



# The Tableau Healthcare Show

*Your Third Thursday Skill Pill*

**Skill Pill 10**

**Use Data and Predictive Analysis to  
Drive Optimal Health**



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# For Healthcare Providers, Payers, Pharmaceuticals, Medtech, Life Sciences, Admins and Data fans

*Information, News and Info Applicable to the Healthcare  
Analytics Community*



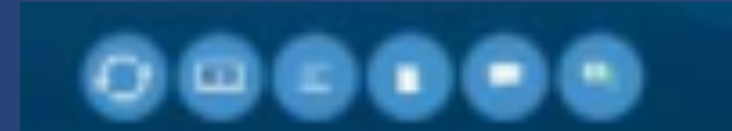
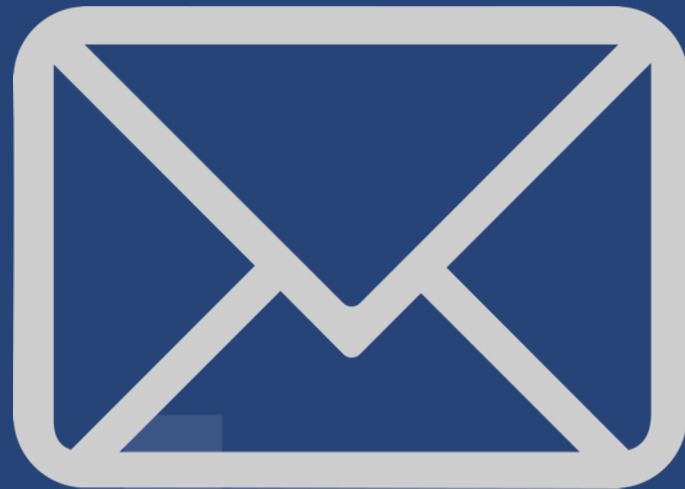


**Tableau has a dedicated Healthcare Team for Payers and Providers and a dedicated Life Sciences team for Pharma, Bio-tech and MedTech.**

- **Tableau works with 20 out of 20 of the Top Hospitals (US News & World Report)**
- **Tableau works with all major Payers**
- **Tableau works with over 2,200 healthcare organizations in the USA**
- **Tableau works with 10 out of 10 of the Top Pharmaceutical organizations**

# Feedback, questions, comments

Email us!



Questions? Let us know in the Q&A pane!

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We are listening and want your input!

# Agenda

- Our Guests Today
- Use Data and Predictive Analysis to Drive Optimal Health
  - Extending Analytics to your Members and Patients
  - Integrating descriptive, predictive and prescriptive analytics into Tableau with Einstein Analytics
  - Building and Customizing a Campaign with Tableau
  - Using Extensions to integrate your Campaign with your CRM
- Q&A

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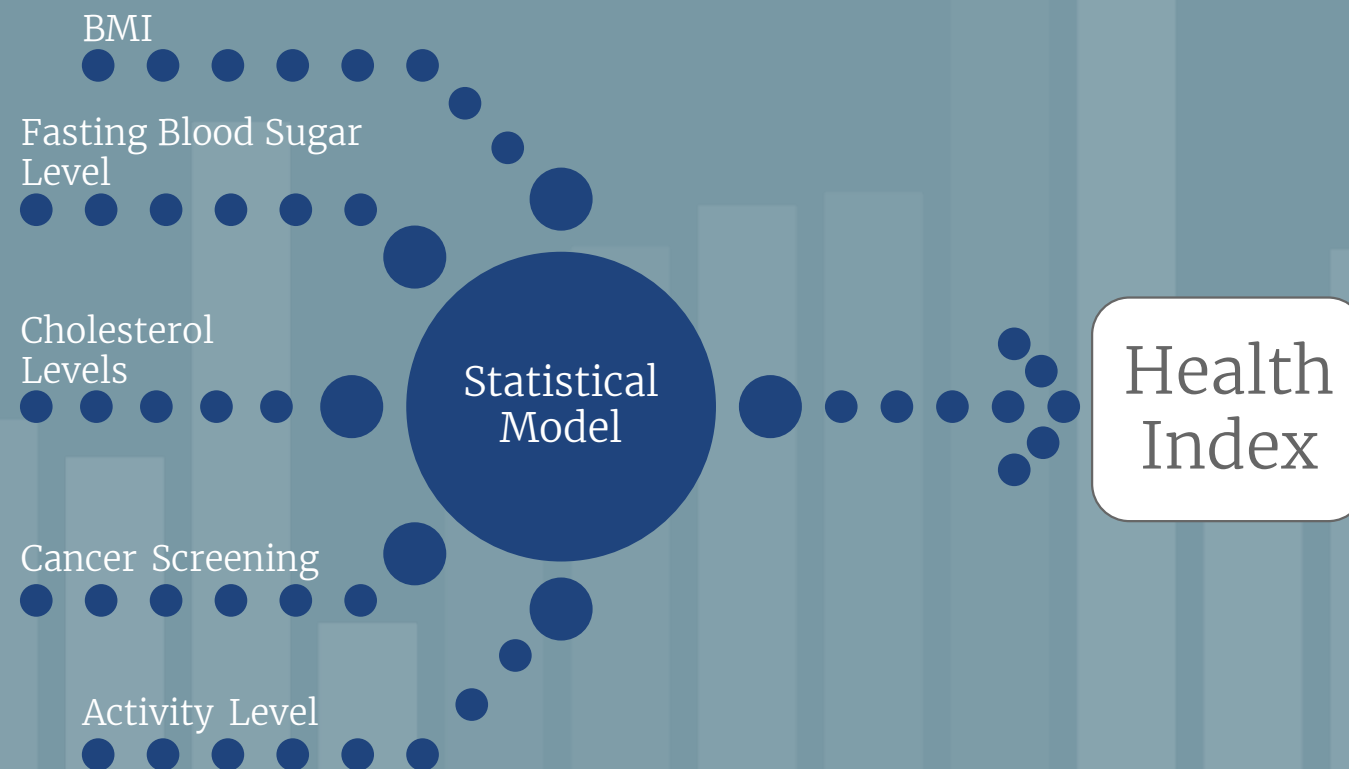
**Today's Presenters**

# Using Analytics to Drive Optimal Health

## What is a Health Index?

- A composite index tied to a member representing a broad array of individual health data points.

The Health index may have a score from 0 to 100 with associated actions as the following example explains:

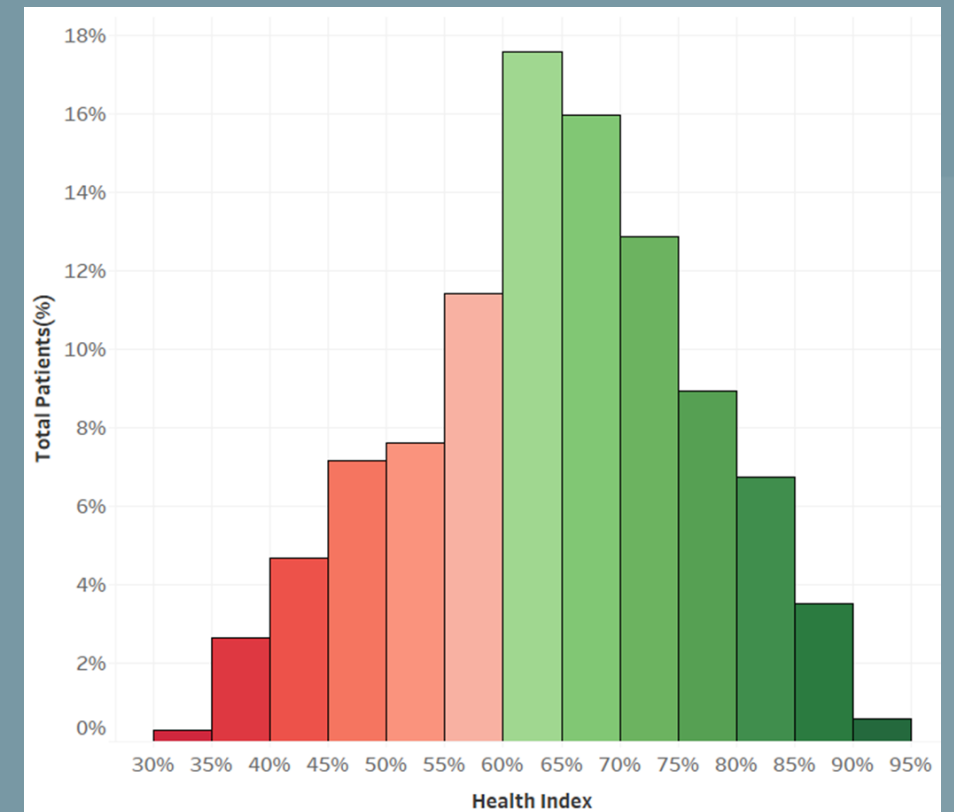


Health Index	Description	Action
75 - 100	Low risk	Let your PCP know about your results and keep it up
50 - 75	Mild Risk	Talk to your PCP at your next visit and discuss your results
25 - 50	Moderate Risk	Schedule a visit with your PCP immediately to discuss your results
0 - 25	High Risk	Seek emergency or urgent care

# Using Analytics to Drive Optimal Health

How do I use a Health Index to reduce risk?

- 1) Create a model
- 2) Scale the model
- 3) Make the results actionable



# Using Analytics to Drive Optimal Health

What else can I do with the results?

- Make the member part of the care or wellness team by sharing the data with them
  - Guide them on understanding what their index means and why it is what it is
  - Show them what they can do to improve the outcome
  - List the benefits they would see from having better health metrics
- As an organization, you will be able to target relevant articles and improvement tips to increase the health (thus lowering the risk) of your Patient and member populations.



# Using Analytics to Drive Optimal Health

What else can I do with the Results?

- Campaigns can be targeted and optimized to deliver maximum return. Campaign results can be measured to understand what is effective and what is not. Cohorts can be measured by segment, plan and clinical traits.
- Index and component measure results can be tracked over time and tied to things like compensation to keep member health at the highest priority.

**Makana Health**

Daquan Phillips

### Your metrics

Age	47
BMI	30
Blood Pressure	86
Calories	1,917
Glucose	161
Alcohol	12

Your predicted health index: **51.15%**

### What influences your health index?

Driver

- smoking history is Never ■ Good
- stroke is 0 and smoking history is Never ■ Good
- Glucose is 148 to 167 ■ Bad

### Discuss these with your doctor

Metric	Today	Recommend..	
Blood pressure	86	24 to 56	+11%
BMI	30.4	18.2 to 24	+5%
Calories consumed per day	1,916...	1320.227047 to 1529.004..	+5%
Glucose	161	44 to 85	+12%
Number of alcoholic drinks consumed p..	48	0 to 1	+10%

**Makana Health**

New campaign name:  Save

### Scoring members

Metric:  Age  Blood pressure  Health index  BMI  Glucose  First recommendation

### Population breakdown by points

Points	Count	Percentage
6 pts	51	7%
4 pts	197	35%
2 pts	260	37%
0 pts	439	100%

### First recommendation histogram of patients

Reset

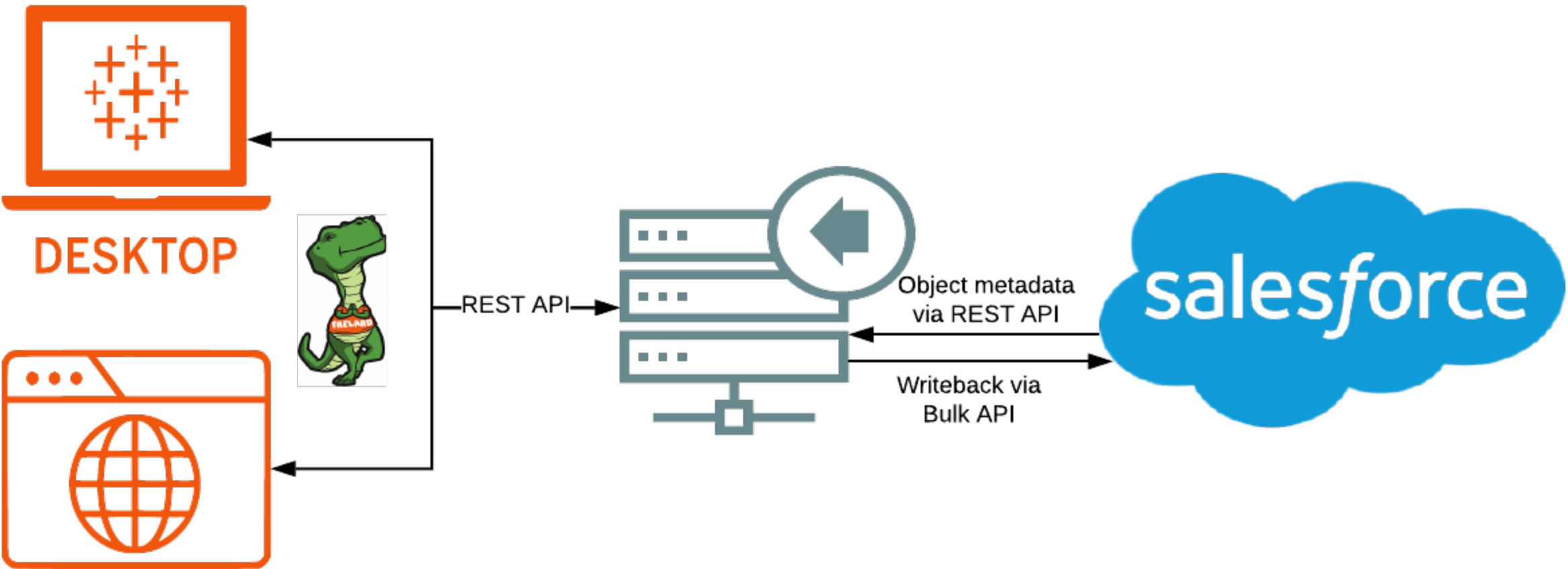
### Rules

Points awarded	Rule metric
4	First recommendation [Glucose]
2	Glucose [170][180][190]
N/A	N/A

### Member list

Patient Id	Gender	Name	Age	Healt..	Bloo..	First reco	
675	F	Zia Velazqu..	31	69%	70	Glucose	6
661	F	Jacqueline ..	22	51%	76	Glucose	6
647	F	Melyssa Kir..	22	65%	50	Glucose	6
611	M	Cruz Hood	36	55%	58	Glucose	6
606	M	Acton Holt	22	40%	78	Glucose	6
604	M	Jackson Da..	36	14%	95	Glucose	6

# Architecture – Tableau Extension to write back to Salesforce



**Tableau Extension**  
Collects data from the Tableau workbook, and send it via REST API

**Extension Web App**  
Securely receives data via REST API, and uploads to Salesforce

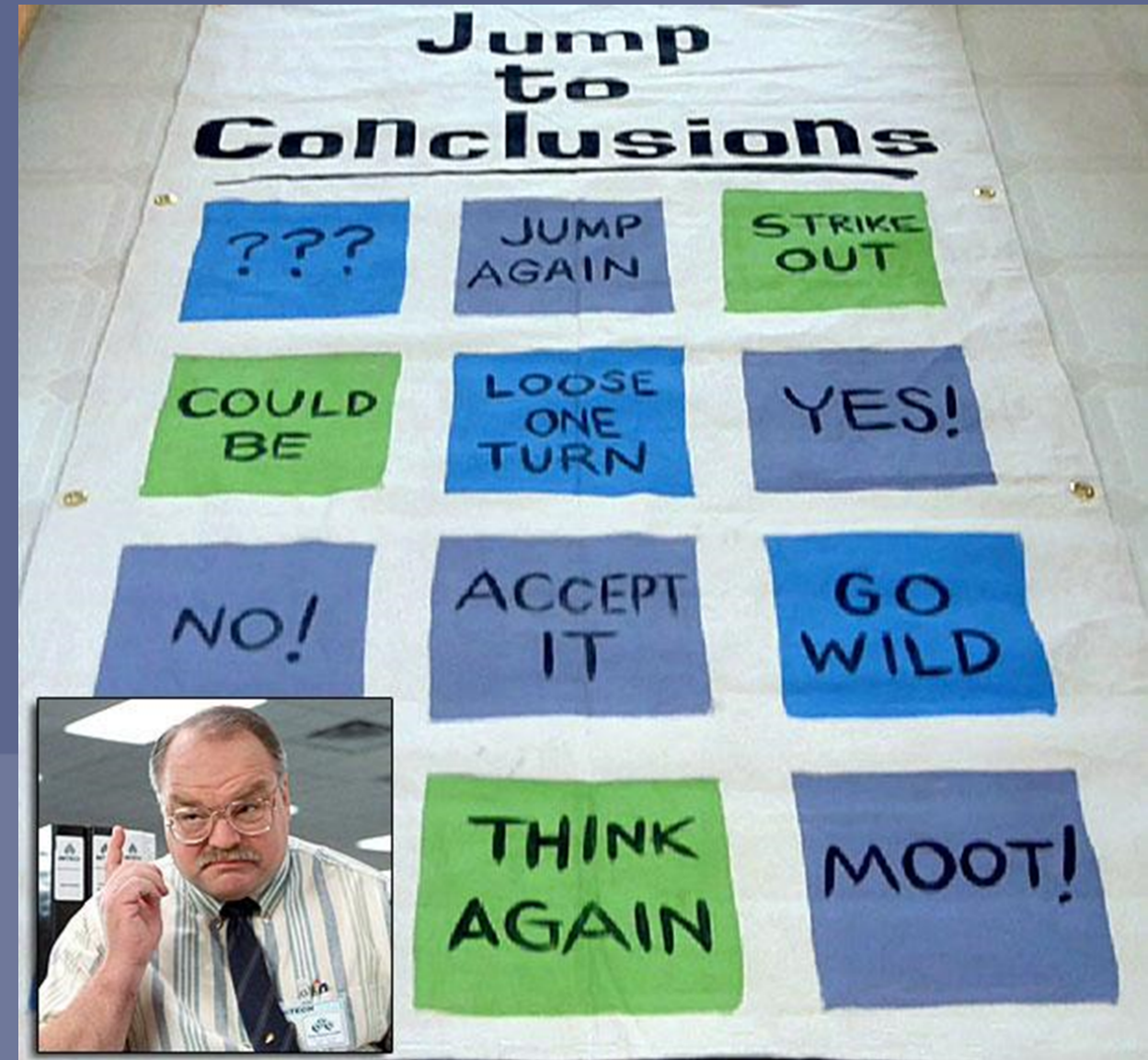
**Salesforce Connected App**  
In order to authenticate the web app, a connected app is defined within Salesforce

# Conclusions and Final Thoughts

A Health Index is a way to help Patients take a more active role in their health thus reducing risk in a population.

Augmenting it with descriptive and prescriptive analytics helps make it more actionable.

Wrapping it with campaigns can help target specific subpopulations with ways to improve their health that are customized to the Patient.



# Learning Resources

## TabPy resources

- [Tableau Prep integration with Python](#)
- [Python in Tableau Prep: Simple useful scripts](#)
- [Tableau Sci-Fic: Tableau + Data Science](#)

## Salesforce and Einstein Analytics Resources

- [Tableau Extension to write your campaign to Salesforce](#)
- [Learn more about Einstein Analytics](#)

## Health Index resources

- [WellPoint Member Health Index](#)
- [UHG Rally Health platform](#)

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Q&A



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