BIG DATA APPROACHES: BETTER CONNECTING PHYSICIANS AND PATIENTS

Mike Manocchia, PhD
Cigna Analytics
EBRI Forum

December 2014

Together, all the way.℠

Cigna®

Cigna is applying big data analytics across all aspects of our business

Commitment to analytics

Significant financial commitment
Interdisciplinary data scientists
Dedicated technology talent
Institutionalized "insight" process

Big data platform

Data diversity

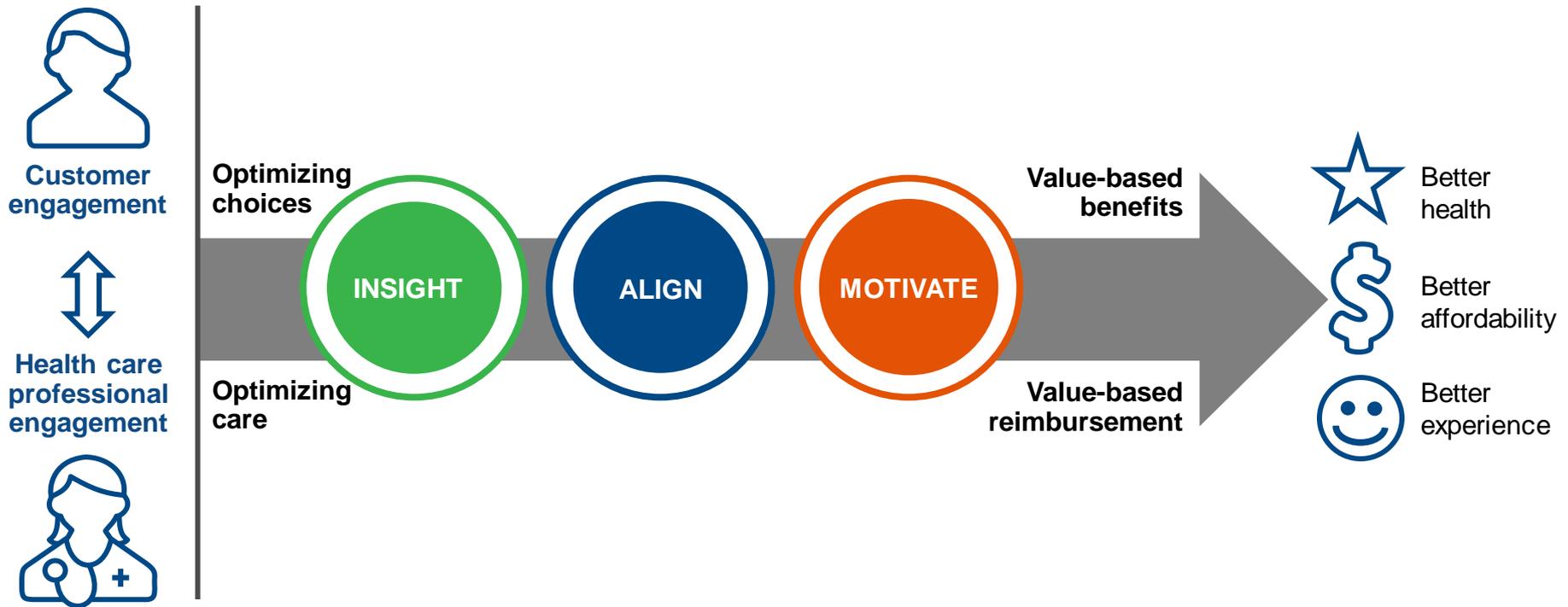Unstructured text
Consumer data
Web logs
Health diagnostics

Key initiatives

Health segmentation
Net promoter score
Delivery system collaborations
Employer benefit design

Cigna's connected care approach

Meet them where they are. Take them where they need to be.

Customer engagement

Health care professional engagement

Optimizing choices

Optimizing care

INSIGHT

ALIGN

MOTIVATE

Value-based benefits

Value-based reimbursement

Better health

Better affordability

Better experience

Big data driven initiatives that are core to Cigna's connected care strategy

Identifying customer level health opportunities and individual tendencies to make changes based how, where and by whom information is delivered.

Deeper collaboration with physicians and hospitals by sharing actionable information and creating value-based incentives.

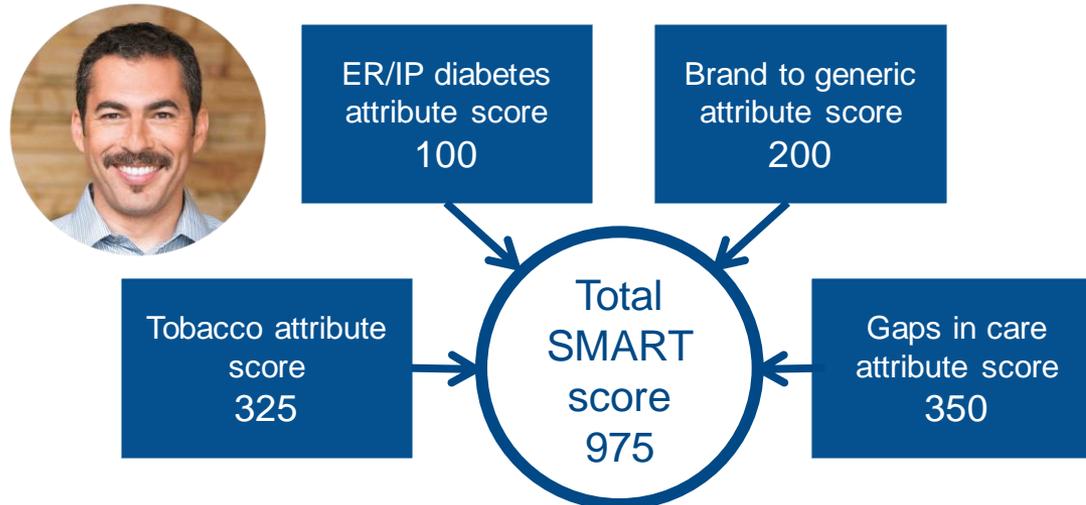# What is the Health Matters score?

Define

STEP 1: Each attribute is scored for each customer as illustrated below.

Value of coaching opportunity	✕	Targeted impact	✕	Probability of success	=	Tobacco attribute score =
Quit tobacco $1,623		100% tobacco free		20%		**325**

STEP 2: The score for each attribute is combined for a total SMART score for each customer as illustrated below.

Customer with diabetes, gaps in care, smoker and taking brand medication

ER/IP diabetes attribute score
100

Brand to generic attribute score
200

Tobacco attribute score
325

Total SMART score
975

Gaps in care attribute score
350

Cigna.

How Health Matters creates value for Cigna customers

Asthma	**Diabetes**	**Coronary artery disease**	**Chronic kidney disease**
• One ER visit or inpatient stay • Women's plus size purchases • Interest in dieting/weight loss	• Females > 42 • High-risk scores	• Females > 42 • High-risk scores	• Diagnosis of CKD Stage 4 • No evidence of dialysis

Medical cost savings opportunity

$500 PDMPY	**$780** PDMPY	**$900** PDMPY	**$2.4k** PDMPY

$500 - $2,400 (7%-23%) TMC Savings per engaged diseased customer

- Optimal segmentation yields superior medical cost savings for coaching
- 29%-42% of customers in national clients with these conditions are in optimal segments

| Identify possible optimal segments (ex., within existing disease populations)	Look at new modalities for segments (ex., online, text, email)	Test, learn and implement what worked

Cigna

Driving insights to personalize our operations and drive deeper customer engagement

Past = At least one discussion with a Cigna health coach (via phone) or Cigna online coaching tool


Healthy ——————————————————————————— Sick
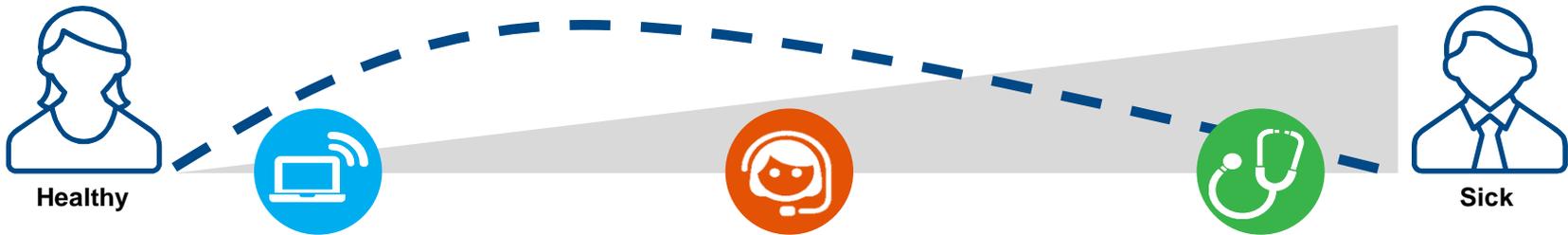
2015 and beyond = Measuring a customer's individual journey using his/her preferred health modality and accompanying evidence of change

Segment	Health-Behavior				Illness-Behaviors				Engagement
	Devices	Apps	Web	Texts	Email	Phone	Onsite	Physician	
Healthy	✓	✓	✓		✓				✓
Chronic Illness			✓		✓	✓	✓	✓	✓

How we connect customers with doctors

Piloting the Health Matters score and broader definition of engagement within key ACO groups
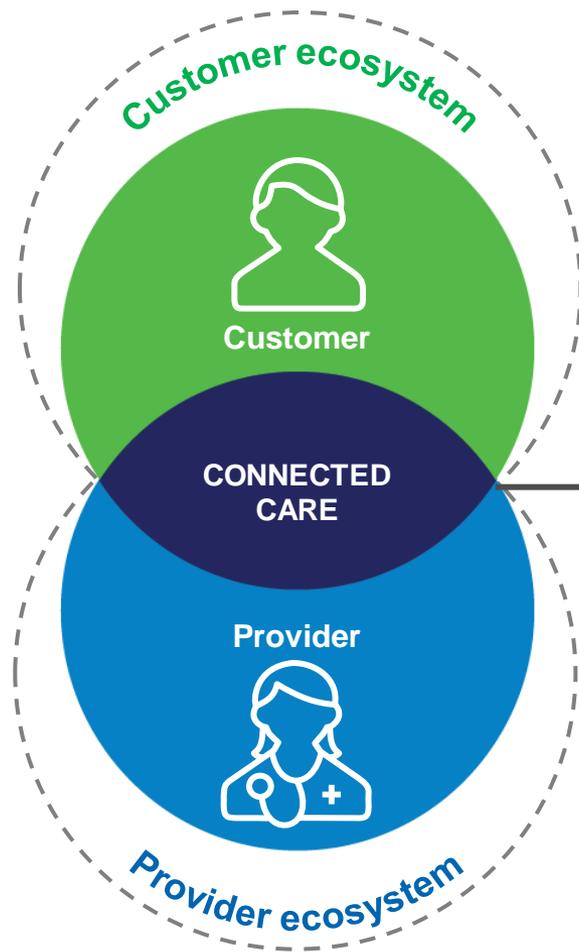
Key areas of focus

- Exchanging **actionable information**
- **Aligning** health goals and motivating change
- **Activating** and **empowering customers**
- Enhancing **value relationships** with **providers**

How we see our Big Data initiatives evolving our collaborations with physicians

Today	Working Toward
Care management reports for embedded nurses to identify high-risk customers and close claim-based care gaps	New products and financial models to align incentives HCP, customer and client
Performance management reports for practice administrators to identify areas of opportunity for affordability and quality improvement	Risk-adjusted episode of care arrangements
Contract negotiations for ACO performance for quality and cost outcomes and taking action on proactive Cigna data	EMR data driving improved stratification and quality assessment
	Shared care plans between customer, Cigna nurses, and HCPs

Cigna

QUESTIONS?