

Senior Living Foundation of the American Foreign Service



# History

- Founded in 2001 with the guiding principle that every person can change health behaviors, regardless of motivation level or past struggles to change
- Proven success across diverse industries including:
  - Hospital systems
  - Higher education
  - Federal employees
  - Health plans

restleTree

• Manufacturers

- Construction
- Retail
- Transportation
- Medicare and Medicaid
- Public employees



• URAC accredited for Disease Management since 2006

## **Population Health Transformation**

Behavior change expertise for entire population that has delivered tangible results year after year

- Prevention & Wellness
- Chronic Condition Management
- Opioid Risk Prediction Tool & Prevention Solution
- Engagement Tools
- Data Analytics and Integration



### TrestleTree Vision, Mission, Values

#### **Vision**

TrestleTree exists to celebrate and pursue health transformation in people.

#### **Mission**

We use our knowledge, integrity and influence to reduce health care spending while helping people achieve maximum health.

#### **Values**

TrestleTree chooses to be an agent of influence, with full <u>belief that growth and change are achievable and</u> <u>advisable</u> to move towards highest levels of holistic, healthy living:

We seek to influence with care through empathy and respect.

We seek to influence with knowledge and expertise.

TrestleTree celebrates life as a mosaic, rich with messiness, meaning, and texture.

TrestleTree promotes life fullness and joy as vital ingredients in our work with others.

TrestleTree seeks integrity, honesty and practiced ethical behavior in our work.

TrestleTree seeks to hold persons involved with this company in trust.

We value the preciousness in others, including their uniqueness, diversity, particular vulnerabilities and possibilities.



## TrestleTree's Core Expertise

- Focusing on non-adherent and less motivated individuals
- Customizing the experience to engage and influence each participant based on their unique set of circumstances
- Achieving measurable and sustained clinical outcomes
- Achieving cost savings and a positive ROI



# **Behavior Change Coaches**

- Healthcare Professionals trained by TrestleTree
  - Registered Nurses
  - Licensed Practical Nurses
  - Registered Dietitians
  - Certified Diabetes Educators
  - Exercise Specialists
  - Nutritionists
  - Health Educators
  - Medical Social Workers
  - Pharmacists
  - Physicians (in elements of the training)



# **Behavior Change Training**

- For the full TrestleTree model, Behavior Change Coaches receive 200 hours of initial training by doctoral level Psychologists
- Pragmatic pieces of 12 elegant theories help create TrestleTree's proprietary training model, including:
  - Health Belief Model (Rosenstock, 1974)
  - Social Learning Theory (Bandura, 1977)
  - Transtheoretical Model (Prochaska, DiClemente, & Norcross, 1992)
  - Motivational Interviewing (Miller, 1983)
- Ongoing individual supervision and group training



# **Behavior Change Coaching**

- Philosophy and approach
  - Expertise in non-adherence and low motivation
  - Build relationship of trust/earn right to influence
  - Focused and holistic, with multi-goal intentionality
  - EBM guidelines and physician directives
  - Move beyond simple provision of information
  - Match and move approach:
    - Value the health and life story to drive behavior change within the unique context of each life
    - Everything tailored for each individual participant
  - Help participants access all available resources



## Clinical Outcomes 2001-2017

#### Diabetes

• 67% of participants with elevated HbA1c levels at or above 7% lowered their HbA1c an average of 1.6%, from 8.8% to 7.2%.

#### Cholesterol

• **79%** of participants presenting with elevated cholesterol levels at or above 240 mg/dl reduced an average of **63 mg/dl** from **273 mg/dl** down to **210 mg/dl**.

#### Blood Pressure

• **78%** of individuals presenting with elevated blood pressure values over 140/90 mmHg reduced from an average of **149/92 mmHg** down to **128/78 mmHg**.



# Clinical Outcomes 2001-2017

### • Weight

• **57**% of individuals enrolled presenting with a BMI over 30 lost an average of **13.3 pounds**.

### Waist Circumference

- 61% of male participants with a waist circumference >40 inches, reduced an average of 2.9 in. from an average of 45.8 in. to 42.8 in.
- 64% of female participants with a waist circumference >35 inches reduced an average of 3.1 in. from an average of 42.2 in. to 39.1 in.

### • Tobacco

• 53% 6-month quit rate and 41% 12-month quit rate using the rigorous Intent-to-Treat methodology, with an average weight loss of 0.8 lbs. per participant.



TrestleTree Behavior Change Stories

- Ellen's retiree
  - Quit after 60 years
- Cindy's retiree
  - Liddy
- Jennifer's pre-retiree
  - Veteran
- Dianne retiree
  - Cultural beliefs
- Ye Jin's pre-retiree
  - Finances

Real people – real life – real living

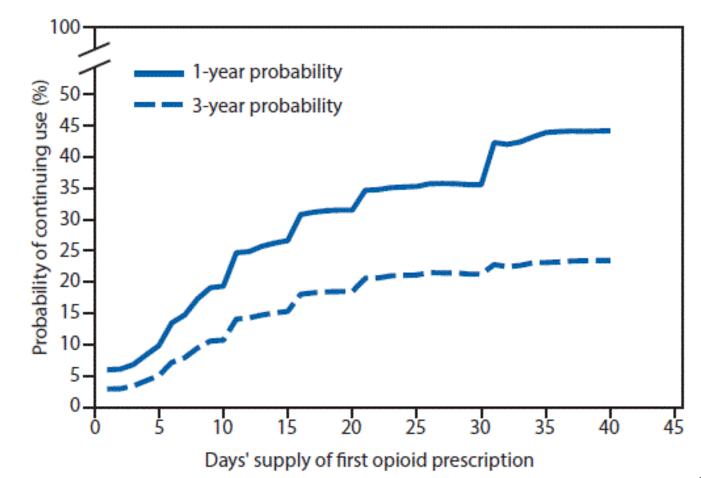


Opioids and Retirees

- 2002-2014 the opioid abuse declined in young people, but doubled for American's over 50 years of age
- 2016 one in three Medicare members with drug coverage were prescribed an opioid
- For high opioid utilizers, doctor shopping and pharmacy shopping is a serious concern for coordination of care
- As we age our aches and pains increase and pain medication increases
- Medicine closet management is important



SLIPPERY SLOPE OF OPIOID ABUSE: 5+ Days Э 14% likelihood of continued opioid use 1 year after initial 7 day supply
 ⇒ 25% likelihood of continued opioid use 1 year after initial 11 day supply



Source: UAMS College of Pharmacy 2017

### PREDICTION OF OPIOID RISK

- This crisis requires an additional, new approach focused on patient-level insights to predict opioid addiction risk and leverage behavior change methodology to prevent opioid misuse and addiction at the individual level
- ⇒ Focus is on disrupting opioid abuse before the unintentional slippery slope impacts lives and increases avoidable cost
- TrestleTree has an exclusive licensing agreement for an Opioid Risk Prediction Tool from leading opioid addiction risk researchers and data science centers of excellence, with a predictive ability of just over .90
- 323 risk variables ("data features") spanning demographic, pharmacy claims, and medical claims data, each individually weighted for an individual prior to being prescribed an opioid for the first time



### PREVENTION OF OPIOID RISK

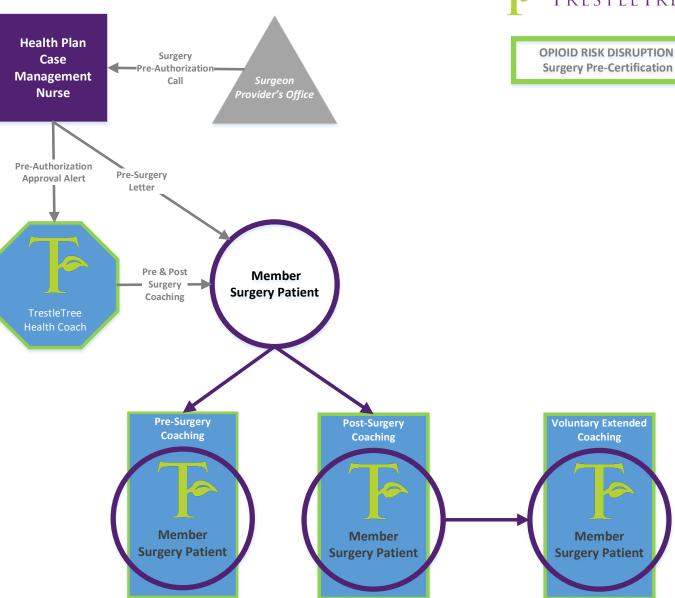
- → Behavior change intervention for high-risk individuals who are being prescribed an opioid for the first time, before a refill, pre- and post-surgery, post-ER visit, work comp injury, etc.
- → TrestleTree's unique approach to behavior change enables a more contextual understanding of patient predisposition for opioid abuse, such as family, culture, finances, social, etc.,
- → TrestleTree's expertise is <u>helping people change</u> tough health behaviors that <u>do not want</u> <u>to change</u>
- → Holistic approach to health behavior change allows influence on co-morbidities and fosters referrals/access to all available resources



Opioid Disruption Pre – Post-Surgery

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TrestleTree





A Look Around the Corner Disruption Solution Strategy

- Use timely data and predictive analytics to *look around the corner* to proactively engage, change health habits and reverse the costly impact of musculoskeletal diagnosis and surgeries
- Successfully incentivize early and sustained engagement with a uniquely trained TrestleTree Health Coach
- Leverage TrestleTree's proprietary opioid risk prediction algorithm to identify the pre-risk population for opioid abuse, addiction, overdose and SUD



A Look Around the Corner Analysis Assumptions

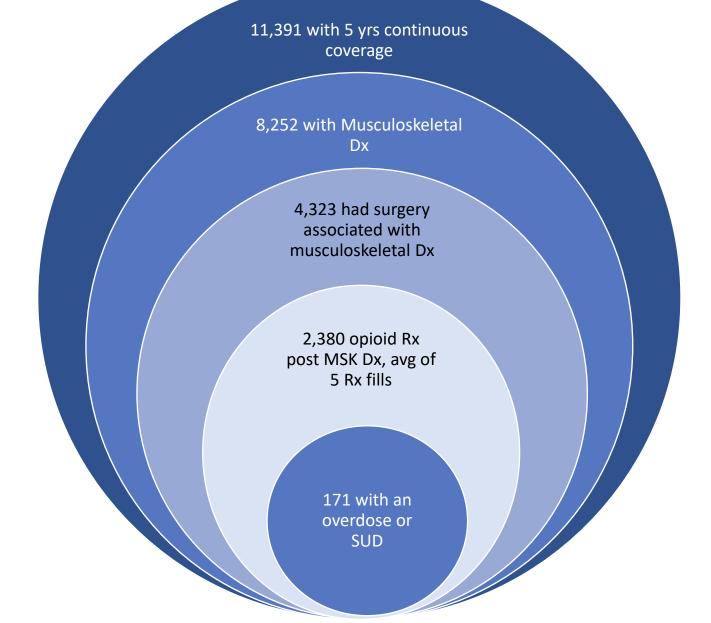
#### DATA

- Included in the analysis was paid Medical claims and Rx claims from May 2012 – July 2018 for all members covered
- To be included in the analysis, a member must have 5 years of continuous coverage in a health plan during claims run
- Stratified population by:
  - Diagnosis for musculoskeletal pain / issue
  - Use of an opioid
  - Surgery related to musculoskeletal pain / issue
  - Overdose or Substance Use Disorder



Musculoskeletal Cascade Case Study

> A Look Around the Corner Analysis Overview





A Look Around the Corner Musculoskeletal and Surgery Analysis Results

#### Cascade Musculoskeletal - Surgery

	<u># lives</u>	<u>Cumulative \$\$</u>	<u>% lives</u>	<u>Avg. Mem</u>
• 5 Year Stratified	11,391	\$407,152,115	100%	\$ 35,743
Musculoskeletal Dx	8,252	\$329,857,254	72%	\$ 39,973
Musculoskeletal Surgery	4,323	\$214,538,293	52%	\$ 49,627
Opioid users & Musc. Dx	2,380	\$142,788,111	29%	\$ 59,995
Overdose or SUD	171	\$ 19,369,234	7%	\$113,270





### Population Health Improvement: Reversing non-adherence & hyper-adherence

