

# Big Data -- Big Problems Big Data -- Big Solutions

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### **Outline**

Where we were

Where we are

Where we are going





### Where We Were - Risk Pool



**Underwriting** 

Insurer Experience

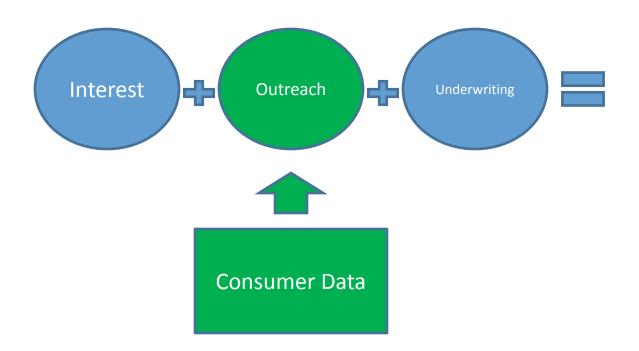


Participation and Contribution Requirements





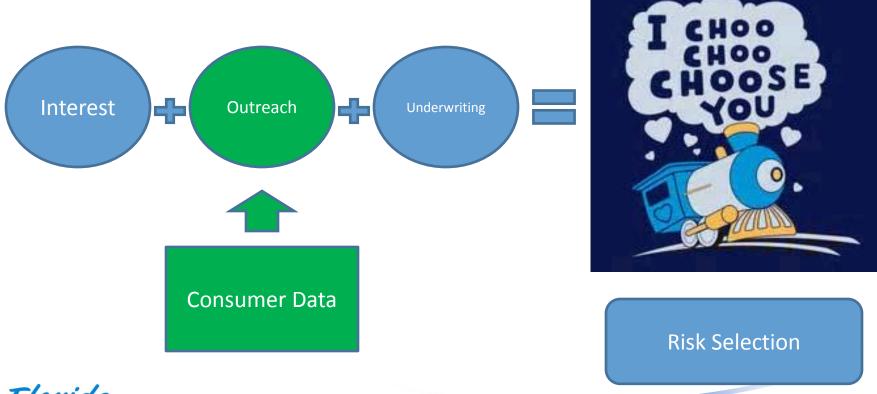
### Where We Were - Marketing







### Where We Were - Marketing







### Where We Were – Consumer Data







### Where We Were – Consumer Data



Data



Underwriting Prohibition

Limits on Plan
Designs
(Metal restrictions,
limits on total plans)

Risk Adjustment (Premium ≠ Revenue)

New Insured
Populations
(No underwriting
info, no claims
experience)



#### **Before**

We knew something about every person we insured

#### Now

We will have to find other ways to learn about our members

#### **Before**

The amount of money we collected from a member was the amount of money they "earned" for us

Risk Adjustment (Premium ≠ Revenue)

#### Now

The amount of money we "earn" from someone will be more closely connected to their coded health status

#### **Before**

We could offer hundreds of plans

– to be all things to all people



#### Now

The number of plans is limited Available plan offerings are limited A higher level of benefits are required

#### **Before**

Most insured were insured before

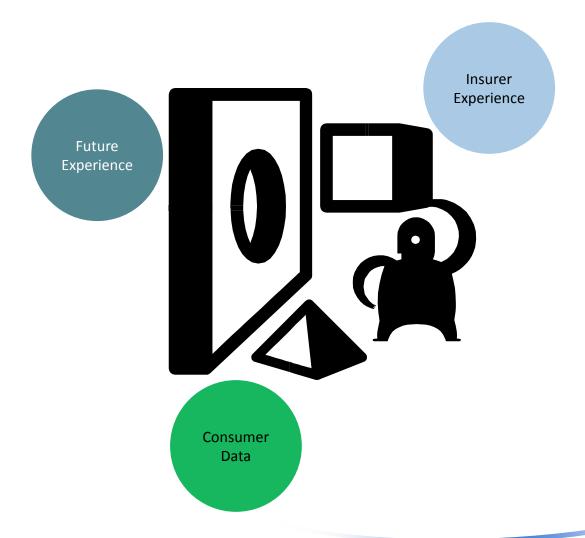
#### Now

40-60% of our enrollment will be totally new to us





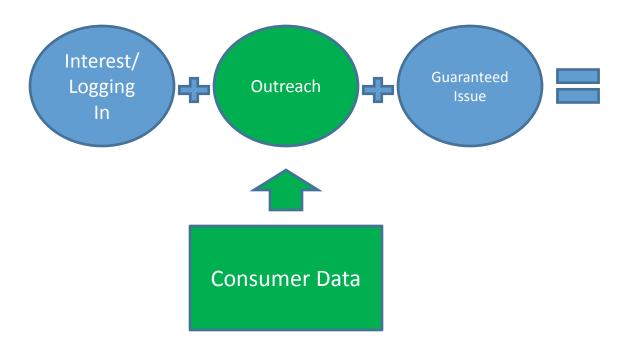
### Where We Are







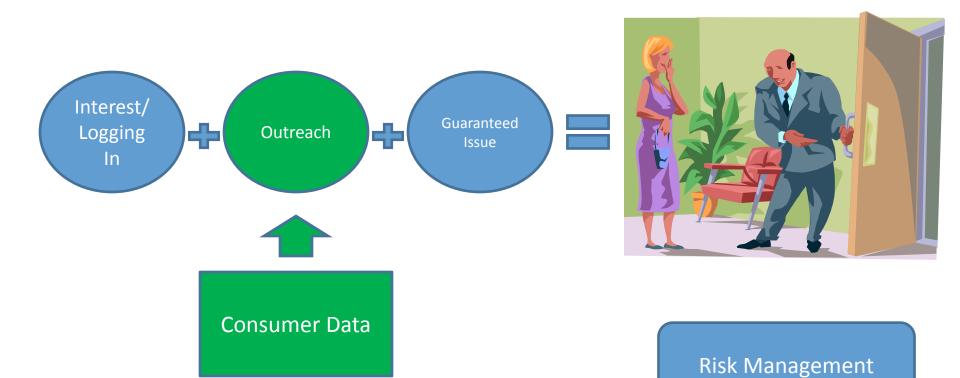
### Where We Are - Marketing







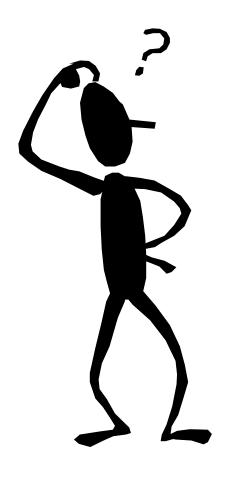
### Where We Are - Marketing

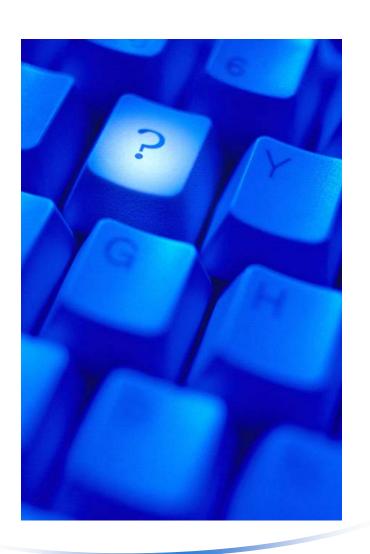




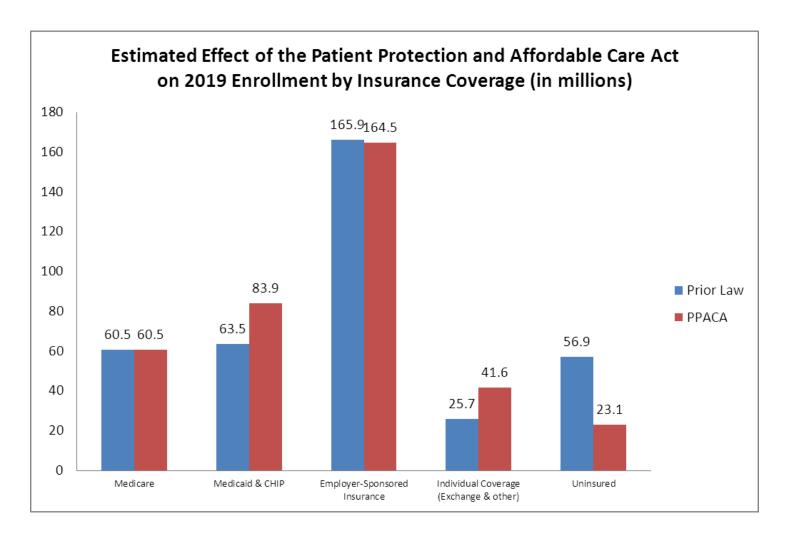


### Where We Are





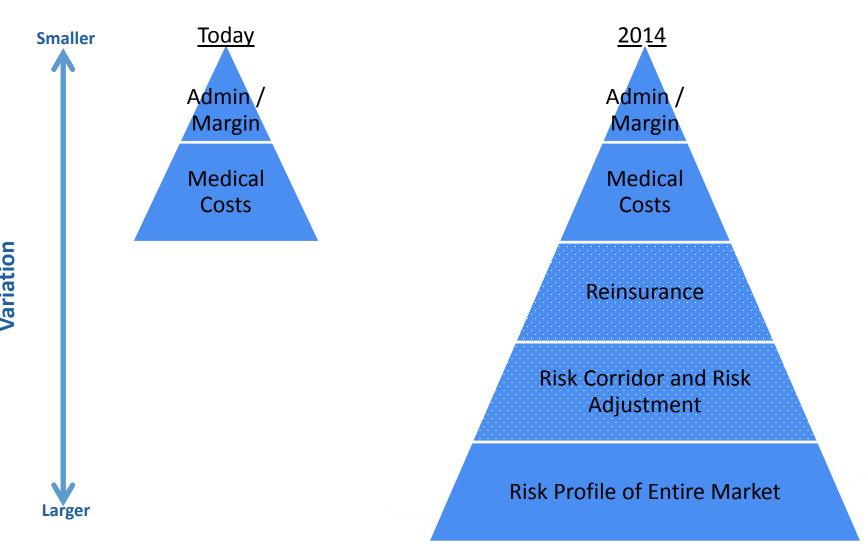




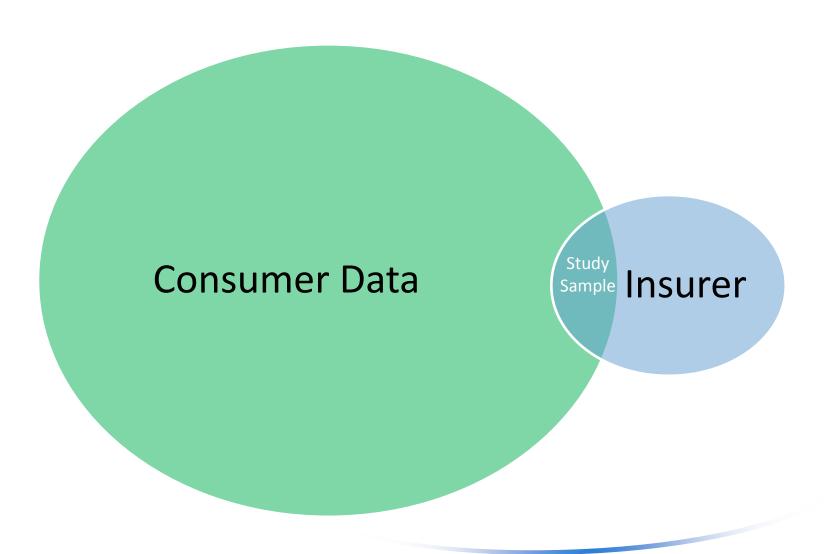
Source: Centers for Medicare & Medicaid Services, Office of the Actuary

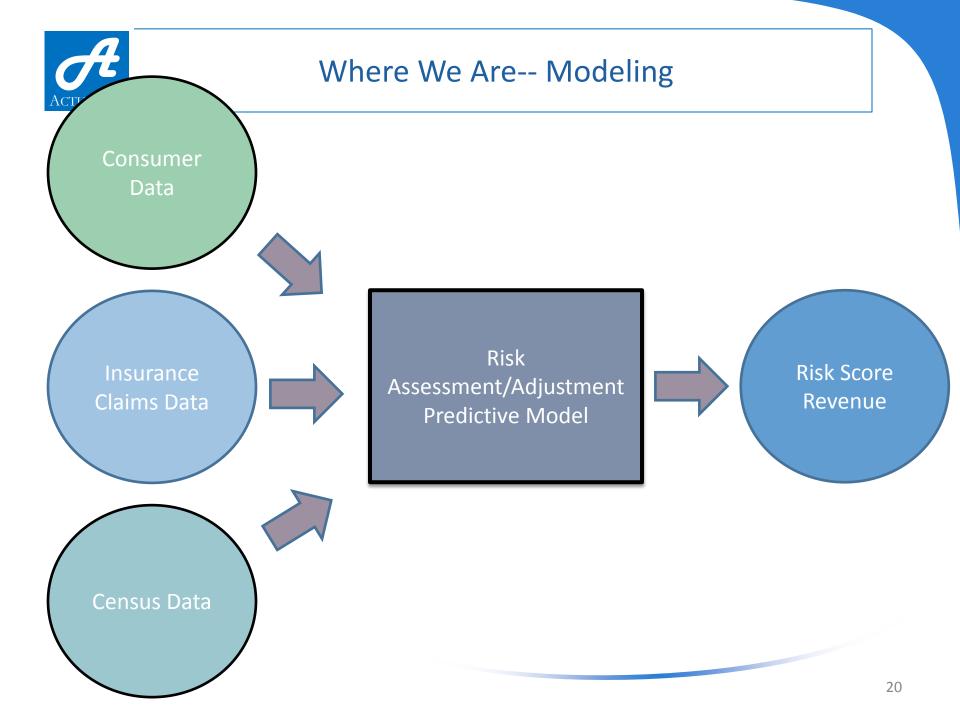


### Where We Are Today-- Unknowns

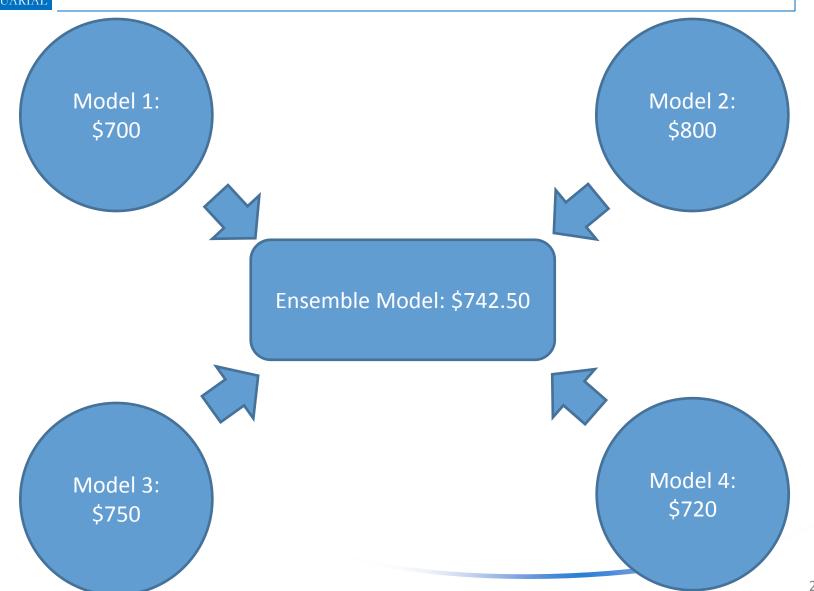














#### **Cardiovascular Disease**

Prevalence: 0.0749

Severity: \$491.54

Estimate: **\$36.82** 

#### Diabetes

Prevalence: 0.167

Severity: \$335.13

Estimate: **\$55.97** 

#### **Gastric Disease**

Prevalence: 0.1023

Severity: \$272.19

Estimate: **\$27.84** 

#### Hypertension

Prevalence: 0.2060

Severity: \$211.06

Estimate: **\$43.48** 

#### **Musculoskeletal Diseases**

Prevalence: 0.1723

Severity: \$335.16

Estimate: **\$57.75** 

#### Other Diseases

Prevalence: 0.7731

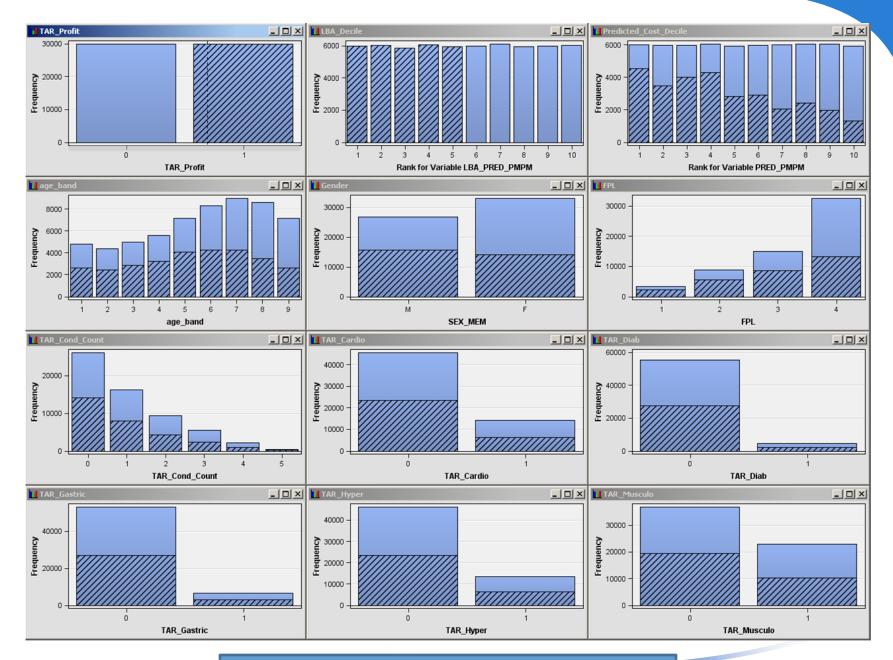
Severity: \$248.69

Estimate: **\$192.26** 

**Predicted PMPM** 

\$414.12

4/22/2013

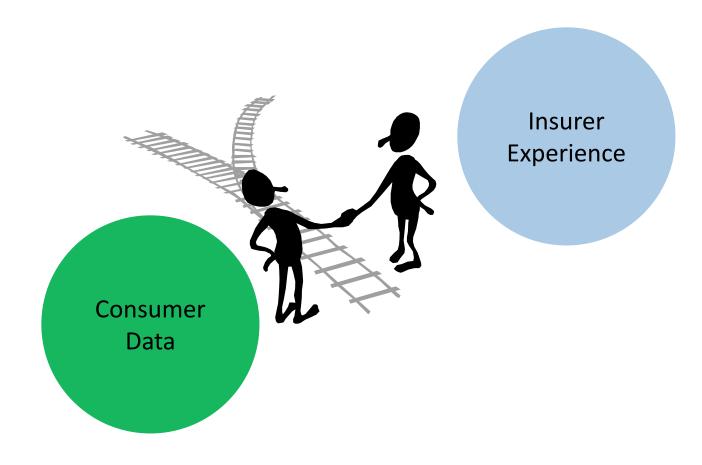




Loss Ratio		With Low HCC	With Expensive	<u>Grand</u>
LUSS RALIU	No Conditions	<b>Condition</b>	<b>HCC Condition</b>	<u>Total</u>
Good Lifestyle Score	79%	74%	73%	74%
Moderate Lifestyle Score	81%	79%	75%	77%
Poor Lifestyle Score	95%	93%	83%	87%



### Where We Are Going







### Where We Are Going

# **Applications**

- Product Design
- Pricing
- Targeted Marketing
- Care Management
- Provider Education
- Distribution Channels
- Risk Adjustment

