

Using Data to Improve Population Health

Task Force on Innovations in State Health Systems

October 13th 2017

REVISED DECEMBER 2020

Avera Quick Facts

Integrated Delivery Network

Coverage population of ~2,000,000 souls

~30 Hospitals & 1,100 Licensed Beds

~21 Skilled Nursing & LTC Facilities

~300 Ambulatory Clinics

~450 Providers

~10,000 Nurses

~25 Pilots, 33 Flight Nurses and Paramedics

~2500,000 Member Health Plans

~2.7 M Annual Outpatient and Clinic Visits

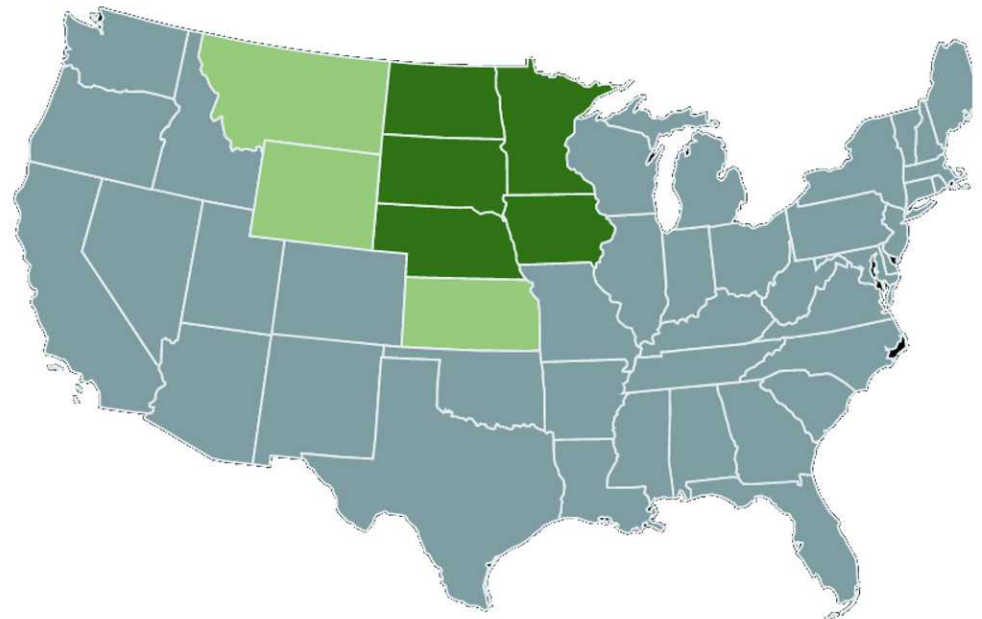
~147 patient spoken languages

Telemedicine Presence in 235 Locations

36 Specialty Sites

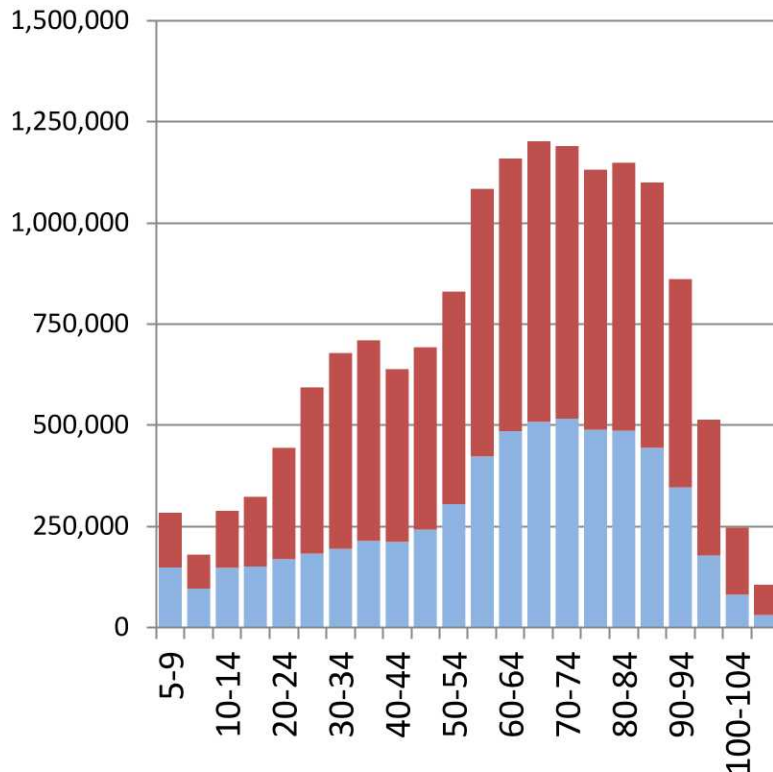
30 Long Term Care Sites

4 Prisons & Correctional Facilities



Avera's Population

Age Distribution (M&F)
Inpatients 2007-2017



Top 3 Diagnoses (2007-2017)

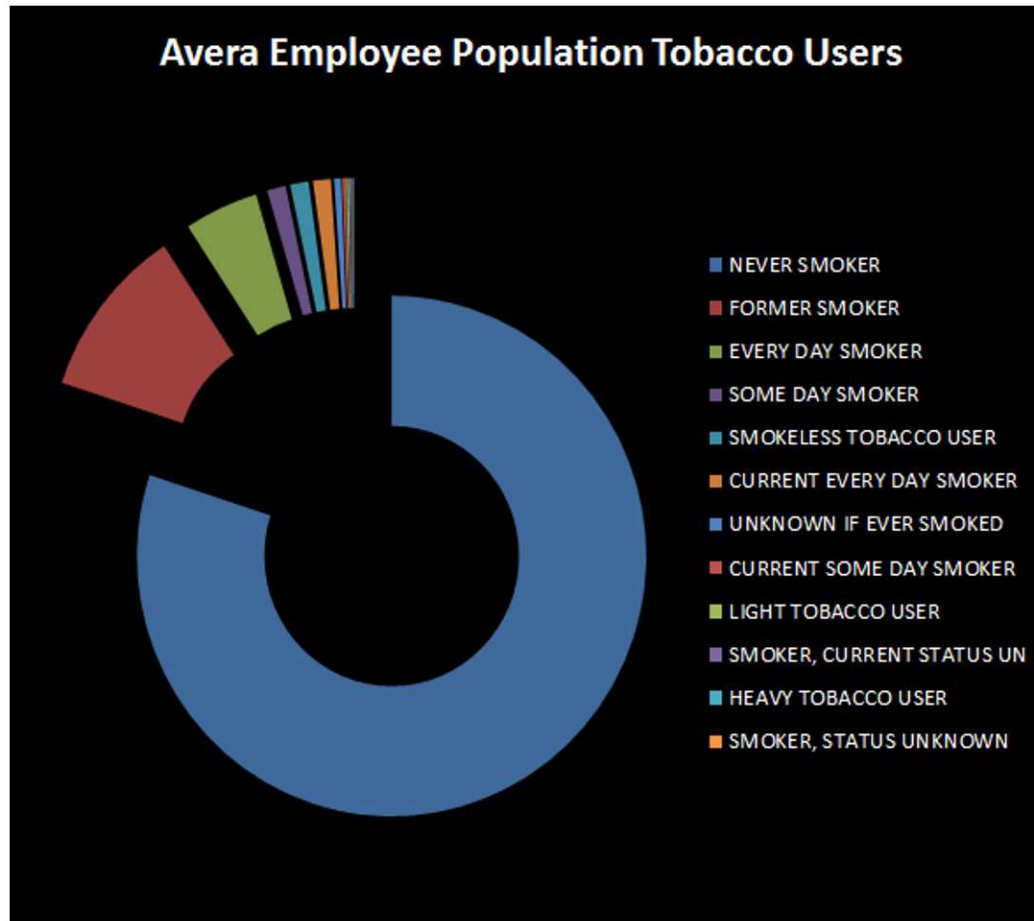
- Diabetes Type 2
- Hypertension
- Hyperlipidemia

.... Sugar, Salt, Cholesterol

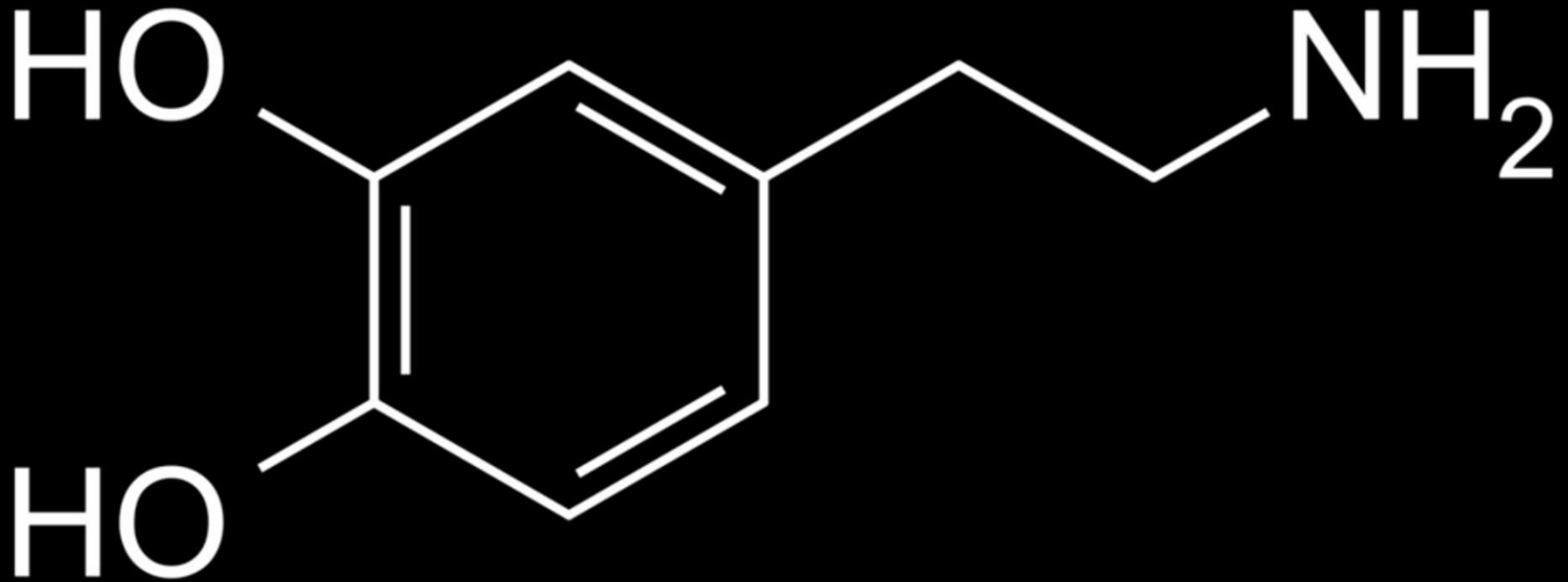
Tomorrows Patient Population and the Mechanics of behavioral feedback loops



Irrational Human Behaviors



Dopamine Manipulation



Fun = Challenge + Achievement + Reward

DIVERSION



A Tale of Two Economies

Baumol's Cost Disease & Hobson's Choice.

1. High Productivity Growth

- Dell, Toyota, Wal-Mart, Amazon, Tyson Foods, PepsiCo, Nestle, Kraft Heinz, InBev, General Mills
- **Consumers conditioned to pay less for more**

2. Low Productivity Growth

- Education, *Healthcare*, Law Enforcement, Arts & Culture, Government, Self-employed service industry
- **Consumers pay more for the same**

The Gap

Mozart String Quartet No. 4 in G Minor (K.516) 1787.

The productivity of classical musicians has not improved over time.

The average college professor can't grade papers or give lectures any faster today than he did in the early nineties.

A mechanic takes just as long to fix a radiator hose.

A doctor takes just as long to assess and diagnose a patient as they did in the 1990's.

**DIVERSION
ENDS**

Designing Wellness Programs

De

Demographics

Ps

Psychographics

Lo

Location

Pr

Product

Be

Behavioral

In

Intention

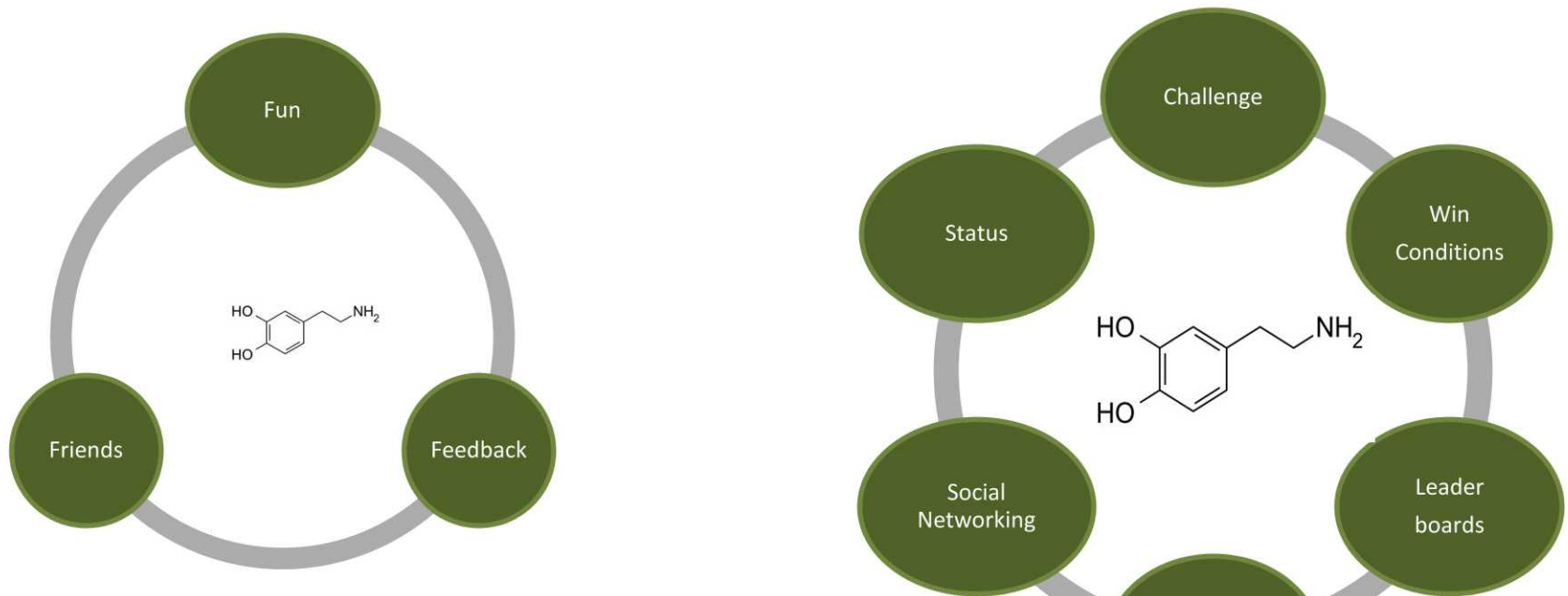
Re

Referrals

Hi

History

Dopamine Manipulation Models



Rewards as Engagement Motivators

Intrinsic Rewards for individual achievement.

- Fulfillment, Satisfaction, Enjoyment
- Status, Praise, Recognition
- Respect, Influence, Authority
- Wellbeing, Happiness

Extrinsic Rewards for effort and accomplishment.

- Tangible recognition of achievement
- Fungible (exchangeable), Access
- Certificates, Medals, Trophies
- Cash, Gift Cards, Merchandise
- Candy, Stickers, Toys

Evolution of Extrinsic Rewards

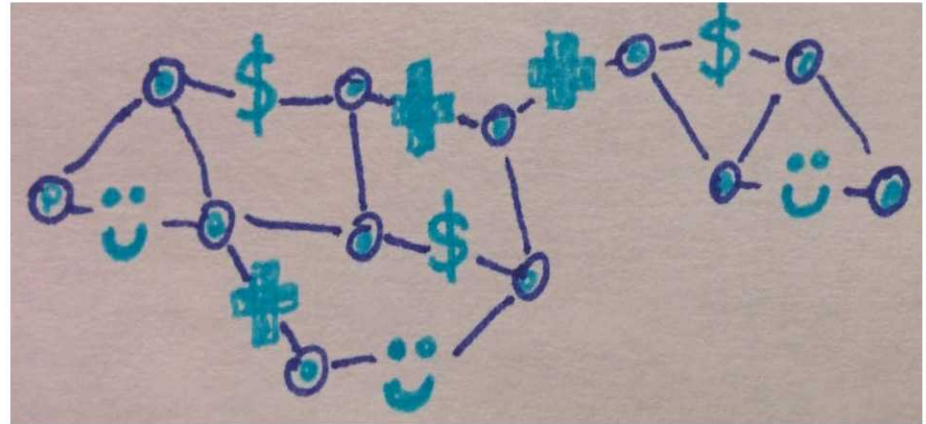
- 1800's : Point of Sale Tangible Goods (BoGo)
- 1930's : Post Sale Engagement
- 1980's : Loyalty Programs
- 2000's : Virtual Rewards



The future of population healthcare is **not just being good at this...**



But being **REALLY** good this...



NextJump Inc. | Charlie Kim



WHO WE ARE OUR BUSINESS CAREERS BUZZ BLOGS CONTACT US



WINNER OF THE 2013 MCKINSEY/HBR LEADERSHIP AWARD

THE LEADERS EVERYWHERE CHALLENGE

Charlie Kim & David Marquet co-authored their stories on leadership as interwoven narratives. They each embedded leadership as a core organizational capacity in two very different settings—a nuclear-powered submarine and an internet startup.

[LEARN MORE](#)

Swedish Lottery | Kevin Richardson



~~What does this mean for
Legislators?~~

**Don't let a good crisis
go to waste.**