carrier	2018 Enrollment	2018 Market Share
UnitedHealth Group, Inc. (UHG)	1,317,453	32%
Aetna Inc.	705,123	17%
Humana Inc.	503,571	12%
Kaiser Foundation Health Plan, Inc.	502,071	12%
Blue Cross Blue Shield of Michigan	386,482	9%
Subtotal >100,000	3,414,700	83%
All Other	704,941	17%
Total	4,119,641	100%

MA Market Share by Carrier



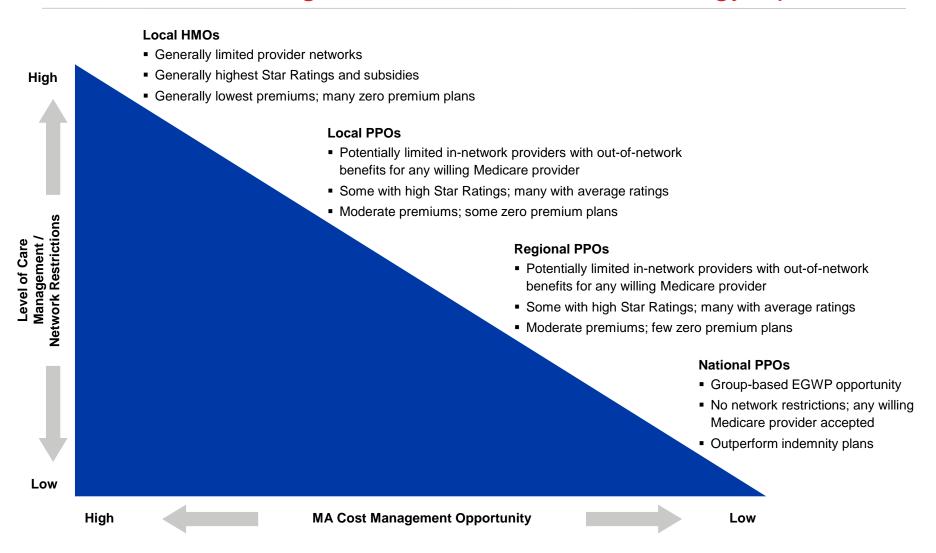
Group MA Market Share by Carrier



Source: Centers for Medicare and Medicaid Services January 2018 enrollment files



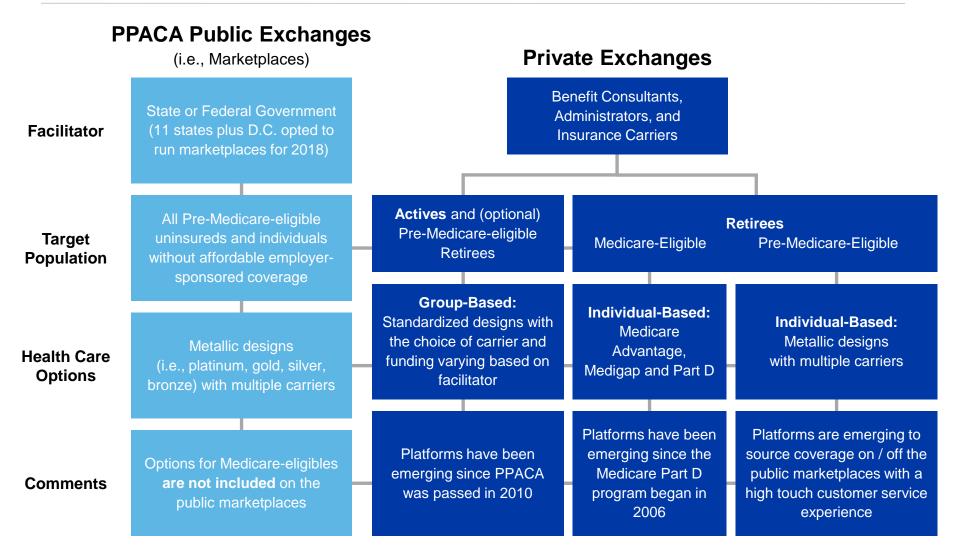
Medicare Advantage — General Product Strategy Spectrum





Marketplace Innovation — Health Exchanges

Public vs. Private / Active vs. Retiree





Private Medicare Exchange Mechanics

Plan Sponsor Insured Health HRA / Subsidy Strategy Exchange Platform Care Offerings Medicare Advantage If HRA is desired, Plan Insured health care offerings Sponsor converts current group-based health care Communications subsidy into an HRA credit, Medigap which may be set at or below Decision support the actuarial equivalent of the Enrollment current subsidy Individual Part D Advocacy HRA administration Retiree HRA Other (dental, vision) Retiree Enrollments Private exchange platform assumes many of the current plan sponsor group program responsibilities, but with a significantly Commission Revenue "higher-touch" retiree experience

Key Take-A-Ways from Retiree Health and Food for Thought Questions

- SFHSS has incorporated group market innovation for the post-65 retirees via Medicare Advantage PPO
- Less options for pre-65 retirees currently

Food for Thought Questions

- Could individual market solutions be an option in the future?
- Could HRA based programs be an option for the pre-65 retiree population in the future?



Consumer Mindset



What Employees Are Telling Us

Consumer Health Mindset Survey



Wellbeing
is Having a
Bigger Impact

Consumers are 4x more likely to be engaged in a strong health culture



Savvy
Consumerism
is Still a Challenge

1 in 5 said high costs have led them to decline other coverage, stop taking meds, or avoid care



Frustration and Confusion Plague Patients

44% of emerging millennial higher health care users give up and hope for the best



Multi-Channel
Experience
is Vital

64% prefer personal email and 44% prefer text messaging / more willing to opt in "in the moment info"



Mental Health is in the Shadows

54% report high stress / 37% report stress increase in last year / 76% report 1+ obstacle to getting care

Source: 2017 Alight Consumer Health Mindset® Study conducted with Aon, the National Business Group on Health, and Kantar Futures



Hyper-Relevance and Communication is in High Demand

75%

of consumers
like it when brands
personalize messaging
and offers

60%

of millennials
(and 52% of all consumers)
want a **personalized**, **online summary** of their health care
usage and other details

60%

of millennials
(and 49% for total) are more
likely to seek online views of
health usage

75%

of consumers

get frustrated when online
content appears that has
nothing to do with their
interests

68%

of consumers over age 40 (54% for younger consumers) prefer to seek advice from their doctor compared to friends and family

50%

of millennials
(and 40% for total) will look to
online direction for finding
certain providers

66%

of consumers over age 60 value **health plan decision tools** over general wellness information

31%

of high users of health care are more likely to jump into treatment without asking the right questions

60%

of consumers under age 60 value cost **clarity tools**, 63% value general wellness information



Consumers are Open to Employer Programs for Lifestyle Change

Female consumers
(56% of all
consumers) are
more likely to agree
that employers
should offer free
tools, rewards for
outcomes, and
healthy lifestyle
programs

Non-white consumers are more likely to agree that employers should direct participants, target by condition or demographic, require activities for discounts, or impose consequences for unhealthy conditions

African American consumers (52% of all consumers) are more likely to agree that employers should provide healthy lifestyle programs

Source: 2014 Aon Hewitt Consumer Health Mindset® Study conducted with the National Business Group on Health and Kantar Futures



Mental Health is Emerging as a Top Concern and Cost in Workplaces and the Health Care System

Men are more likely than women to report being afraid to tell friends / family (24% vs. 14%) of mental health issues or their employer (21% vs. 9%)

Women, millennials, moderate or high users of health care, and those in weak health care cultures are more likely to report high and increasing stress levels

Source: 2017 Aon Hewitt Consumer Health Mindset® Study conducted with the National Business Group on Health and Kantar Futures



Engage Employees In Meaningful Ways

New, Interesting, or Unique Ideas to Improve Communication

Truthfulness and just plain communication would be a breath of fresh air. (Millennial)

Honesty, Transparency, and Respect

Stronger connections among employer, employees, and customers

> It would be great to incorporate more innovative ways to communicate with customers. (Millennial)



Managers and Leaders

Live visits from top leaders. (Gen Xer)

Well-Designed Email

Need a better filter in order for the right people to get the right info. (Gen Xer)

Mobile and Social

Quick texts. I want a simple thing like a text that would say "Remember to update your 401(k) by (date); see www.401k.com" and then I can go when I want. Simple and sweet. (Boomer)



Breakthrough Personalized Success Factors



Cohorts to Consider

- Health Plan Tenure
- Age / Generation
- Claims Costs
- Geography
- Department
- Role
- Attitudinal
- Other

Channel Possibilities

Personalized Communication

- Mobile (app, mobile friendly site, text)
- Website
- Print
- Email
- Ben admin platform
- Experiential

Promotion

- Video
- Animated infographic
- Leadership briefing
- Newsletter
- Text

- Organization-wide challenge
- New hire orientation
- Champions
- Poster
- Webinar



Imagine the Future



Potentially Groundbreaking Shifts in Employee Benefits and Insurance

HOH H

Magnitude of Market Change

Anthem **EXPRESS SCRIPTS®** medco^o CENTENE Health Net®

Within Core Business





















RECENT

CURRENT

FUTURE



Tensions and Dichotomies in the Market



Fragmentation

Hyper-Lapse speed

Simplification

Ease and Convenience

Consumer

Millennials

Empower

High Tech

Consolidation

Glacial Progress

Personalization

Boutique Experience

Patient

Boomers

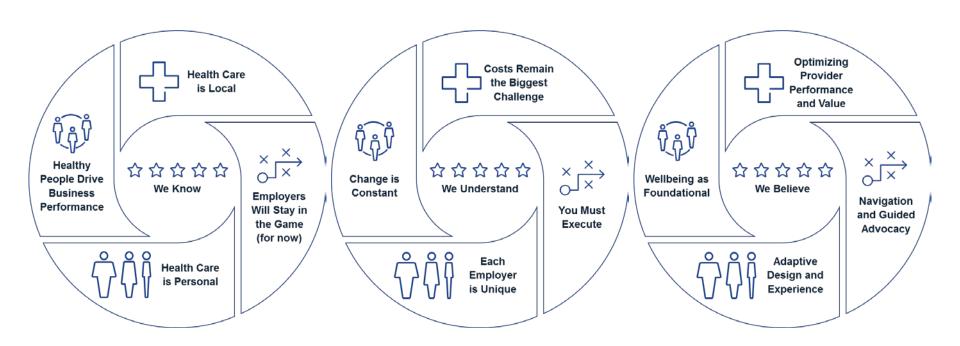
Guide

High Touch



Where Do We Go From Here?

Employers Must Remain Vigilant in Executing Their Strategies



What we know, understand, and believe...is not easy to deliver



Five Key Pillars as Anchors in Plan Sponsor Solutions

- Address four dimensions: physical, emotional, social, financial
- When visibly supported, wellbeing increases engagement / productivity
- Measure return on value

- Encourage high value services
- Integrate cost/quality and navigation
- Implement convenient, affordable alternatives
- Support employees and retirees in navigating the system effectively

- Factor in social determinants in design and supporting mechanisms
- Connect the organizational ecosystem with the patient and treating provider
- Focus on conditions with highest cost and evidence based outcomes

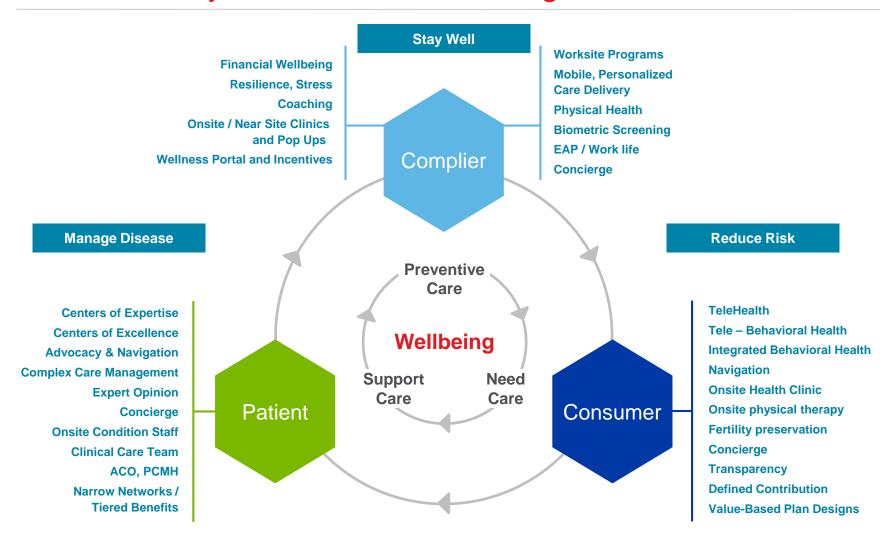


- Optimize value based payments
- Direct patients to optimal providers
- Offer tools to evaluate value, not just price
- Utilize Centers of Expertise for shoppable services and Centers of Excellence for complex care
- Engage people at the right time

While Leveraging Market Innovation Appropriate for SFHSS



Health Experience Cycle Foundationally Grounded in Wellbeing

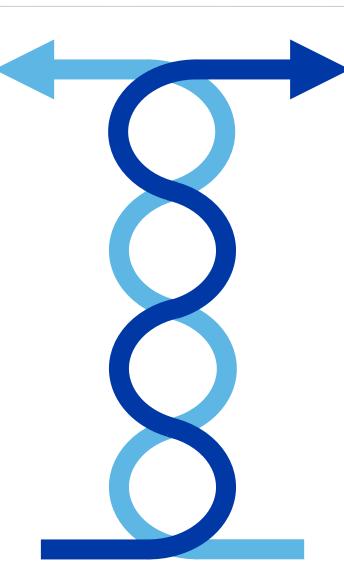




Delivered with Intentional Purpose Guiding and Empowering Members through their Health Journey

Personal Help

- ACOs
- Concierge Care and Service Coordinators
- PCMHs
- Direct Primary Care
- Accountability with Support and Consequences



Empower

- COEs
- Telemedicine
- Shoppable Care / Transparency
- Choices, Apps
- Websites
- Accountability With Limited Personal Help



The Ideal State — An Integrated Solution Supported by Technology and One-on-One Support



An Integrated Seamless Solution



Cost and Quality
Data



Expert Assistance and Support



Single Source of Comprehensive Information



Robust vendor integration and coordination



Family members also have support



Continual communication with providers



A Successful Strategy with an Integrated Approach







Culture of Wellbeing



SFHSS Wellbeing Historical Perspective



SFHSS Better Every Day Programs

Programs

- Weight Management
- Physical Activity
- Healthy Eating
- Emotional Wellbeing

Services

- ▶ Flu Shots
- Health Fair
- Onsite Classes and Seminars
- Onsite Health Coaching
- BiometricScreening
- Online WellnessChallenges

Pilots

- Group-Based Diabetes Prevention Program
- My Brain Solutions

Infrastructure

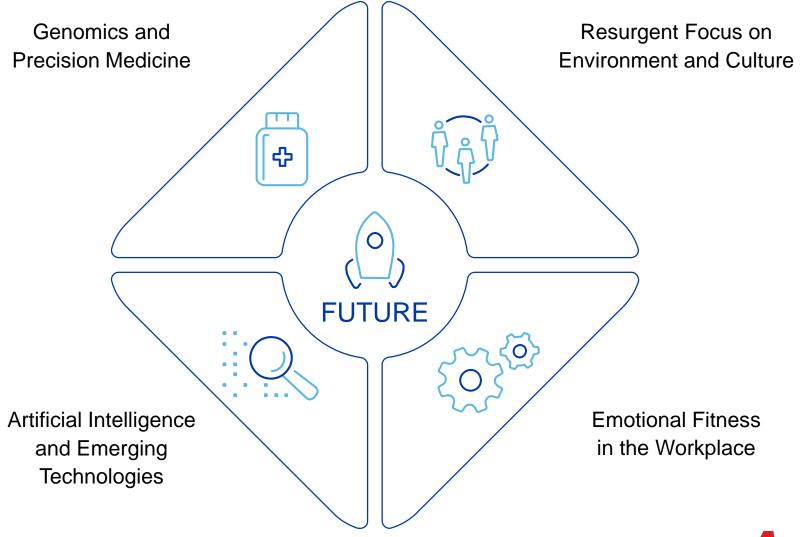
- SFHSS Wellbeing Staffing
- WellnessDepartmentChampions
- Dedicated Wellness Center
- KP Resources and Supported Programming



Trends and Emerging Areas



Emerging Focus Areas



Genomics Framework

Member **Experience**

Ensure member experience is supported.

Population Health

Ensure population health improves during genomics transformation.

Value

Ensure employees receive evidence based screenings and treatments.

Quality should improve while costs increases are mitigated.



Types of Genomics



Rx Genomics

The study of potential metabolic reactions at the genome level to different prescription pharmaceutical drugs. This is also referred to as pharmacogenomics.



Precision Medicine

A medical strategy that would allow for a more personalized treatment of patients, through the use of their genetic history and makeup.



Precision Health

In addition to genetic factors, precision health also examines external factors like environment and lifestyle. These factors help draw up a full map of risks and opportunities for each patient.



Direct to Consumer

Companies like 23andMe provide broad genetic profiles to individual consumers. These tests are not used for medical diagnosis but instead provide general genetic data.



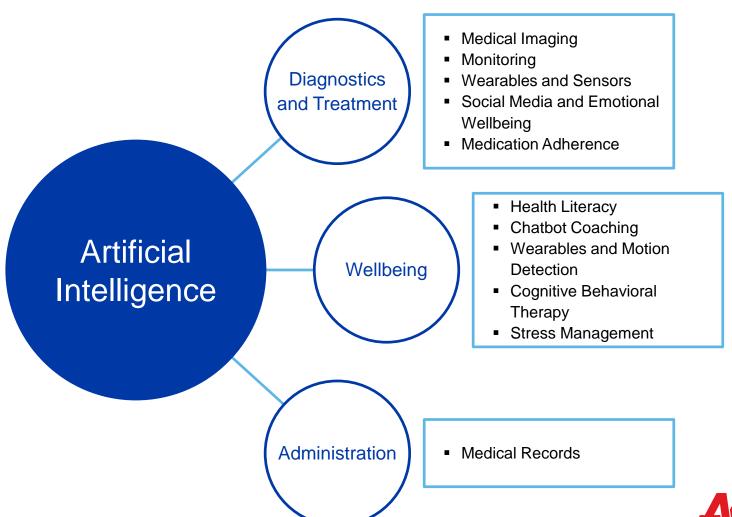
Types of Medical and Rx Genomic Testing

Diagnostic Testing	Identifies a genetic condition or disorder that is making or in the future will make a person ill. Results can help in treating and managing the disorder.
Predictive and Presymptomatic Genetic Testing	Finds genetic variations that increase a person's chance of developing specific diseases. Results can help in decisions about lifestyle and health care.
Carrier Testing	Tells people if they "carry" a disease-causing genetic change. Carriers usually show no signs of the disorder; however, they can pass on the genetic variation to their children, who may develop the disorder or become carriers themselves.
Prenatal Testing	Offered during pregnancy to help identify fetuses who have certain diseases.
Pre-Implantation Testing	Done in conjunction with in vitro fertilization to determine whether embryos for implantation carry genes that could cause disease.
Newborn Screening	Used to test babies one or two days after birth to find out whether they have certain diseases known to cause problems with health and development.
Pharmacogentic Testing	Describes how certain medicines are metabolized in a person's body. Results influence health care provider prescribing medicines that work best with a person's genetic makeup.
Research Genetic Testing	Helps scientists learn more about how genes or genomes contribute to health and disease as well as develop gene-based treatments.



Al and Health Improvement

"The use of technology to replicate or outperform humans at cognitive tasks"



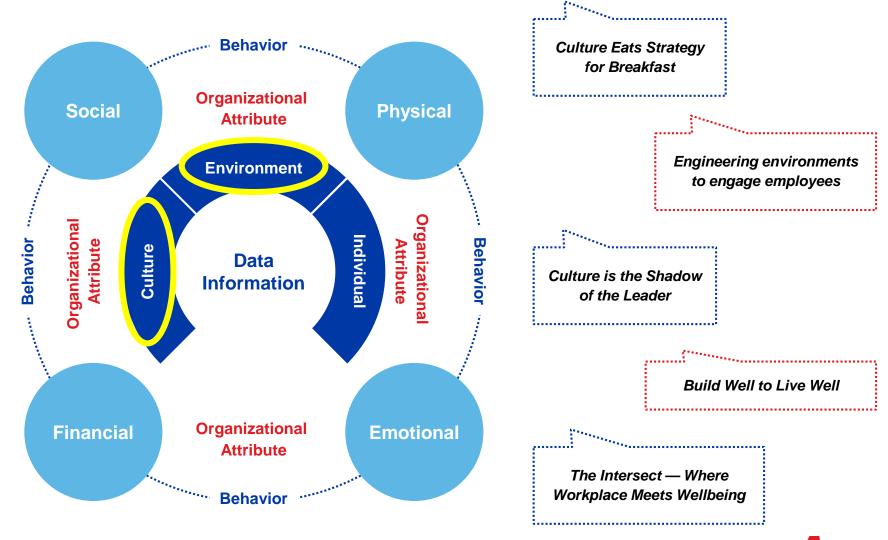
Culture and Environment to Drive Organizational Results

- Why is culture so important?
 - One common misconception is that pay is the most important influencer of job satisfaction. However, one study found that across all income levels, the top predictor of workplace satisfaction is *not* pay: It's the culture and values of the organization
- Survey results also demonstrated that employers are investing in culture-enabling programs.
 - Eighty-four percent offer organized, work-sponsored activities
 - Eighty percent offer team-based programs
- Employers also know that the physical work environment can have an influence on our wellbeing. As a result:
 - Fifty-six percent have made changes to the physical work environment
 - Top changes: healthier food in vending machines and cafeterias, onsite fitness centers, ergonomic programs and standing desks

Source: Optum 9th Annual Wellness in the Workplace Study



Workplace Environment — A Resurgence

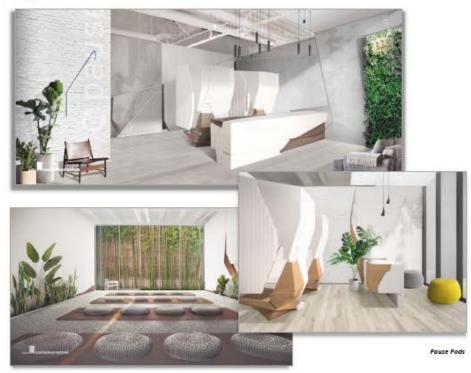


Reimagined Meditation Workspaces

The Convergence of High-Touch and High-Tech

Concept Overview

Reception



Zen Garden

carl@pausewellness.com

Digitally activated meditation space for your workplace, culture and business

CONCIERGE

Reception with products for brain function, memory & focus

PRIVATE PODS

Highly curated havens with a stateof-the-art audiovisual interface

ZEN GARDEN

Meditation area designed to restore attention, balance and awareness



WELL Building Standards

Physical Environment

Health, Happiness

Productivity



AIR



WATER



NOURISHMENT



LIGHT



FITNESS



COMFORT



MIND



INNOVATION

- Best Practice Design plus evidence-based research
- Impact to home, workplace, and public spaces
- Foster social interaction and engagement

Source - White Paper: Aon Wellbeing for Multinationals



Surround-Sound Messaging

Floor Clings, Wall of Wellness, Healthy Meeting Pledge





The "Elevated" Wellbeing Raffle



carl@pausewellness.com



Health and Wellbeing — Market Shifts

Broadened Definition of Wellbeing Traditional >>> Holistic Balance of High-Tech / High-Touch **Over-Rotation to Digital Only Targeted Communications** Hyper-Personalization Organizational Impact / Value on **Encompassing Efforts to Measure** Investment Help Me and My Family Help "Me!"



Wellbeing Framework



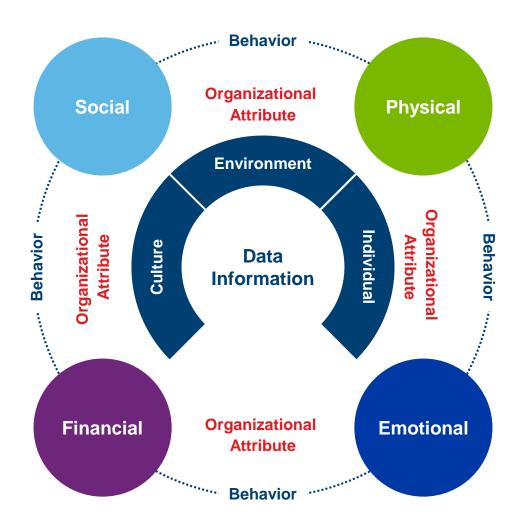
How We Define Wellbeing

Wellbeing is a state of balance that consists of having the appropriate resources, opportunities and commitment needed to achieve optimal health and performance for the individual and the organization



Empower Results®

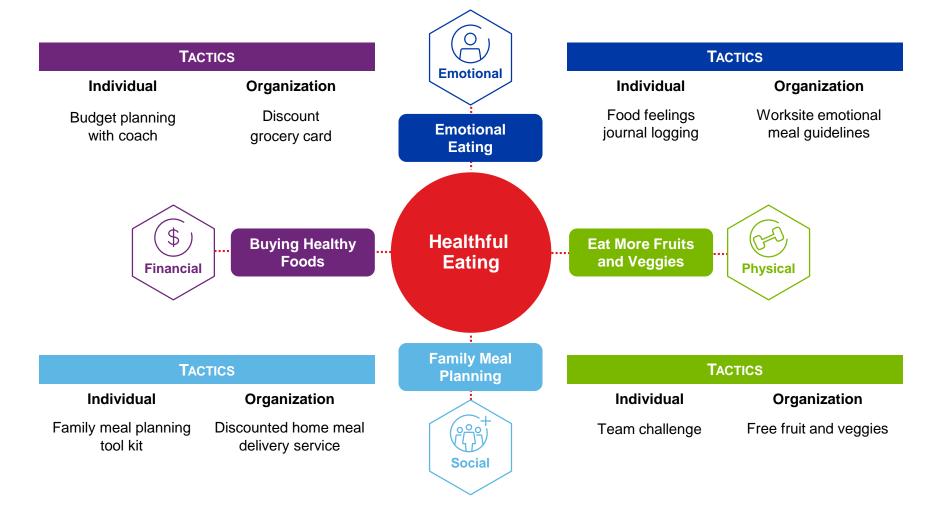
4-Square of Wellbeing — An Innovative Approach



Adapted from the World Health Organization



Wellbeing Takes a Behavior and Works it Across all Dimensions

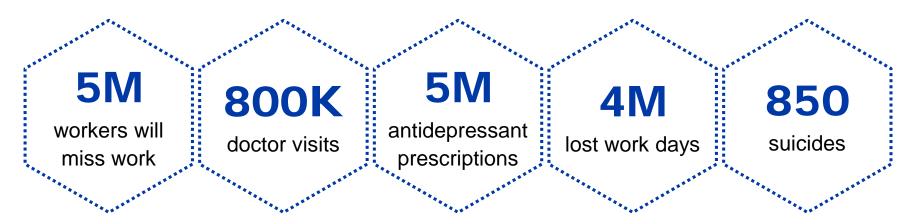


Emotional and Financial Health



Emotional Wellbeing is an Issue

An Average Week in the U.S.



Depression magnified by social isolation will be the most costly disease burden in the world by **2030**



Sources: Centers for Disease Control and Prevention, American Institute of Stress, U.S. Department of Health and Human Services; SAMHA 2016, Global Burden of Mental Disorders, World Health Organization, 2011



Many Aspects of Life Are Stressing Employees Out



50% Financial Situations

41% Changes at Work and School

40% Balancing Work Schedules

36% Coworker Relationships

33% Influence Over How I Do My Work

Sources: 2017 Consumer Health Mindset®: Aon, the National Business Group on Health, and Kantar Futures



Emotional Fitness and Family Wellbeing

- 1 in 5 parents spend a quarter of their income on child care
- The U.S. reports the greatest gap in happiness between parents and nonparents
- 47% of adults who have a parent 65+ are raising a minor child or supporting a grown child
- Over 43 million adults provided unpaid care to an adult or child in 2014

- 30% of family caregivers say they don't receive support-emotional, physical or financial help
- Nearly 1 in 4 employees provided eldercare in 2011
- 50% of all employees expect to provide eldercare in the next 5 years

Taking care of a child (prenatal through age 18)

Middle aged adults "sandwiched" between elder parents and young children Taking care of an adult aged 65+

Parental: Care.com, 2016. "How Much Does Child Care Cost?"; Emotional: CDC, 2017. "Depression Among Women"

Sandwiched: Parker, Kim; and Eileen Patten, "The Sandwich Generation," Pew Research Center, (January 2013); Center for Work Life Law at UC Hastings, 2016

Elder Care: http://www.easterseals.com/explore-resources/siblings-study.html; Center for Work Life Law at UC Hastings, 2016



Virtual Reality Guided Meditation

- Award winning employer-based solution
- Comes with virtual reality headset(s)









info@provatahealth.com

Vacation Match Benefit

Recharge to Boost Emotional Wellbeing

- Although employees worry about health care, disability, and retirement, they value vacation time more than savings and income protection products.^[1]
- Americans left 662 million vacation days unused in 2016, and 54% of workers finished the year with unused paid time off.^[2]

New Vendors Emerging in the Market

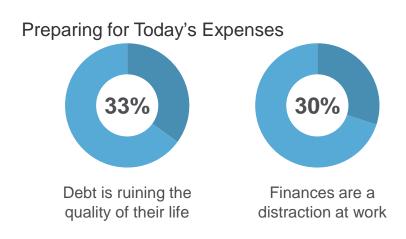


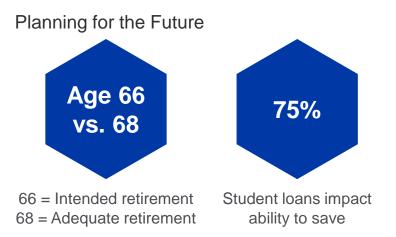


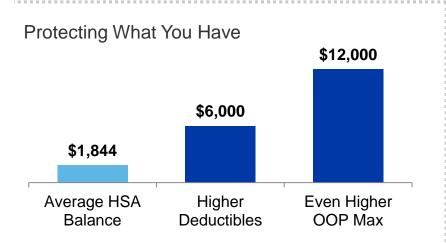
[1] MetLife 8th Annual Study of Employee Benefit Trends [2] Oxford Economics, 2016, U.S. Travel Association



Financial Health is an Issue







Preserving Assets for a Lifetime

How to create retirement income?



How to optimize Social Security and minimize taxes?

How much to leave to heirs?

- 1: 2017 Alight Financial Mindset® Study conducted with Aon
- 2: 2017 PWC Employee Financial Wellness Survey
- 3: Aon Hewitt The Real Deal—2015 Retirement Income Adequacy at Large Companies
- 4: EBRI Issue Brief, November 29, 2016, Health Savings Account Balances, Contributions, Distributions, and Other Vital Statistics, 2015: Estimates from the EBRI HSA Database



Financial Health is an Issue

Why Organizations Focus on Financial Wellbeing

believe it is the right thing to do

78% increase employee engagement

60% improve retirement plan statistics

decrease employee time spent on finances

What Employees Want and Need

49% spend time at work on their personal finances

Top Help Requests

Save for retirement / long-term needs	91%
Establish an emergency fund	49%
Save for children's education	49%
Pay off all or a portion of student loans or refinance at lower rates	47%

6 in 10 employees

would be **comfortable sharing** personal financial information with their employer for more **personalized guidance**



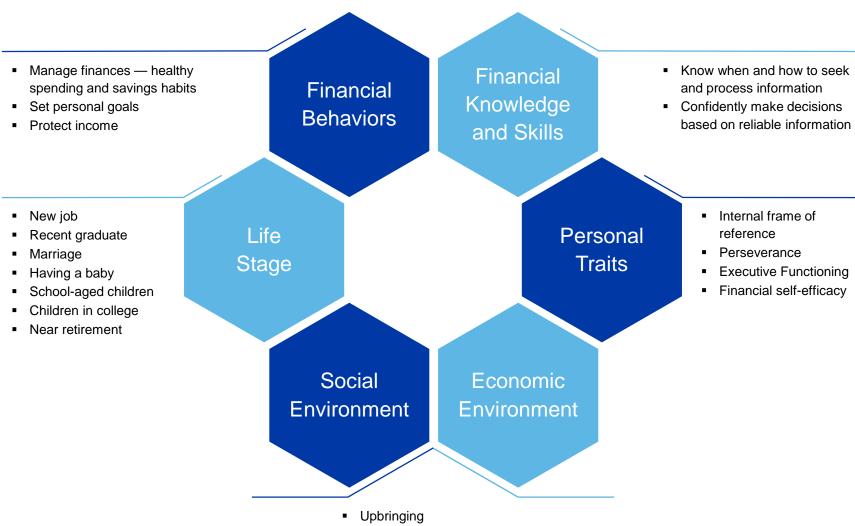
^{1: 2017} Alight Financial Mindset® Study conducted with Aon

^{2: 2017} PWC Employee Financial Wellness Survey

^{3:} Aon Hewitt The Real Deal—2015 Retirement Income Adequacy at Large Companies

^{4:} EBRI Issue Brief, November 29, 2016, Health Savings Account Balances, Contributions, Distributions, and Other Vital Statistics, 2015: Estimates from the EBRI HSA Database

Employee Factors that Drive Financial Wellbeing

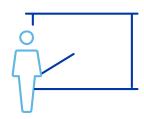


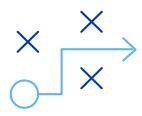
Consumer Financial Protection Bureau

- Friends, family, community
- Home life, work life
- Social media, advertising



Workplace is Ideal Vehicle to Offer Financial Wellbeing Services







Ability to reach large numbers of employees

Mechanisms to allocate income

Increased scale lowers costs





HR staff to monitor behaviors

Reduce stress and increase productivity



Best Practices, Elements of Success





Strategy Development	Implementation
 Develop a well-defined scope of health and wellbeing 	 Health and wellbeing program design and administration needs to be in alignment with overall scope Programs should support the overall vision / strategy while being creative with needs and considerations
 Integration of health and wellbeing — total rewards, benefits, employee health and safety, facilities, etc. 	 Governance process inclusive of budget expectations / requirements, reporting and audits
 Understanding of measurement infrastructure in conjunction with strategy development 	 Support of resources (e.g., champions, ambassadors, managers) with tools, resources, training and recognition



Key Take-A-Ways from Culture of Wellbeing and Food for Thought Questions

- Culture and Workplace Environment matter
- Holistic approach to wellbeing positively impacts engagement
- Emotional and financial health need to be addressed
- Personal technology and apps are accelerating

Food for Thought Questions

- How can Culture and Workplace Environment be impacted when SFHSS is not the employer?
- How do we measure the success and impact of these programs?
- What are the considerations to support wellbeing programs for pre-65 and post-65 retiree population versus actives?
- When is it appropriate to incorporate technology solutions into wellbeing programs?





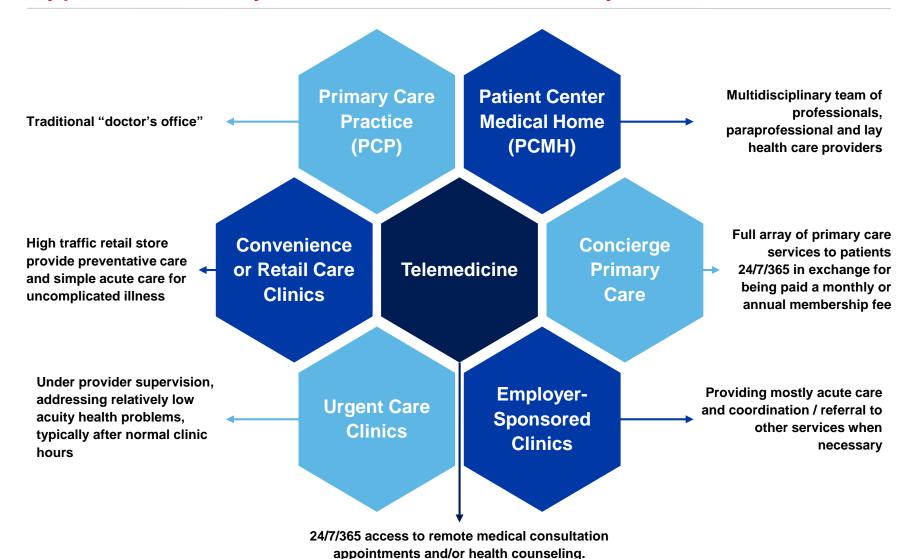
Clinical and Care Management



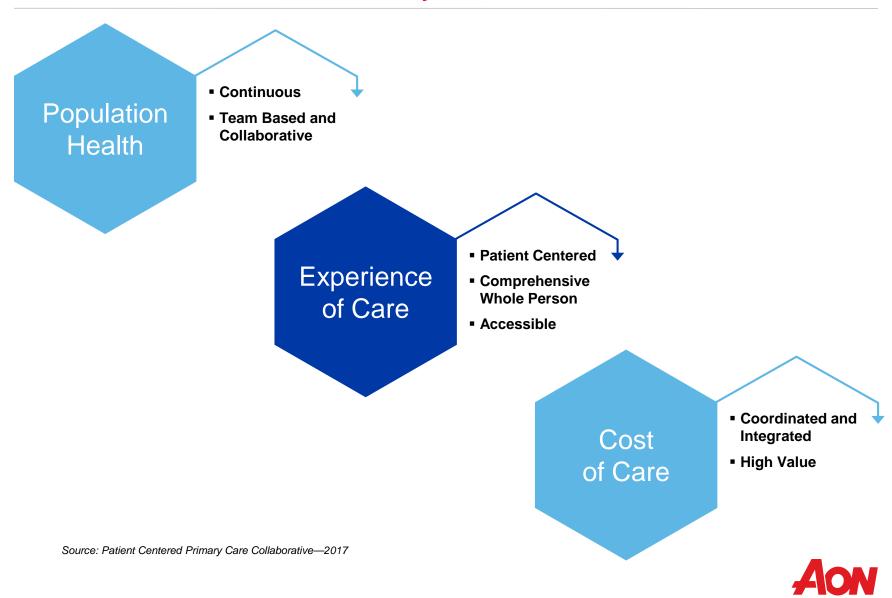
Primary Care Alternatives



Types of Primary Care Alternatives Today



What is Best Practice Primary Care?



Empower Results®

Impending Physician Shortage Facts and Fragmentation

Impending Physician Shortage Challenge

By 2020 the U.S. shortage of Primary Care Physicians will be >65,000

Currently in the U.S., average wait time to schedule a PCP appointment is 24 days

Higher concentrations of PCPs show lower cost and higher quality of care

Increase
spending on Primary Care
to 10% of total spend
decrease total cost of
care by 15%

Alternatives Creates Further Fragmentation Challenge

For most employers
1 ER visit

10 PCP visits

Current
reimbursement
method
not value based
or tied to
outcomes

87%
urgent care clinics
provide episodic
care only

58%
of retail clinic visits
represent new
utilization and
increase in cost
(\$14PMPM)

Sources: Bryant, Healthcare Dive.com March 21,2017

Ashwood et al, "Retail Clinic Visits For Low-Acuity Conditions Increase Utilization And Spending." Health Affairs 2016 Chernow et al, "Would Having Primary Care Doctors Cut Health Spending Growth?" Health Affairs Sept-Oct 2009 Patient Centered Primary Care Collaborative 2016 Annual Impact Report

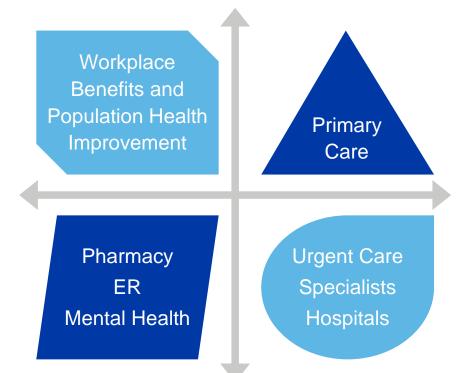


Physician-Led, Team-Based Primary Care is Best Solution

.... And can be the nexus between the employer-sponsored wellbeing, health and care delivery

Current State: Fragmented

Future: Connected and Working Together





Value Based Systems

Delivery System Transformation (DST)



Delivery System Transformation — What is it?

- Accountable care organizations (ACO), clinically integrated networks and health system
- Narrow networks and direct contracting strategy
- Centers of excellence and 2nd opinion tools
- Bundled or episodic payments, and all value-based contracting
- PCMH models, high performing specialty networks, all physician value-based alignments
- Incorporate cost and quality insights that allow for strategizing and implementing meaningful change
- Marketplace analysis of the rapid changes among providers and delivery care models and formulation of strategies that create solutions
- Market challenges and how to best overcome barriers in:
 - Carrier mergers
 - Health systems mergers and overall merger and acquisition activity
 - Lack of transparency and limitations on carrier data



Trends in Effective Health Care Management



Key Headliners

- Effective use of primary care and convenient access points such as Minute Clinics and urgent care facilities with good negotiated rates to avoid emergency room utilization are essential to cost control.
- Data aggregation and predictive analytics aids in early identification of chronic conditions and allows for steerage to chronic care programs that have proven results.
- Bundled payments and episodic payments are showing promise by lowering the cost of surgical procedures and delivering better outcomes, streamlined navigation and patient satisfaction.
- Use of centers of excellence and 2nd opinion programs can help validate the necessity of the care, confirm diagnosis, drive better cost and quality outcomes and pinpoint where the care should occur.
- The narrowing of networks and identifying effective and high quality facilities, primary care models and high performance specialist networks is a logical next step.
- ACOs and clinically integrated network solutions can be an answer when the goals, defined risks and quality metric incentives are aligned.
- Primary care, specialist and behavioral health telemedicine services, when integrated properly, are an effective tool for steerage and cost control.



The Continuum of Alignment Sophistication

AIMS Accountable / Integrated / Measurable / Service

	PPO	ACO	Onsite Clinics	Near-site Clinics	РСМН	Direct Delivery	PCP	Direct Contracts
Integrated Physician, Provider and Services	*	**	**	*	***	*	*	*
Accountable for Employer Specific Results and Outcomes	**	***	**	**	*	**	*	***
Accountable for Specific High Risk Cohort Results and Outcomes	*	**	**	**	***	**	*	*
Accountable for Employer Specific Trends	***	**	*	*	*	*	*	*
Accountable for Managing Unit Costs (Contracting or Risk Bearing)	**	**	*	*	*	***	*	***
Accountable for Managing Units of Service and Referrals	**	***	**	**	**	*	*	***
Employer Specific Measurement Strategy	*	**	**	**	*	**	*	***
Member Focused Care	**	***	***	***	***	***	**	***
Member Service Oriented	**	***	***	**	***	***	**	***

Optimal	***	The organization or provider delivers consistently on employer specific results
Variable	**	The organization or provider delivers if contracts and reports are well defined
Minimal	*	The organizations or providers offer minimal if any employer specific results



Plan Sponsors Need to Catch and Ride the Waves of Change

Plan sponsors must create an adaptive approach to health and wellbeing through <u>a defined set of focused strategies</u>.



Here is what is at stake...

for Employees		
Access / Convenience	Chronic care management	
Out of Pocket Costs for Benefits	Effective Apps and Innovations	
Navigation and streamlining care	Health and Wellness Management	
Transparency on Cost of Care	Quality of Life	

for Employers
Total Cost of Care Stabilization
Recruitment & Retention
Minimizing Disruption
Productivity

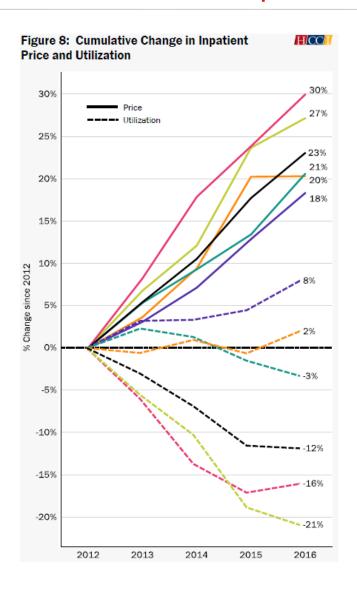




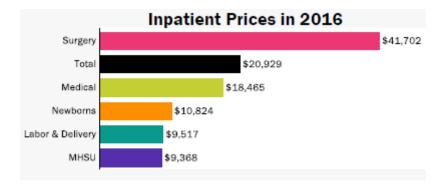
Provider Optimization



"It's The Prices, Stupid" — Uwe Reinhardt



Health Care Cost Institute, Jan 2018 Aetna, United, Kaiser, Humana BoB





Provider-Related Challenges for Employers



Not enough data to accurately measure and manage the effectiveness of health care expenditures



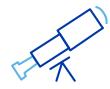
Lack of information on cost variances for specific procedures across the health care providers in their market(s) expenditures



No way to quantify which providers deliver the most efficient combination of cost and quality



Lack of transparency about whether carriers are utilizing the best providers and offering the **best deals** combination of cost and quality



Lack of insights into whether employees are visiting the **best providers** available to them



Aon Provider Optimization



Aon's Provider Optimization Solution gives you the **real picture** of your local health providers' costs and quality, so you can make data-driven decisions to improve the value of your health care dollar.





Aon has established an exclusive partnership with two leading health data companies, Amino and MPIRICA, to offer clients real-time data on the cost and quality variances of medical procedures across their local health care providers.



Data and Transparency Partners



Data guides great decisions



220M

People

The number of people in the U.S. whose experiences are represented by Amino data



951K

Providers

The number of practicing doctors and facilities that are potential matches



9B

Claims

The number of insurance claims powering Amino's database



\$1.8T

Bills analyzed

The total value of American health care expenses we've analyzed



MPIRICA Methodology Overview

MPIRICA is an independent startup focused on providing hospital and surgeon quality transparency. MPIRICA offers a robust measure of quality based on outcome data from hundreds of thousands of procedures derived from 100% sample CMS data,

- Focus on surgical outcomes / inpatient discharges
- All measurements are risk-adjusted at the patient level
- Outcome measures include:
 - Inpatient mortality
 - Prolonged risk-adjusted length of stay
 - Readmission within 90 days of discharge
 - Post discharge mortality within 90 days



DISCLAIMER

Quality information does not constitute medical advice, diagnoses, or prescriptions. Quality information does not constitute a recommendation or condemnation, an endorsement (positive or negative), guarantee or warranty of the professional services of any provider of financial services, health care services, or other regulated or unregulated services.



Provider Optimization — Employer Strategies

Guide people to the best value providers for specific procedures

- Consumer centric 2.0 transparency solutions
- High tech navigation platforms and/or high touch concierge services

Inform advanced design and local network contracting strategies

- Incentive designs and tiered networks
- Reference based pricing
- Narrow network panels and centers of excellence
- Direct contracting

Evaluate emerging carrier network solutions:

- "Premium" provider designations
- Narrow networks focused around specific health systems / ACOs
- Centers of excellence strategies

Measure the impact of strategies implemented over time



Key Take-A-Ways from Clinical and Care Management and Food for Thought Questions

- Team based, patient-centered, coordinated care is high value
- Value-based systems encourage quality outcomes and improved cost
- Population health management and predictive analytics enhance effective care
- Provider optimization guides members to high value providers with better quality and improved cost

Food for Thought Questions

- How can a plan sponsor drive changes in the system?
- What are other value-based systems/programs/structures that could enhance cost efficiency and quality outcomes?
- What levers should be considered in fully insured models like Kaiser and Medicare Advantage PPO?
- How can we measure the success and/or effectiveness of today's ACO programs?
- What other analytics should be deployed to better managed the population?





Specialty Topics

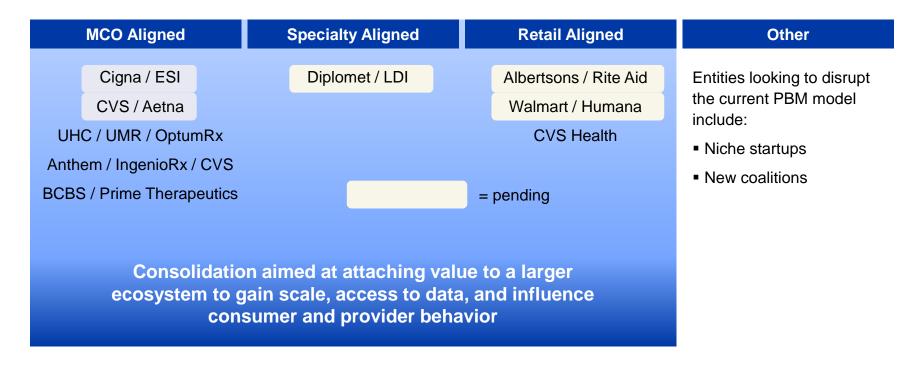


Pharmacy



The Times They Are Changing...

...But Will They Deliver Real Change



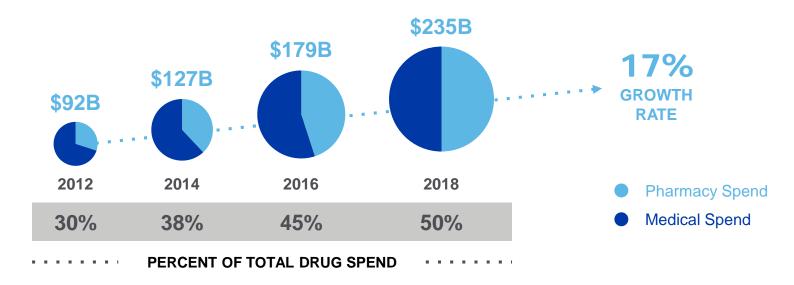
Key Questions:

- 1) Will these changes disrupt the current pharmacy benefit manager (PBM) model?
- 2) Do these changes better align incentives among stakeholders?
- 3) Will these changes result in more sustainable drug prices?
- 4) Will these changes better control cost?



Specialty Drugs — Driving the Narrative

Total Industry Specialty Spend



Specialty is growing in absolute dollars as a percent of drug spend

Specialty drug trend is forecasted to continue to grow at 17%

In the next few years, specialty drug spend is expected to exceed 50% of total prescription drug costs

Source: http://georgevanantwerp.com/tag/drug-trend/



Next Generation Specialty — Gene Therapy

- Genomic medicine is an emerging medical discipline that involves using genomic information about an individual as part of their clinical care
 - More than 1,500 potential treatments are in research and development by dozens of pharma companies, including 600 targeting cancers and 500 for rare, debilitating, or deadly conditions
- Two types of Gene Therapy
 - **In vivo**, where the therapeutic gene is administered directly into the patient
 - In vitro, where genetically engineered cells are created outside of the body and then transferred into the patient
- First to market release, new cancer drug named Kymriah
 - Treatment indicated for an aggressive form of Leukemia
 - For children and young adults who have been refractory to previous therapies
 - 83% response rate with price tag of \$475K
- Newly released Yescarta \$380K and Luxterna ~\$1M
- One time treatments typically administered under the medical benefit

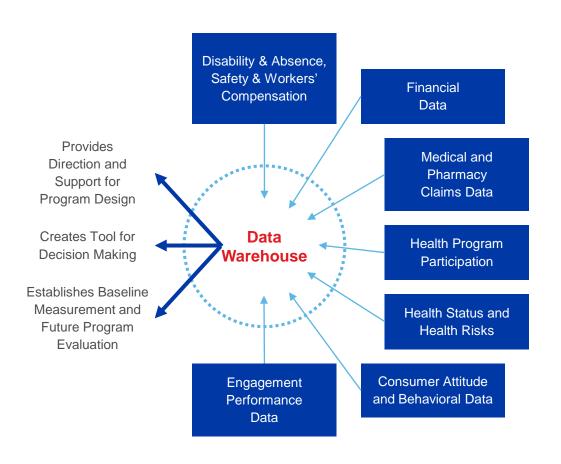


Data Analytics



Allows Data to Turn into Action

Non-Traditional Information







Regulatory Environment



Health Care Reform — Congressional (In)activity

Health care reform activity has come to a halt pre-midterm elections

- Graham-Cassidy and Alexander-Murray CSR bills are all but dead
- GOP leaders not anxious to revive "repeal and replace" efforts

PPACA opponents still want another "repeal and replace" attempt

- End Medicaid expansion and convert Medicaid funding to block grants for states
- Preserve subsidies
- Expand Health Savings Accounts (HSAs)

President signed "Right to Try" legislation

- Allows eligible terminally ill patients access to certain unapproved, investigational drugs
 - Eligible patient has exhausted approved treatment options and is unable to participate in a clinical trial involving the investigational drug
- "Right to Try" law does not address employer health plans
 - Terms of employer health plan regarding coverage of "experimental and investigational treatments" will likely govern
 - Law does not address legal/liability issues for employer health care plan to cover these drugs



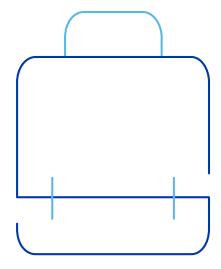
Health Care Reform — Repeal of Individual Mandate





Impact on Employers of Repealing the Individual Mandate

- Individual mandate penalty is set at \$0 in 2019 and beyond
- An increase in number of uninsured will result in higher uncompensated care costs
 - Cost shifting to employers and other payers
 - More instability in individual market





Health Care Reform — States Step In

States Adopting Mandates and Regulating Short-Term Limited Duration(STLD) Policies

- States are concerned that individual state health insurance markets will be adversely impacted by:
 - Guaranteed issue and community rating rules (absent individual mandate)
 - Short-term, renewable, non-PPACA compliant health care policies
- Vermont and New Jersey enacted individual mandates
- Maryland created a commission to study individual mandate
- California has a bill prohibiting sale of STLD health insurance beginning in 2019
- Hawaii passed a bill prohibiting sale of STLD policies to anyone eligible for a plan on the public exchange (awaiting governor's signature)
- Maryland has adopted a law limiting STLD plans to three months and prohibiting their renewal



Health Care Reform

"Repeal & Replace" is Now "Postpone & Preserve"

Government funding legislation postponed many unpopular parts of PPACA...

- Cadillac tax delayed until 2022
- Medical device tax delayed until 2020
- Health insurer tax is suspended for 2019

...but preserved the popular parts of the PPACA

- Federal subsidies to help people buy coverage
- Medicaid expansion
- Prohibition on pre-existing condition exclusions



2018 Mid-Term Elections

Control of House and Senate is at Stake

House of Representatives — Democrats Need 23 Seats for Majority

- Republicans hold 23 seats won by Hillary Clinton
- Democrats hold 13 seats won by President Trump

45 Republicans and 19 Democrats are either retiring or are running for another office

Senate

- Democrats need to pick up 2 seats to retake the majority
- Republicans need to pick up 9 seats for a filibuster-proof majority
- Democrats are defending 25 seats, including 10 in states won by President Trump
- Republicans are defending 8 seats, including 1 in a state won by Hillary Clinton

Democrat Senate seats in Play:

- Donnelley (D-IN)
- Manchin (D-WV)
- Heitkamp (D-ND)
- McCaskill (D-MO)
- Tester (D-MT)
- Nelson (D-FL)

GOP Senate seats in Play:

- Heller (R-NV)
- Flake (R-AZ)
- Corker (R-TN)



Trump Administration — Prescription Drug Pricing

HHS blueprint highlights "four challenges" in American drug market

- Seniors and U.S. overpaying for drugs due to lack of negotiation tools
- High list prices for drugs
- High and rising out-of-pocket costs for consumers
- Foreign governments "free-riding" off American innovation

HHS identifies four key strategies for reform

- Improved competition
- Better negotiation
- Incentives for lower list prices
- Lowering out-of-pocket costs

HHS's blueprint relies on regulatory and executive action, not legislation

- Actions President may direct HHS to take immediately
- Actions HHS is actively considering
- Proposals would likely require Congressional action unless offered under Medicare pilot programs

Health Care Reform — Executive Actions

HRAs

- Agencies told to write rules allowing health reimbursement arrangements (HRAs) to be used to purchase individual health insurance policies in public exchanges and individual health insurance market
 - Could provide cost-effective method of leveraging exchanges and individual health insurance
- Under current PPACA rules
 - HRAs for active employees can only be used to purchase group health coverage (and that coverage must meet certain requirements, such as integration)
 - Cannot be used to purchase individual health insurance policies sold on PPACA exchanges or in individual health insurance market

Short-Term Limited Duration (STLD) Policies

- Proposed rule permits sale of renewable STLD medical insurance policies for coverage periods longer than 3 months
- Expands choice in health insurance market, but possibly worsens demographics and raises premiums in public exchanges

Health Care Reform — Employer Mandate

Employer Mandate Enforcement

- IRS is enforcing employer mandate
- IRS sends Letter 226J to an employer if IRS determines at least one full-time employee (FTE) received premium tax credit for PPACA exchange plan for at least one month



- 30 days to respond
- Letter will likely be sent to individual listed on Line 7 IRS Form 1094-C
- IRS follows up with Letter 227 and possible conference with IRS
 - Samples of Letter 227 can be found on IRS website
- IRS issues **Notice CP 220J** if IRS determines employer is liable for Employer Shared Responsibility (ESR) payment

