Top 10 Industries

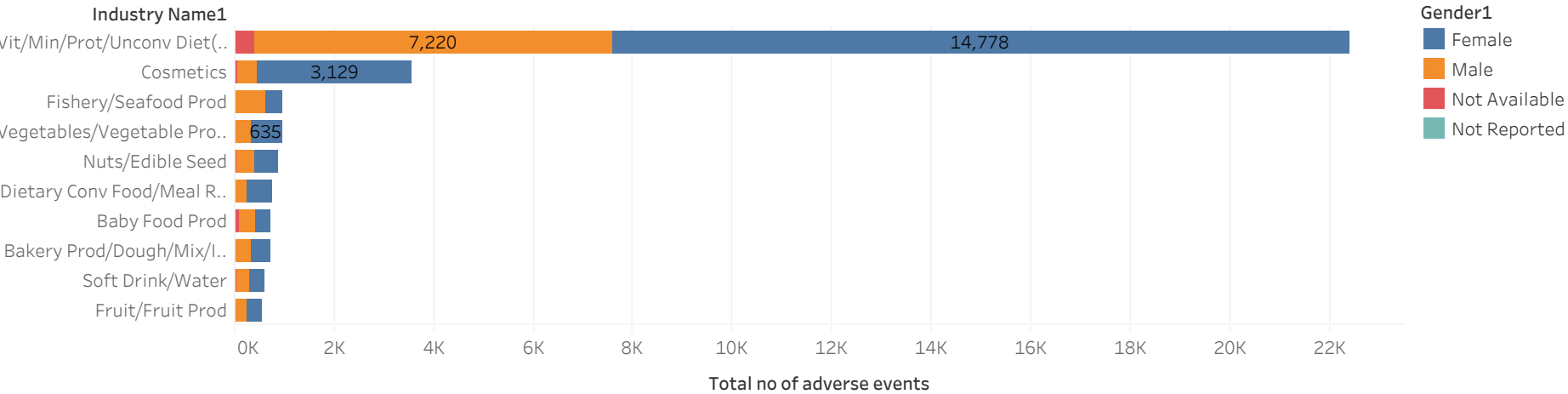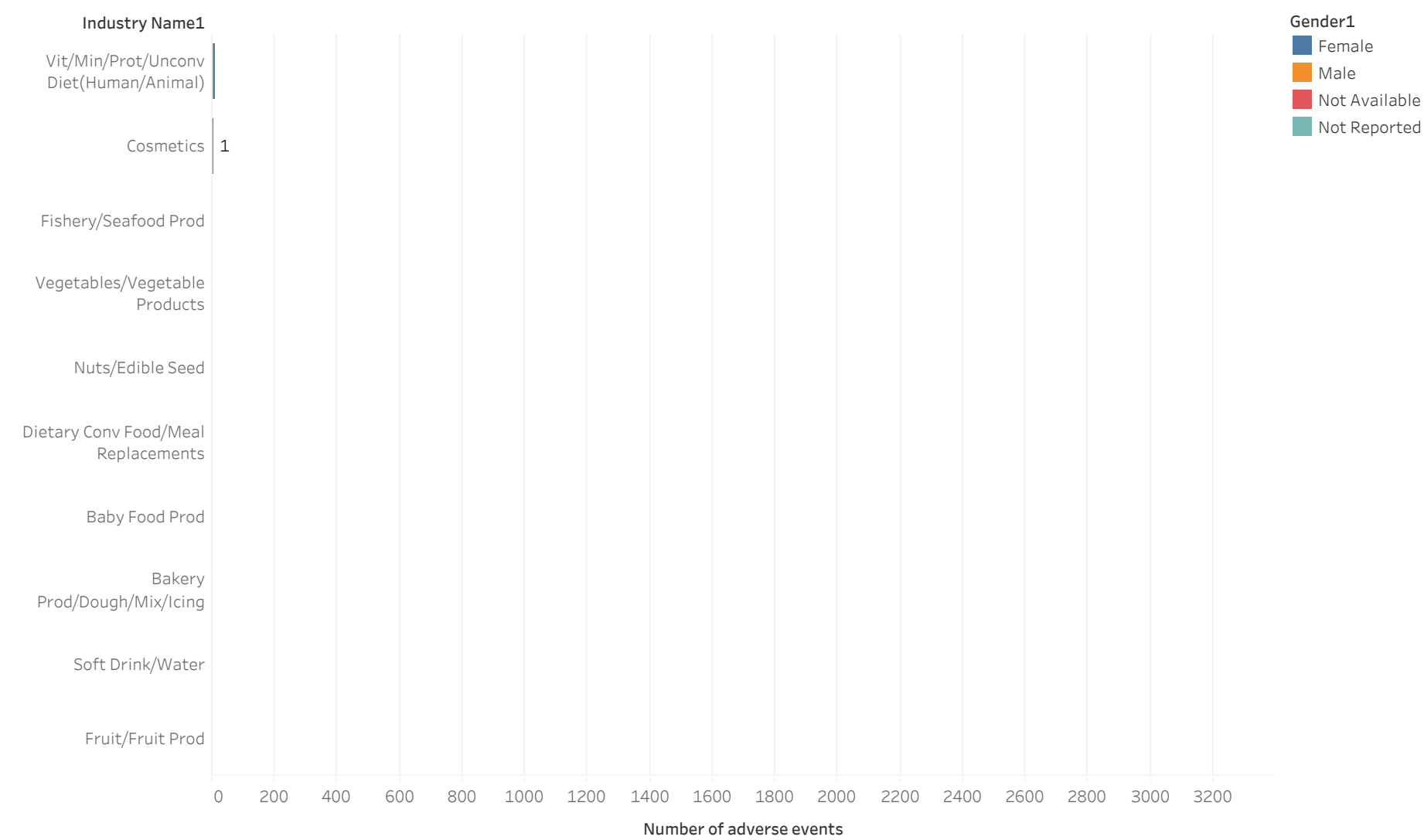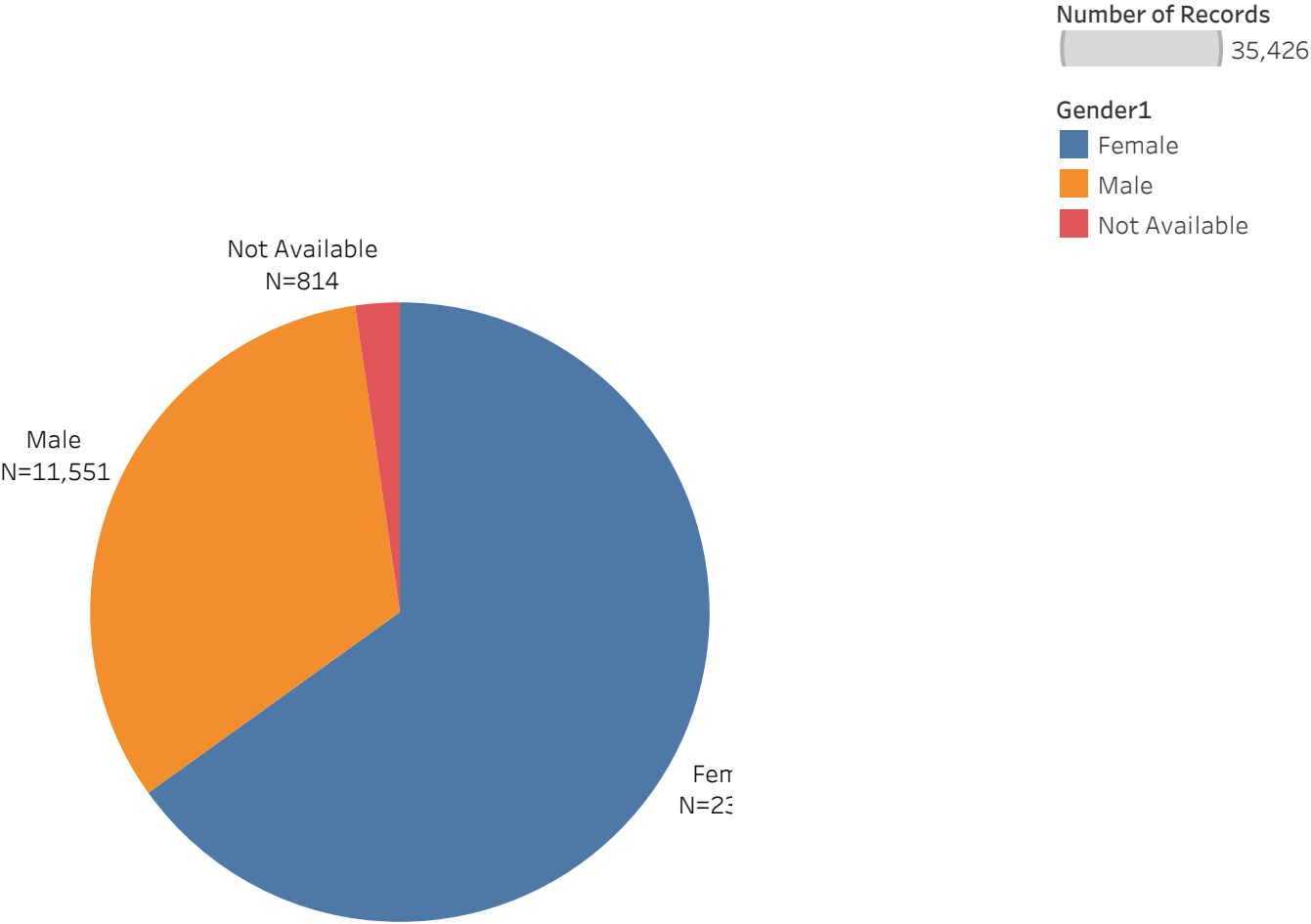**Industry Name1**

Sum of Number of Records for each Industry Name1. Color shows details about Gender1. The view is filtered on Gender1 and Industry Name1. The Gender1 filter keeps multiple members. The Industry Name1 filter has multiple members selected.

Top 10 Industries - Live - 2000

Industry Name1

Vit/Min/Prot/Unconv Diet(Human/Animal)

Cosmetics 1

Fishery/Seafood Prod

Vegetables/Vegetable Products

Nuts/Edible Seed

Dietary Conv Food/Meal Replacements

Baby Food Prod

Bakery Prod/Dough/Mix/Icing

Soft Drink/Water

Fruit/Fruit Prod

0   200   400   600   800   1000   1200   1400   1600   1800   2000   2200   2400   2600   2800   3000   3200

Number of adverse events

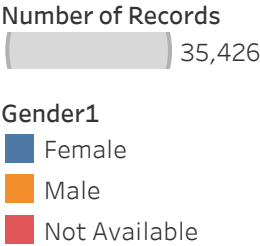**Gender1**
- Female
- Male
- Not Available
- Not Reported

Sum of Number of Records for each Industry Name1. Color shows details about Gender1. The view is filtered on Gender1, Industry Name1 and Event Start Date Year. The Gender1 filter keeps multiple members. The Industry Name1 filter has multiple members selected. The Event Start Date Year filter keeps 18 members.

Adverse Effects by Gender

Number of Records
35,426

Gender1
- Female
- Male
- Not Available

Not Available
N=814

Male
N=11,551

Fe...
N=2...

Gender1 and sum of Number of Records. Color shows details about Gender1. Size shows sum of Number of Records. The marks are labeled by Gender1 and sum of Number of Records. The view is filtered on Gender1, which excludes Not Reported and Unknown.

Adverse Effects by Gender

Number of Records

[====] 35,426

Gender1
- Female
- Male
- Not Available

nale
3,061

Gender1 and sum of Number of Records. Color shows details about Gender1. Size shows sum of Number of Records. The marks are labeled by Gender1 and sum of Number of Records. The view is filtered on Gender1, which excludes Not Reported and Unknown.
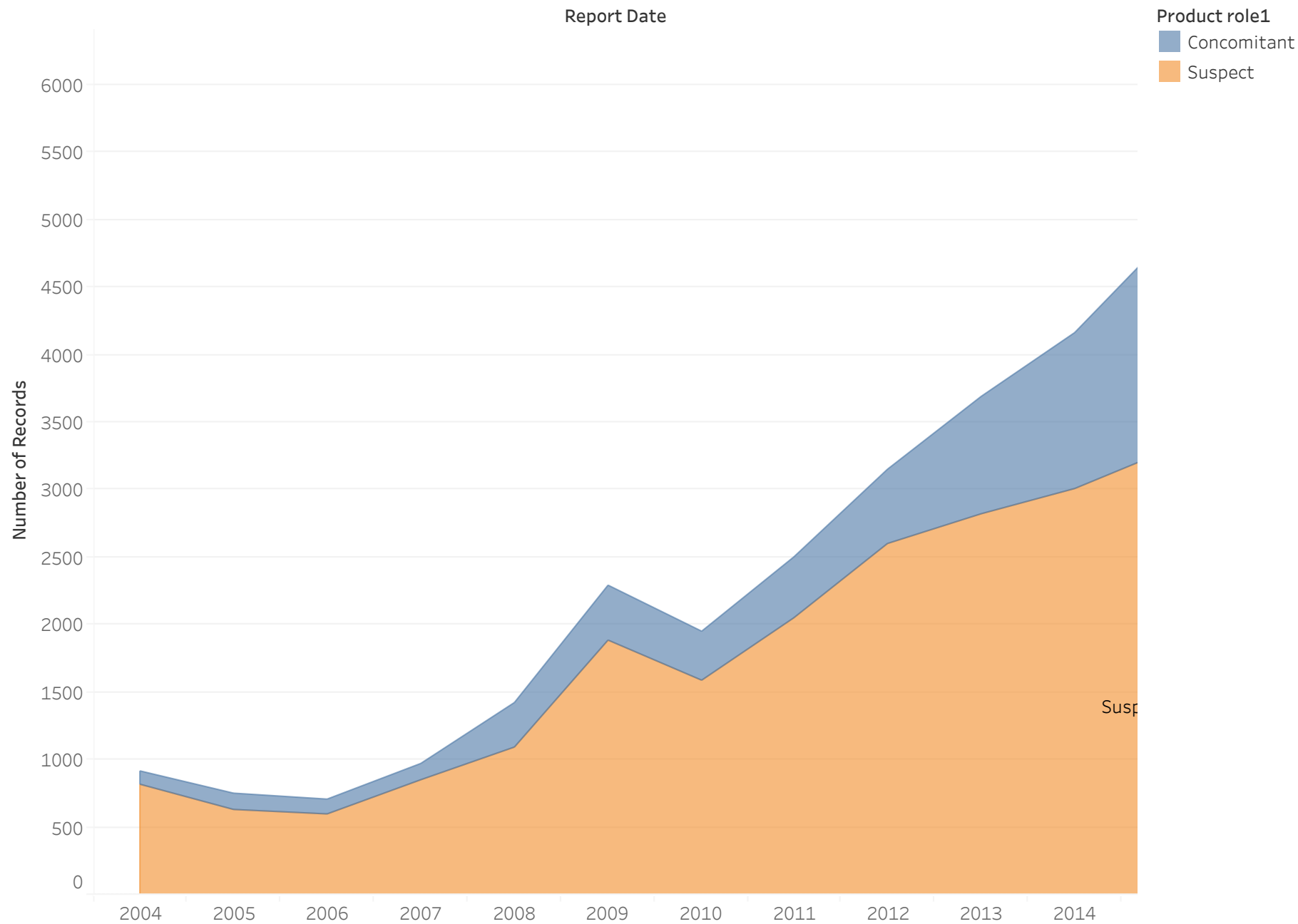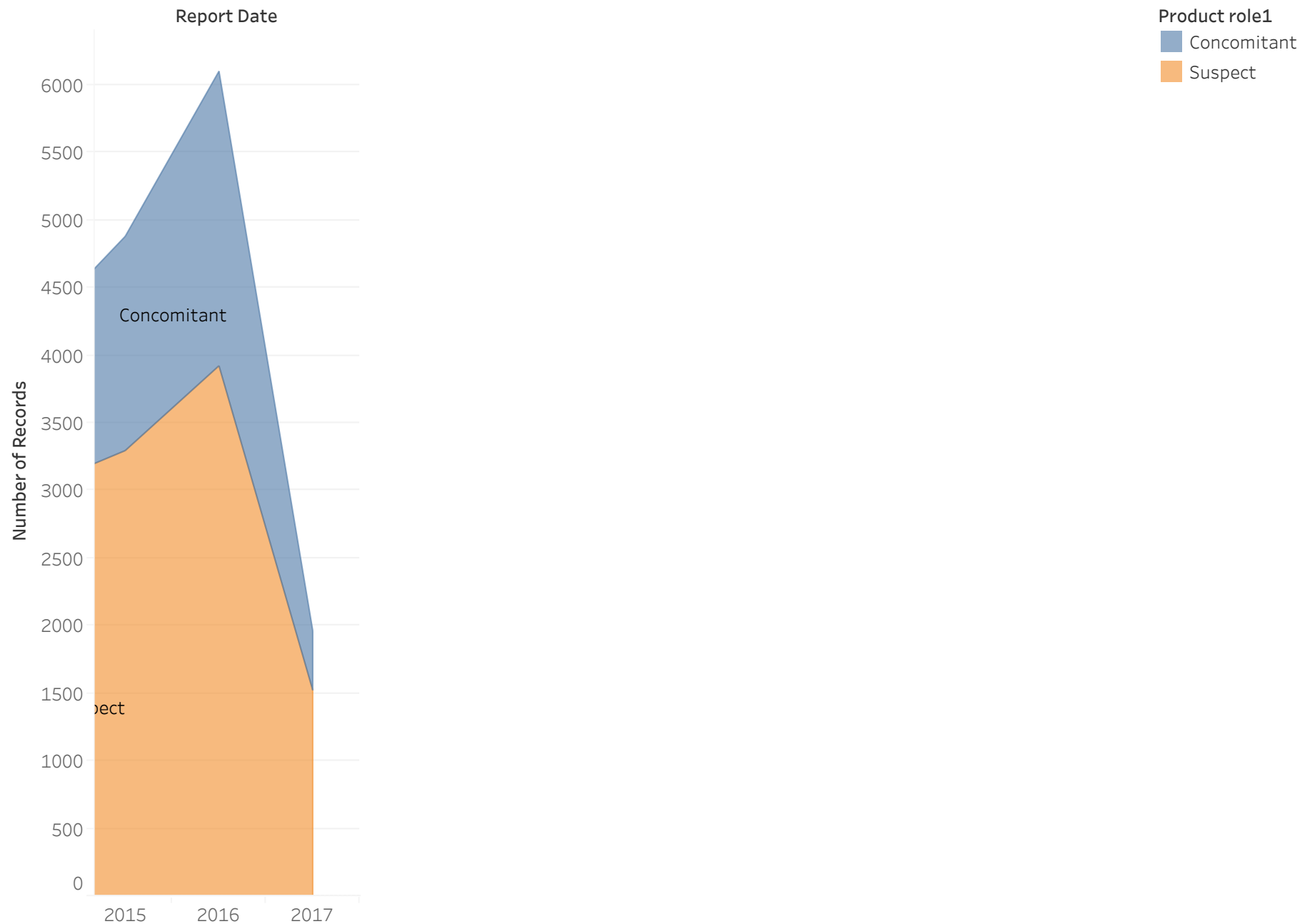
Suspect or Concomitant

Report Date

Number of Records


Product role1
- Concomitant
- Suspect

Susp

Sum of Number of Records for each Report Date Year. Color shows details about Product role1. The marks are labeled by Product role1.

Suspect or Concomitant

Report Date

Product role1
- Concomitant
- Suspect

Concomitant

pect

Number of Records

6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0

2015   2016   2017

Sum of Number of Records for each Report Date Year. Color shows details about Product role1. The marks are labeled by Product role1.
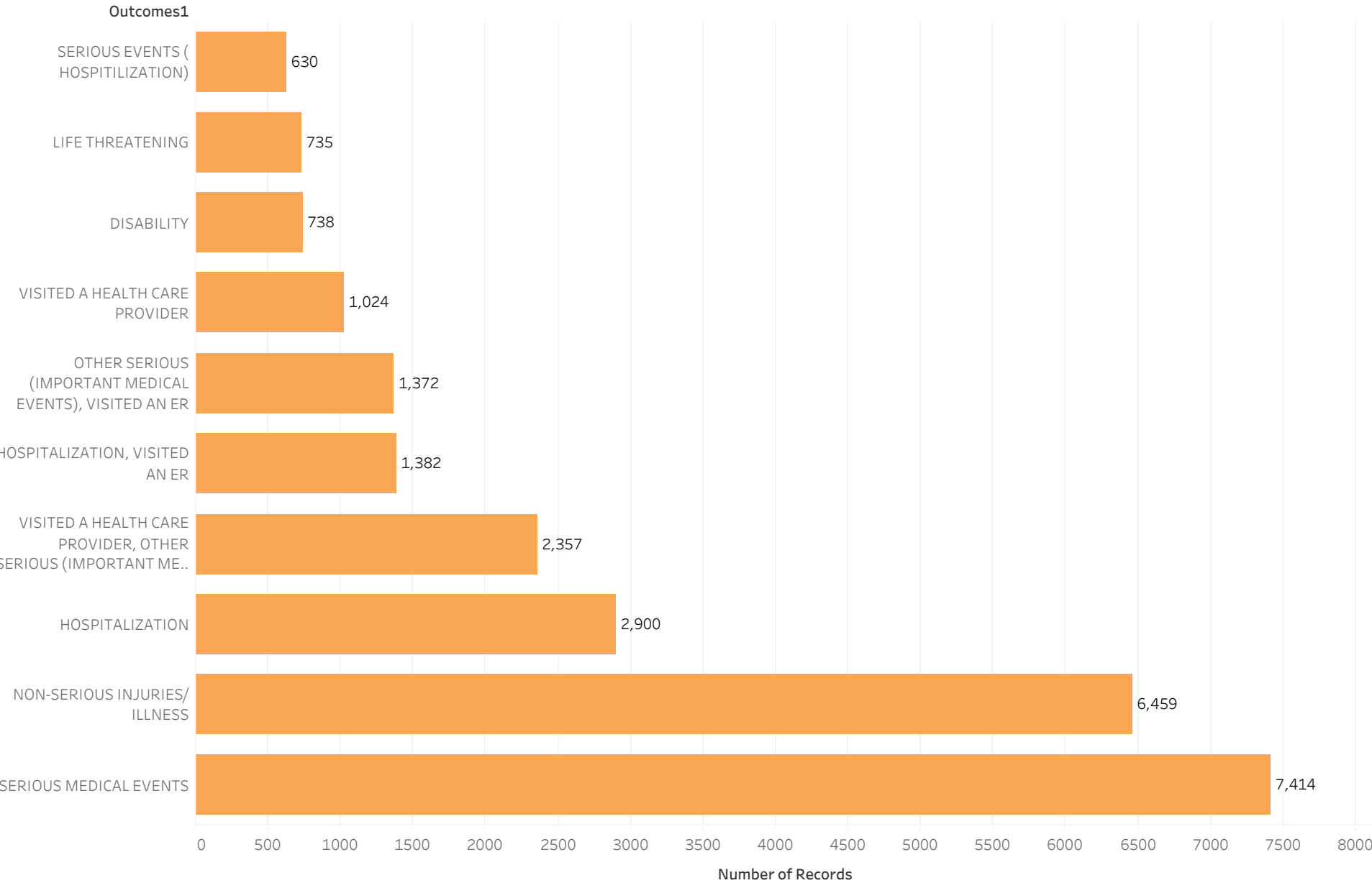
10 Commom Products
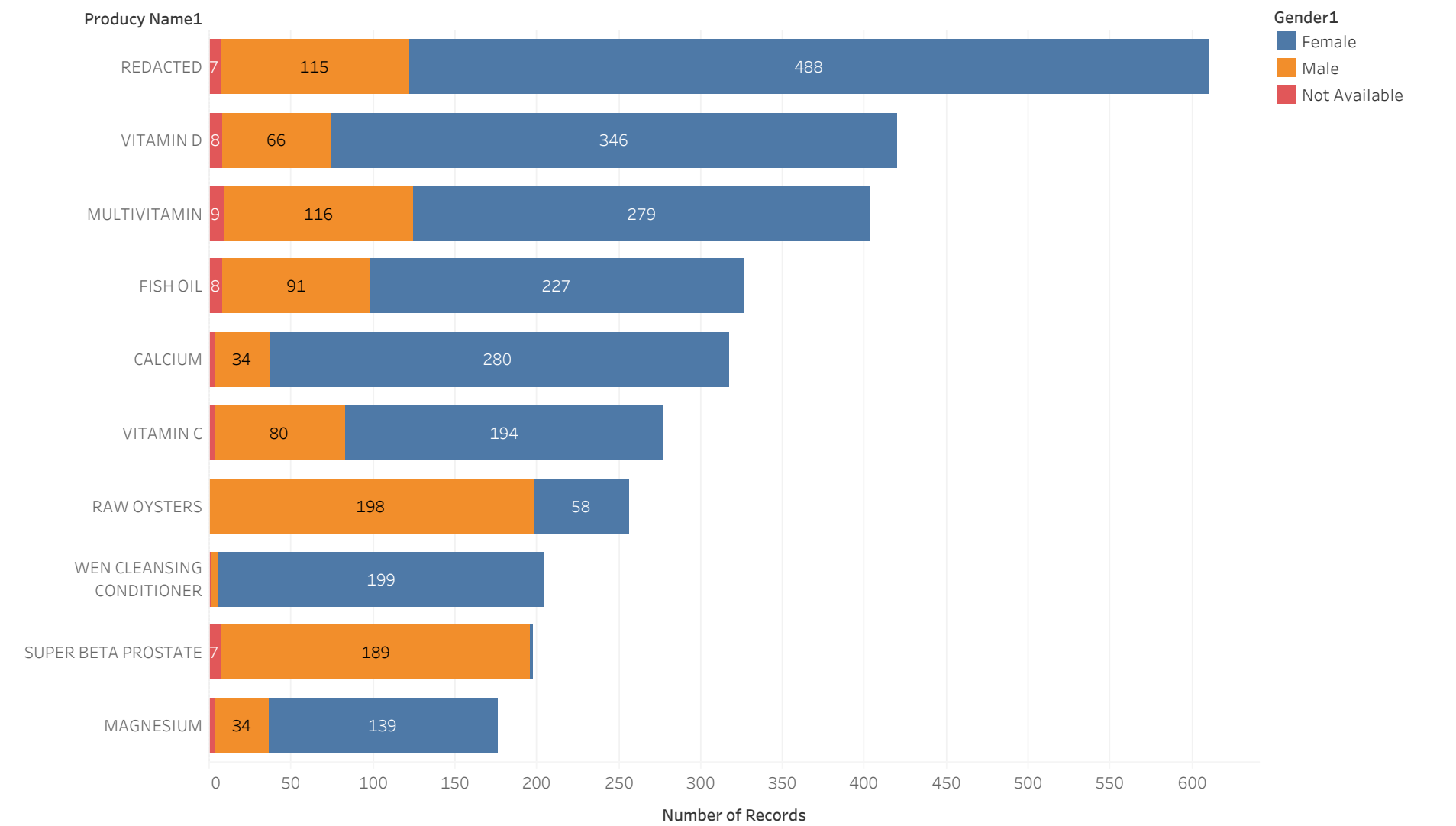
Count of Number of Records for each Producy Name1. Color shows details about Gender1. The view is filtered on Producy Name1 and Gender1. The Producy Name1 filter has multiple members selected. The Gender1 filter keeps multiple members.

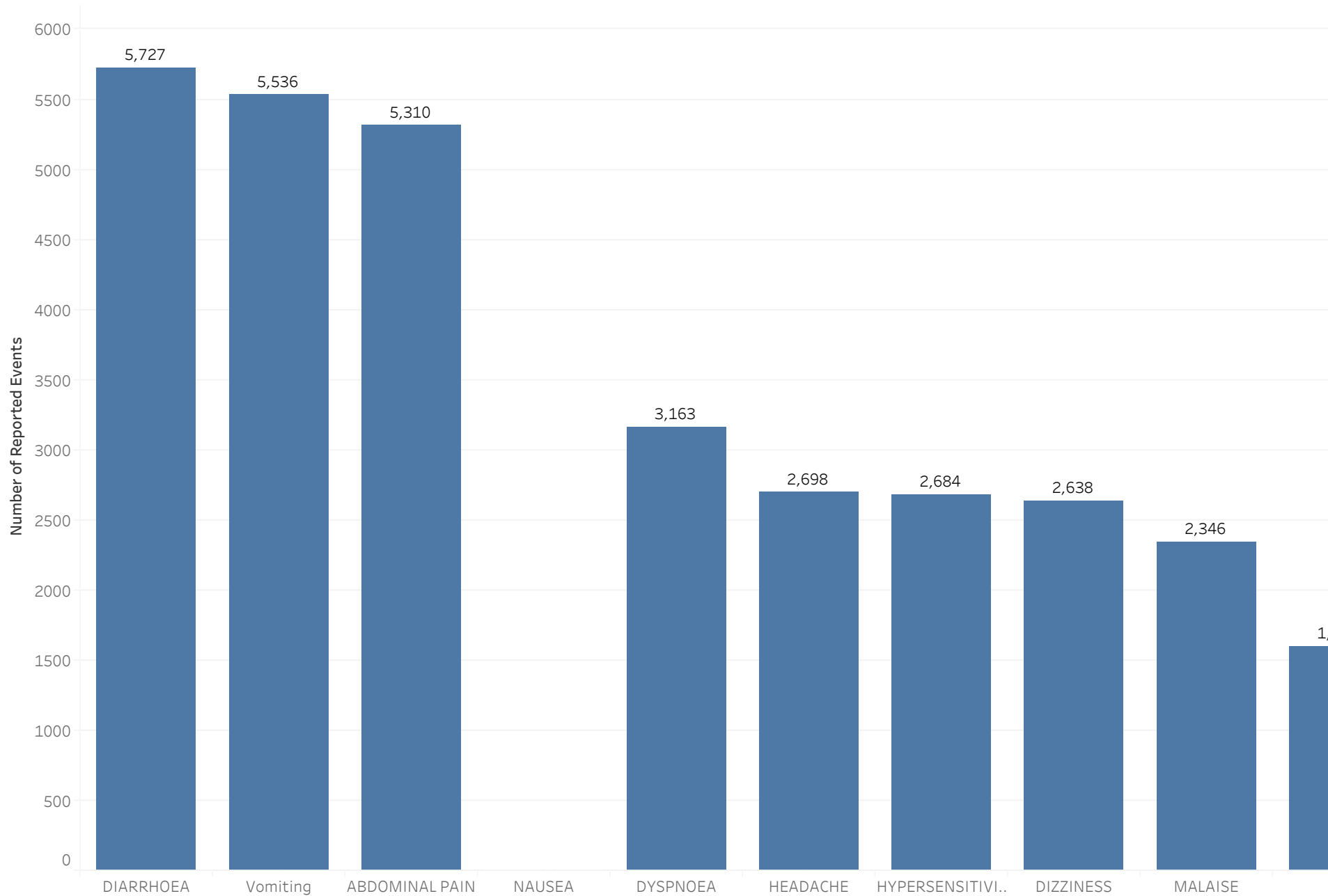# Median
Age
Range

Age1

F.. M..
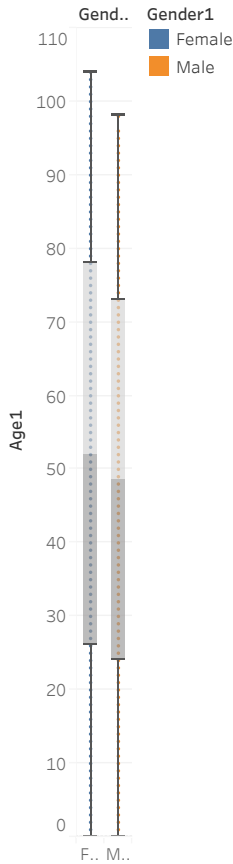
Age1 for each
Gender1. Color
shows details
about Gender1.
Details are
shown for Age1.
The view is
filtered on
Exclusions
(Age,Gender) and
Gender1. The
Exclusions
(Age,Gender)
filter keeps 292
members. The
Gender1 filter
excludes Not
Available.

Outcomes

Outcomes1

Outcomes1	Number of Records
SERIOUS EVENTS (HOSPITILIZATION)	630
LIFE THREATENING	735
DISABILITY	738
VISITED A HEALTH CARE PROVIDER	1,024
OTHER SERIOUS (IMPORTANT MEDICAL EVENTS), VISITED AN ER	1,372
HOSPITALIZATION, VISITED AN ER	1,382
VISITED A HEALTH CARE PROVIDER, OTHER SERIOUS (IMPORTANT ME..	2,357
HOSPITALIZATION	2,900
NON-SERIOUS INJURIES/ ILLNESS	6,459
SERIOUS MEDICAL EVENTS	7,414

Number of Records

Sum of Number of Records for each Outcomes1. The view is filtered on Outcomes1, which has multiple members selected.

Side Effects

Bar chart showing Number of Reported Events for side effects: DIARRHOEA 5,727; Vomiting 5,536; ABDOMINAL PAIN 5,310; NAUSEA (no value shown); DYSPNOEA 3,163; HEADACHE 2,698; HYPERSENSITIVI.. 2,684; DIZZINESS 2,638; MALAISE 2,346; and a final bar labeled 1,... (partially cut off).
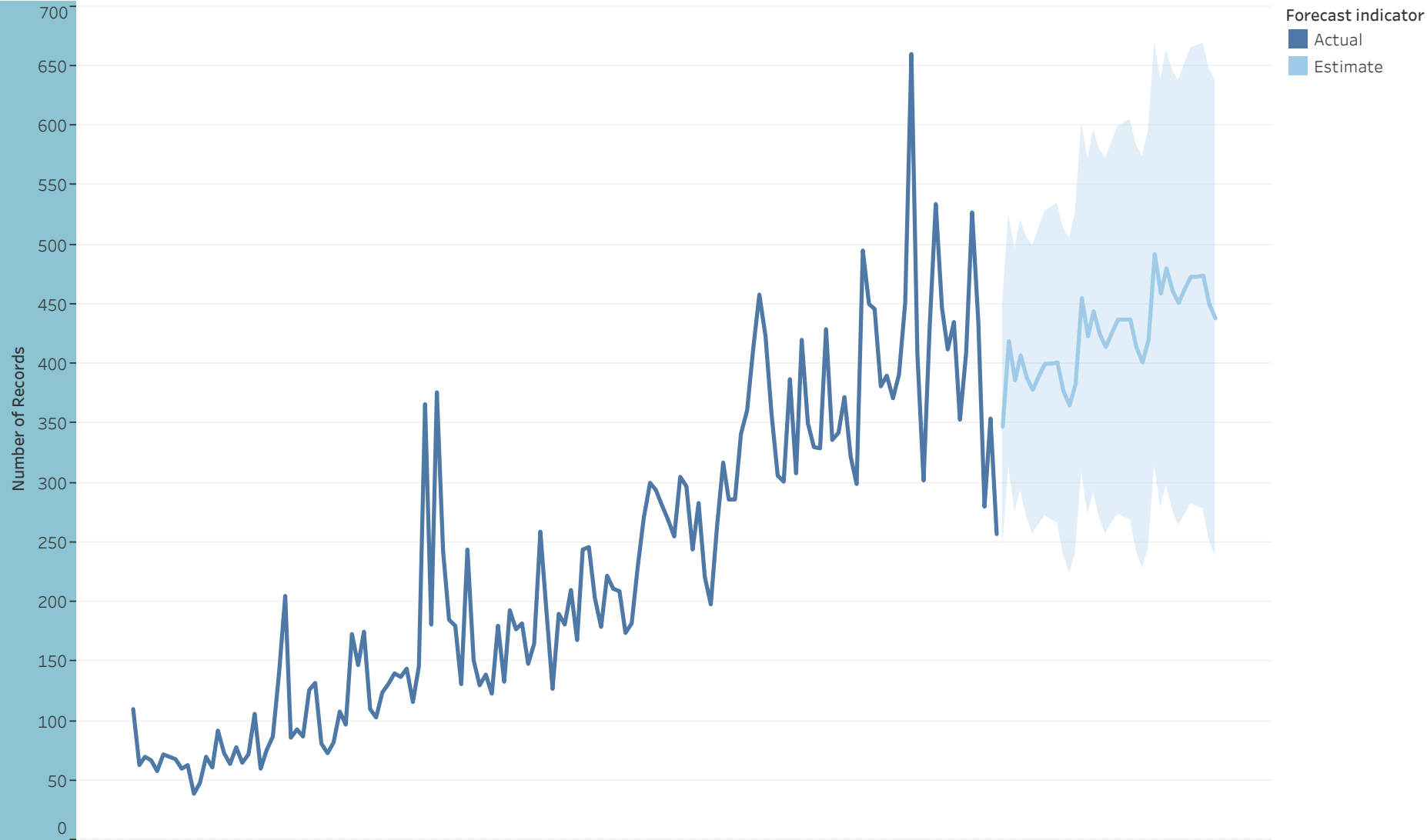
ABDOMINAL PAIN, CHOKING, DIARRHOEA, DIZZINESS, DYSPNOEA, HEADACHE, HYPERSENSITIVITY, MALAISE, NAUSEA and Vomiting.

Side Effects

ABDOMINAL PAIN, CHOKING, DIARRHOEA, DIZZINESS, DYSPNOEA, HEADACHE, HYPERSENSITIVITY, MALAISE, NAUSEA and Vomiting.

Times series forecasting

The trend of count of Number of Records (actual & forecast) for Event Start Date Month. Color shows details about Forecast indicator. The data is filtered on Event Start Date Year, which keeps 12 members.

k-Mean Clustering
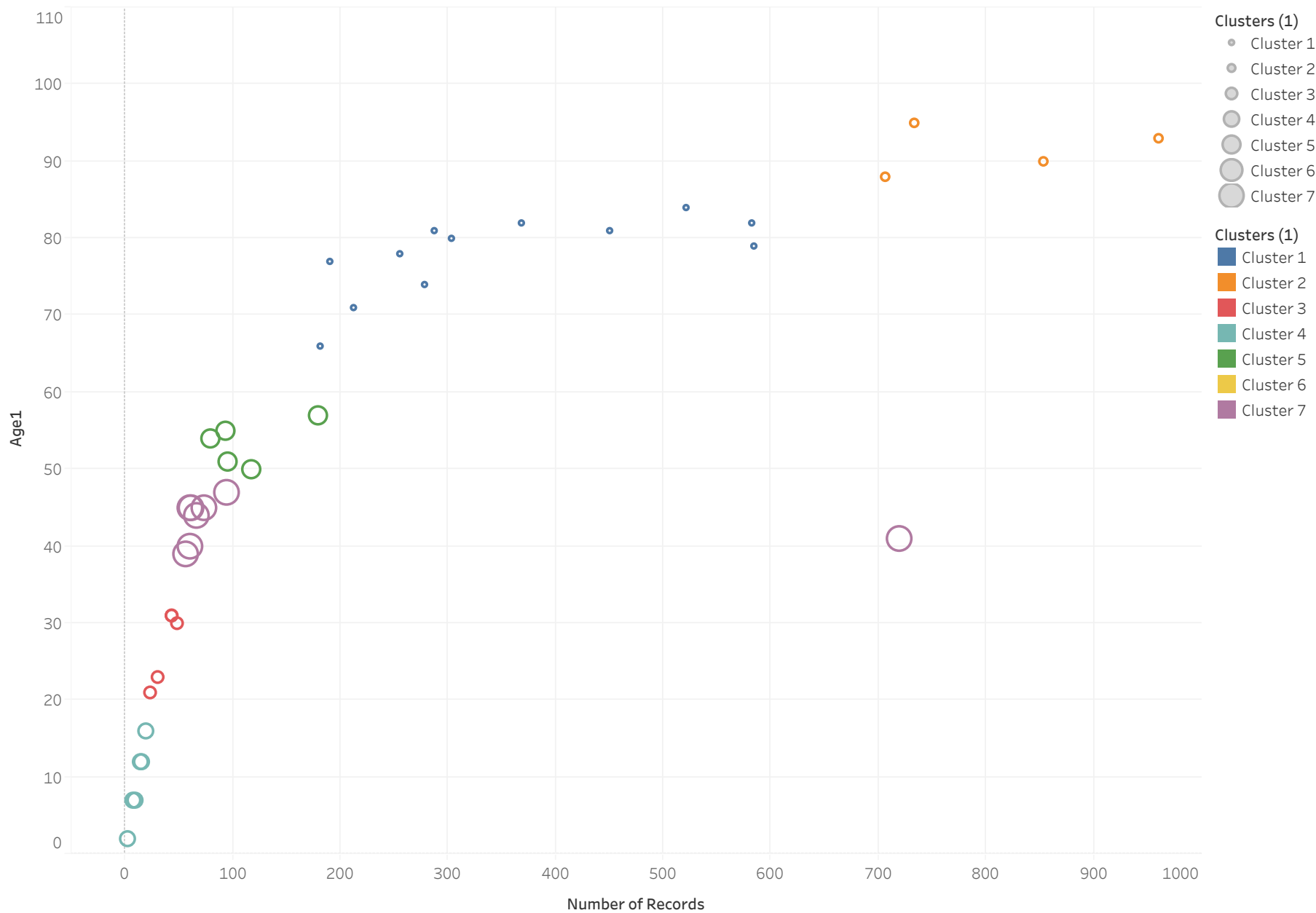
Count of Number of Records vs. distinct count of Age1. Color shows details about Clusters (1). Size shows details about Clusters (1). Details are shown for Industry1.
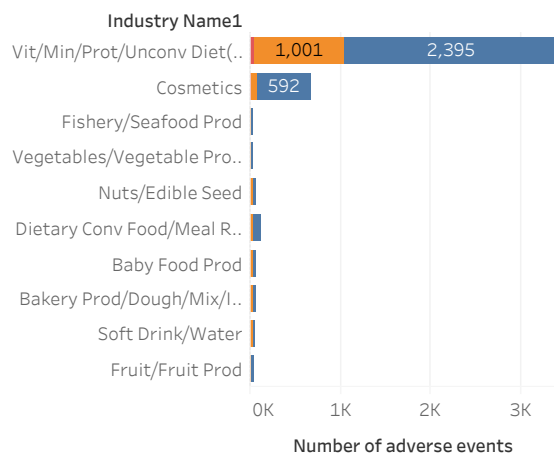
Linear Regression
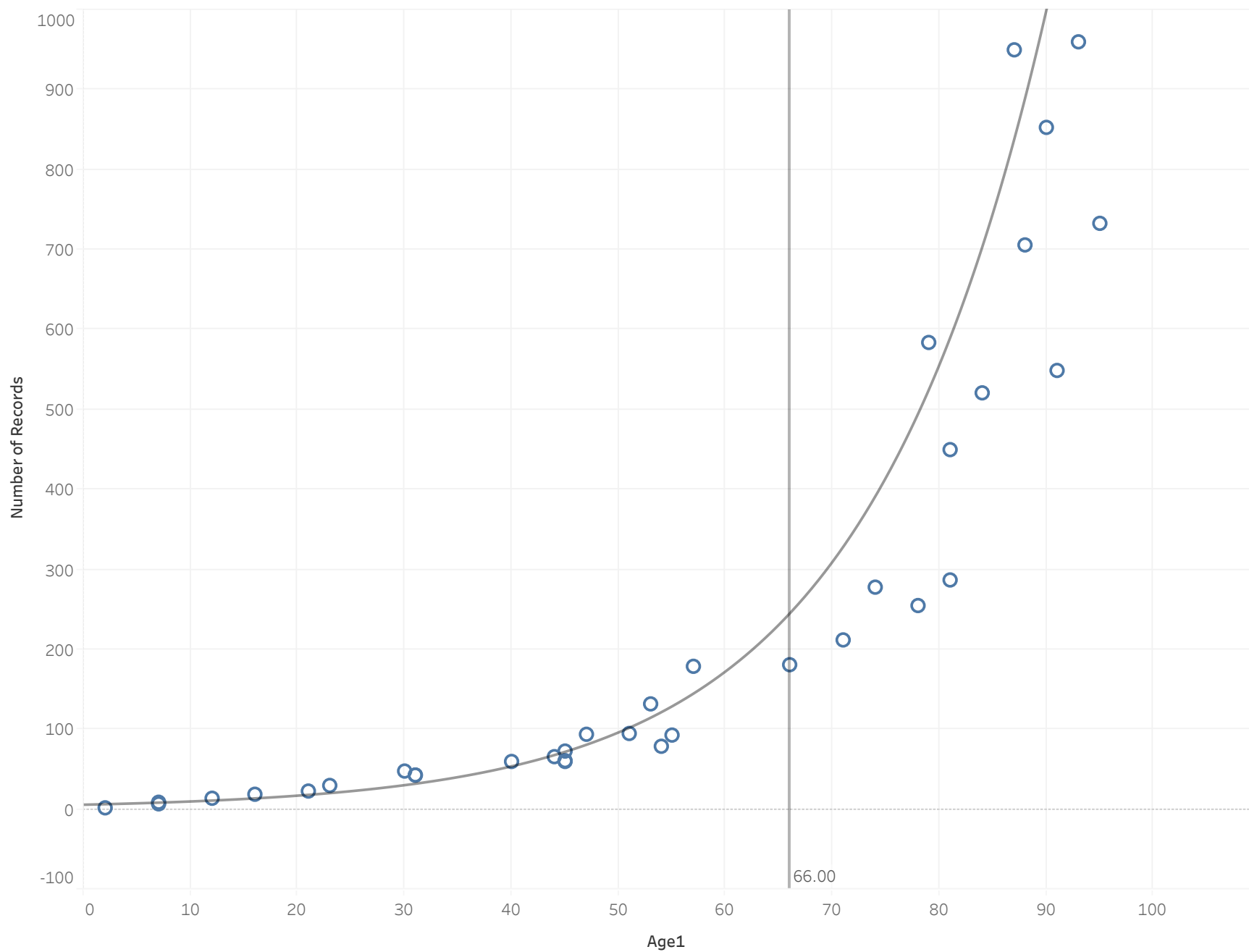
Distinct count of Age1 vs. sum of Number of Records. Details are shown for Industry Name1. The view is filtered on Industry Name1, which excludes Baby Food Prod.
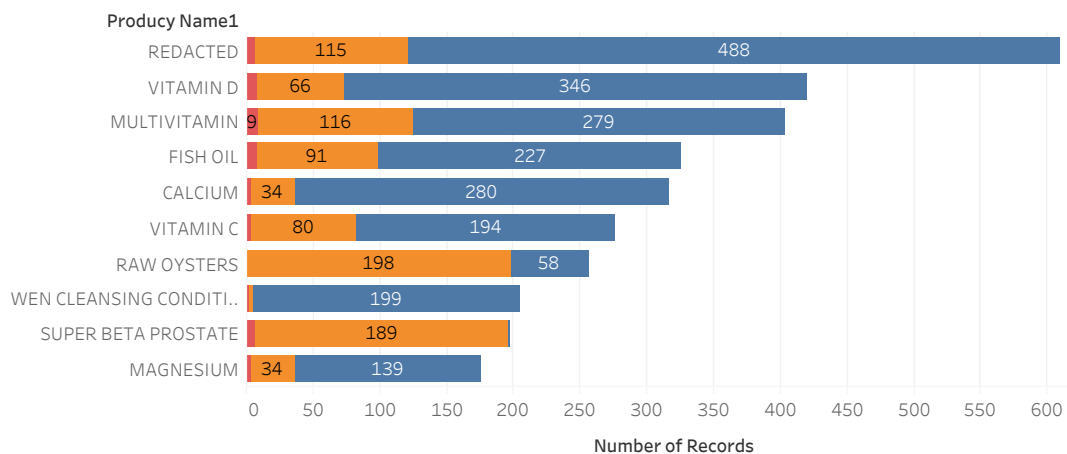
Adverse Effects

A Study of Adverse Effects on Humans for Variety of Products Made for Human Consumptions!

Top 10 Industries - Live - 2015

Industry Name1

Vit/Min/Prot/Unconv Diet(..	1,001 2,395
Cosmetics	592
Fishery/Seafood Prod	
Vegetables/Vegetable Pro..	
Nuts/Edible Seed	
Dietary Conv Food/Meal R..	
Baby Food Prod	
Bakery Prod/Dough/Mix/I..	
Soft Drink/Water	
Fruit/Fruit Prod	

0K 1K 2K 3K
Number of adverse events

10 Most Commom Products

Producy Name1

REDACTED	115 488
VITAMIN D	66 346
MULTIVITAMIN	9 116 279
FISH OIL	91 227
CALCIUM	34 280
VITAMIN C	80 194
RAW OYSTERS	198 58
WEN CLEANSING CONDITI..	199
SUPER BETA PROSTATE	189
MAGNESIUM	34 139

0 50 100 150 200 250 300 350 400 450 500 550 600
Number of Records

Product role1
- Concomitant (blue)
- Suspect (orange)

Gender1
- ✔ Female
- ✔ Male
- ✔ Not Available
- ✔ Not Reported
- ✔ Unknown

Year of Event Start Date
2015
- ✔ Show history

Kaggle
http://www.kaggle.com

CAERS
http://www.CAERS.com

Authored By:

Nimisha Patel

Outcomes

Outcomes1

SERIOUS EVENTS (HOSPI..	630
LIFE THREATENING	735
DISABILITY	738
VISITED A HEALTH CARE P..	1,024
OTHER SERIOUS (IMPORT..	1,372
HOSPITALIZATION, VISITE..	1,382
VISITED A HEALTH CARE P..	2,357
HOSPITALIZATION	2,900
NON-SERIOUS INJURIES/ I..	6,459
SERIOUS MEDICAL EVENTS	7,414

0K 2K 4K 6K 8K
Number of Records

Side Effects

Number of Reported Events

DIARRHOEA	5,727
Vomiting	5,536
ABDOMINAL PAIN	5,310
NAUSEA	
DYSPNOEA	3,163
HEADACHE	2,698
HYPERSENSITIVITY	2,684
DIZZINESS	2,638
MALAISE	2,346
CHOKING	1,595

6K 4K 2K 0K

Suspect or Concomitant

Report Date

Number of Records

Suspect

20..20..20..20..20..20..20..20..20..20..20..20..20..20..20..
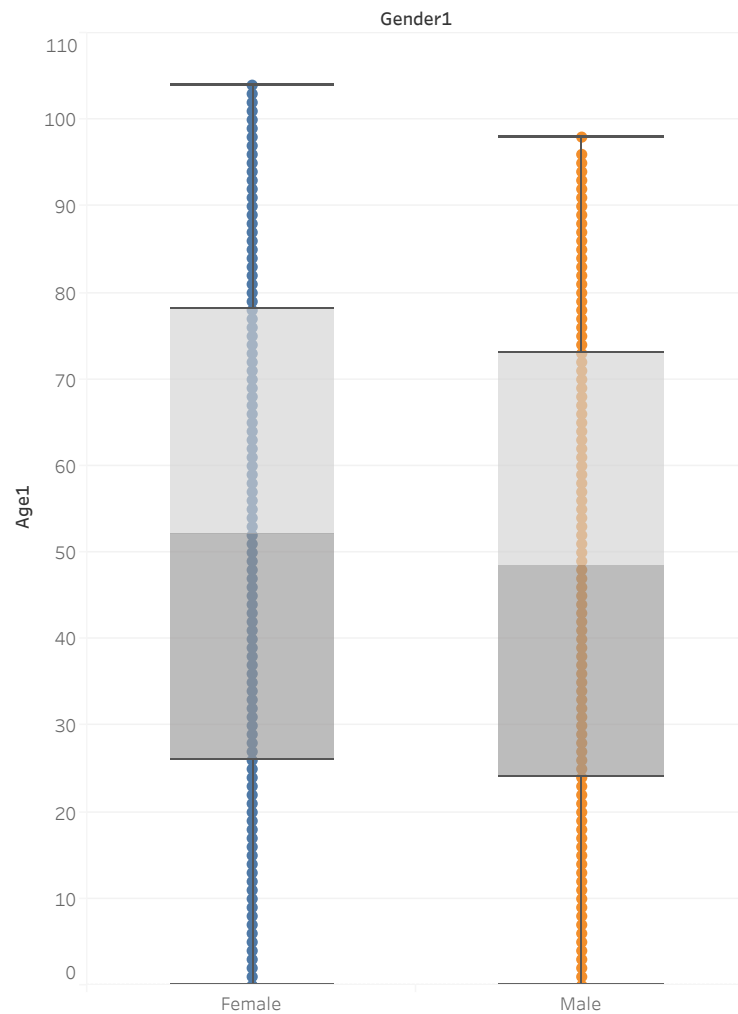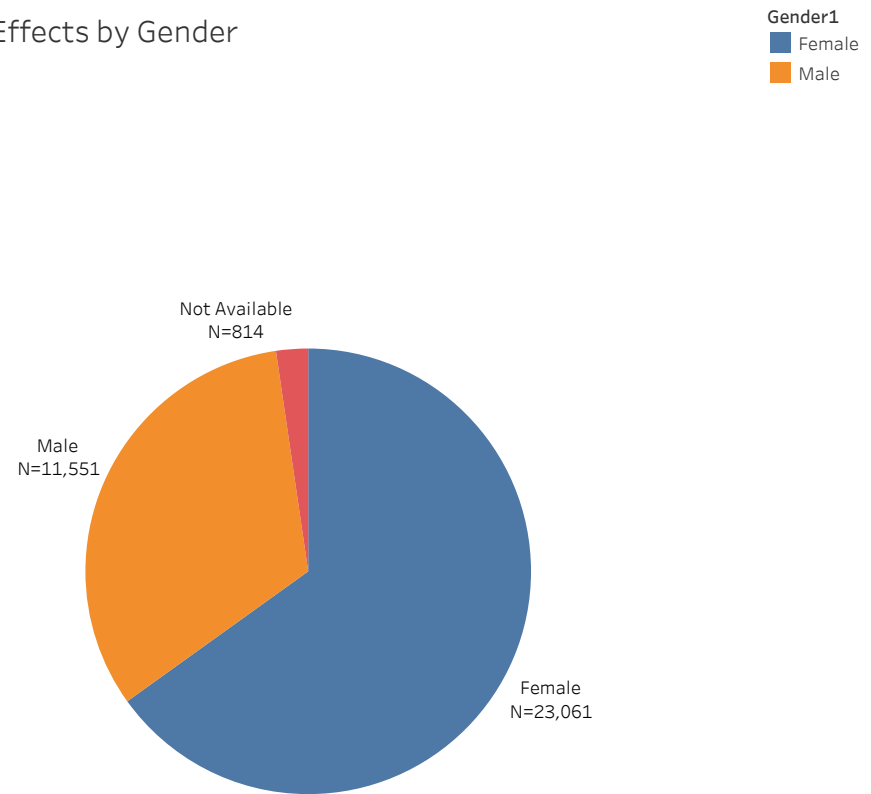
Adverse Effects - Demographics

A Study of Adverse Effects on Humans for Variety of Products Made for Human Consumptions!

Median Age Range

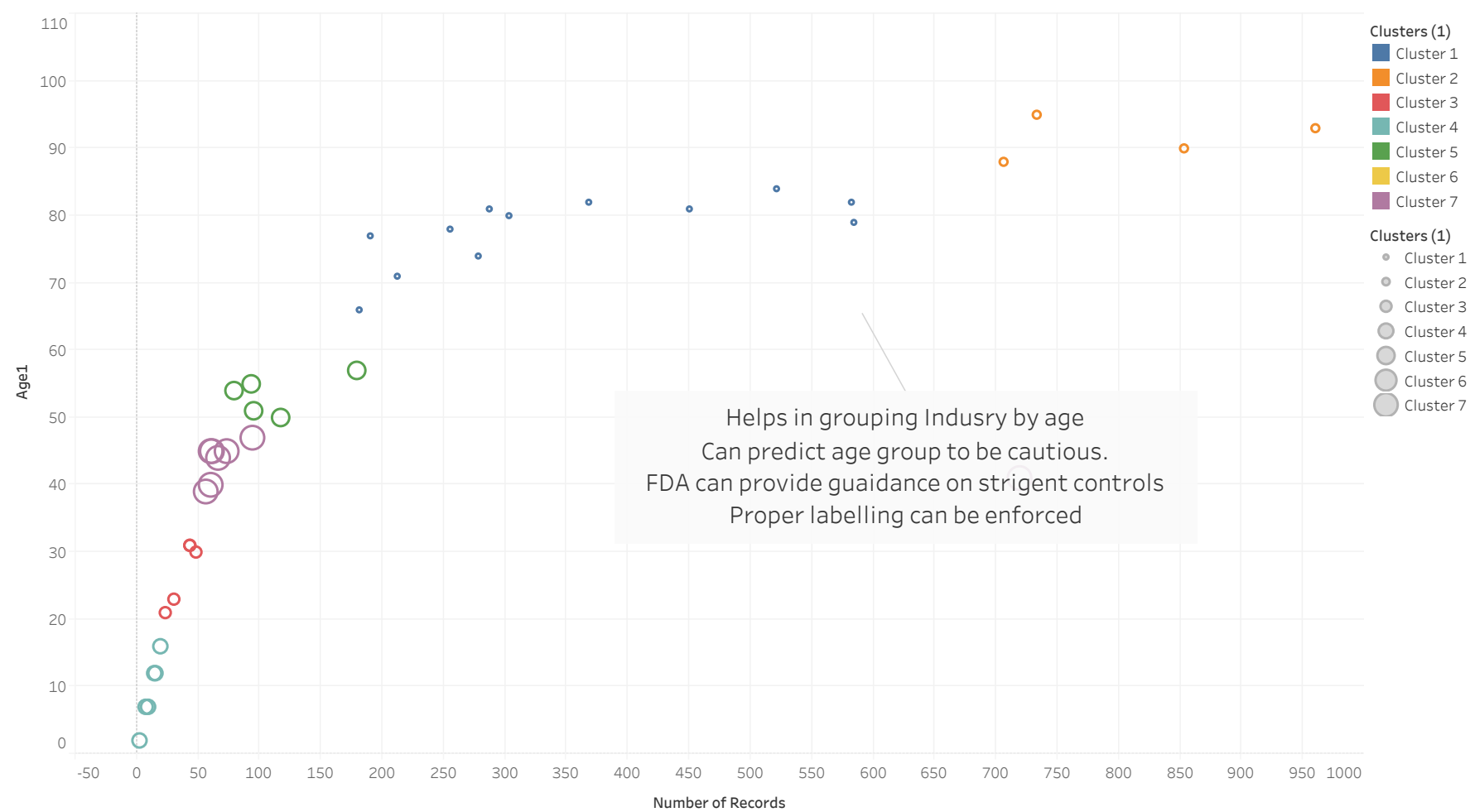## Adverse Effects by Gender

Gender1
- Female
- Male

Authored By:

Nimisha Patel

Predictions and Forecasting

| K-Means clustering is a Unsupervised Analysis.Helps in performing Functions. For segmenting,grouping. | Simple Linear Regession model is a Supervised Analysis. Used in predictive Analysis. | Based on Time series Model of Supervised Analysis. Used in forecasting Future |

Clusters (1)
- ■ Cluster 1
- ■ Cluster 2
- ■ Cluster 3
- ■ Cluster 4
- ■ Cluster 5
- ■ Cluster 6
- ■ Cluster 7

Clusters (1)
- · Cluster 1
- · Cluster 2
- ○ Cluster 3
- ○ Cluster 4
- ○ Cluster 5
- ○ Cluster 6
- ○ Cluster 7

Helps in grouping Indusry by age
Can predict age group to be cautious.
FDA can provide guaidance on strigent controls
Proper labelling can be enforced

Age1

Number of Records

Predictions and Forecasting

K-Means clustering is a Unsupervised Analysis.Helps in performing Functions. For segmenting,grouping.

Simple Linear Regession model is a Supervised Analysis. Used in predictive Analysis.

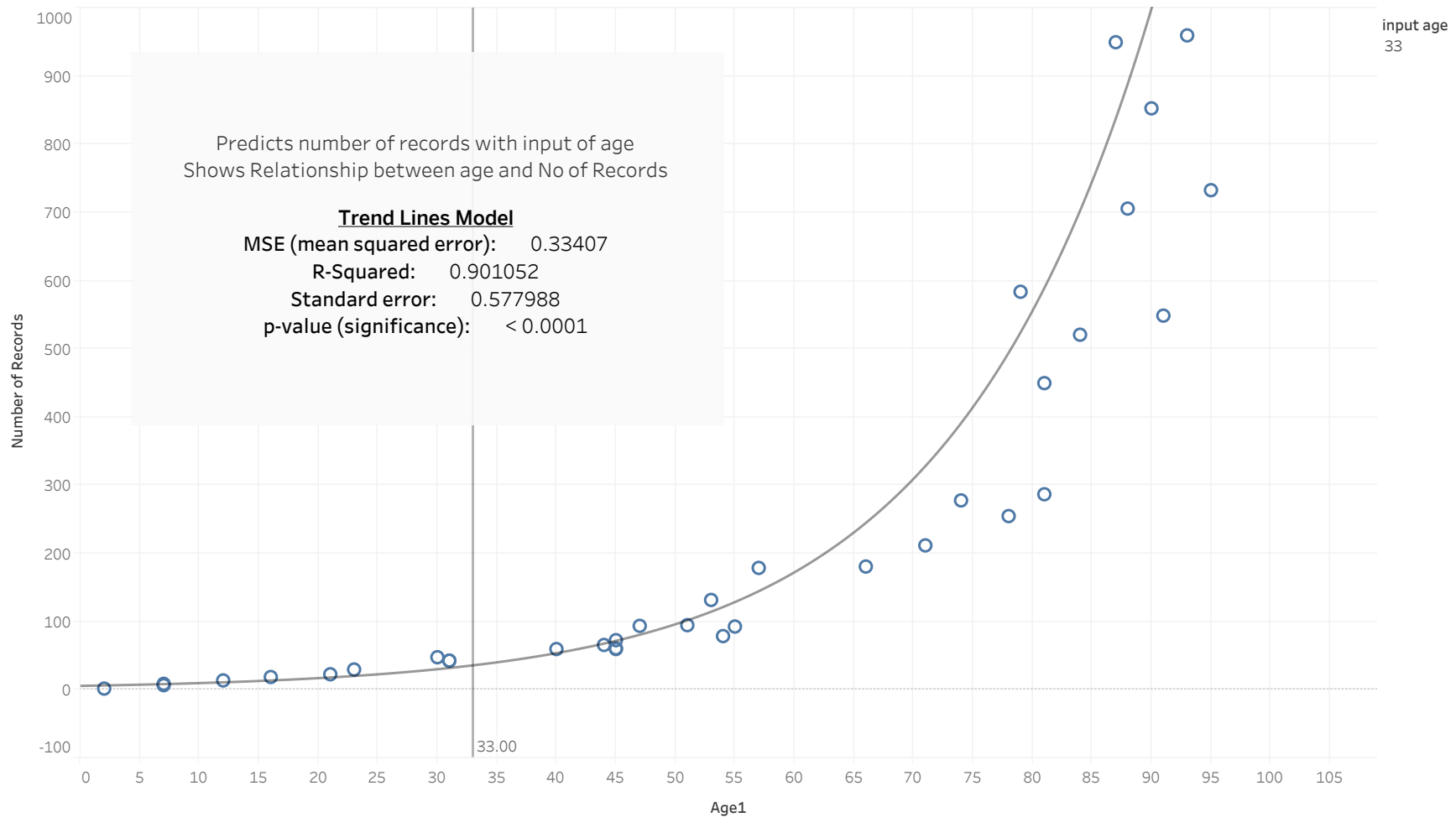Based on Time series Model of Supervised Analysis. Used in forecasting Future

input age
33

Predicts number of records with input of age
Shows Relationship between age and No of Records

Trend Lines Model
MSE (mean squared error):   0.33407
R-Squared: 0.901052
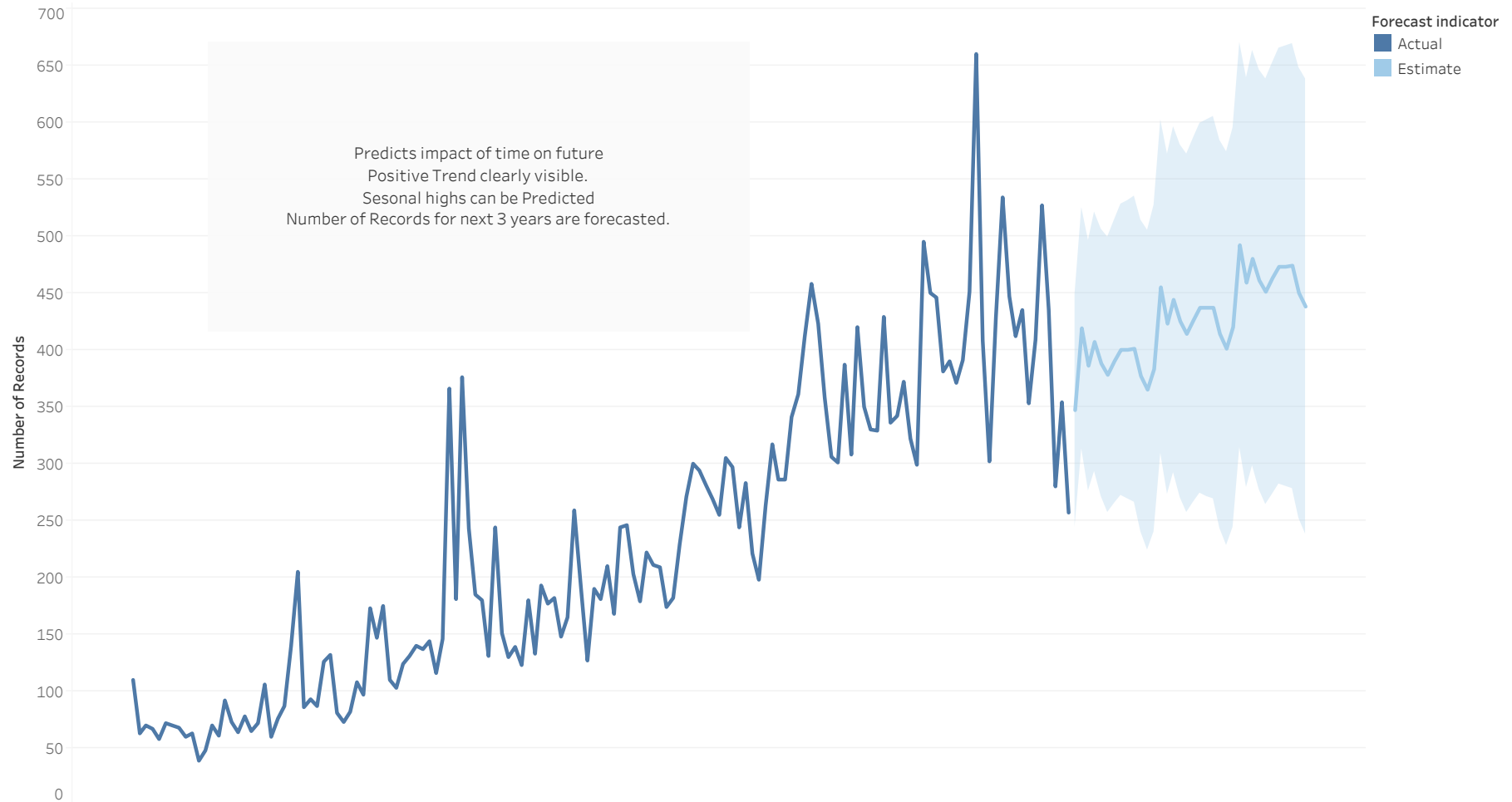Standard error: 0.577988
p-value (significance):   < 0.0001

Predictions and Forecasting

K-Means clustering is a Unsupervised Analysis.Helps in performing Functions. For segmenting,grouping.

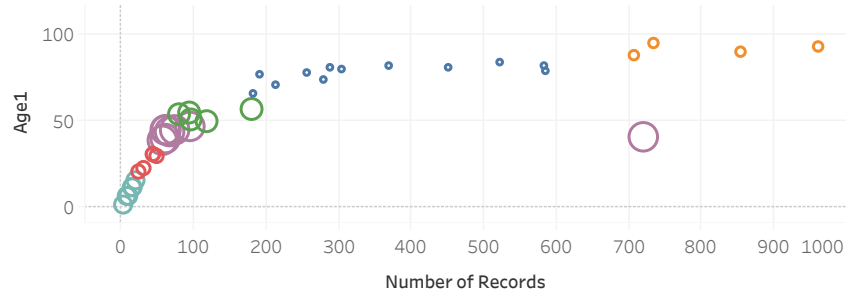Simple Linear Regession model is a Supervised Analysis. Used in predictive Analysis.

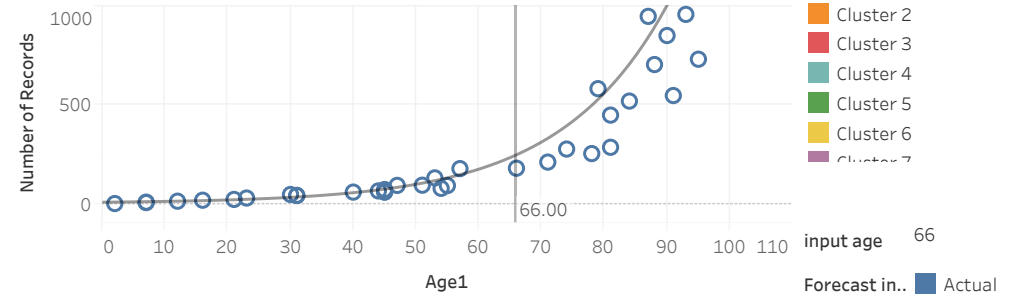Based on Time series Model of Supervised Analysis. Used in forecasting Future

Predicts impact of time on future
Positive Trend clearly visible.
Sesonal highs can be Predicted
Number of Records for next 3 years are forecasted.

Forecast indicator
Actual
Estimate

Adverse Effects - Predictive Analysis
A Study of Adverse Effects on Humans for Variety of Products Made for Human Consumptions!

k-Mean Clustering

Age1 vs Number of Records scatter plot

Linear Regression

66.00

input age   66

Forecast in..   Actual

Clusters (1)
- Cluster 1
- Cluster 2
- Cluster 3
- Cluster 4
- Cluster 5
- Cluster 6
- Cluster 7

Times series forecasting

Number of Records time series forecast