



Department of  
Medicaid

John R. Kasich, Governor  
Barbara R. Sears, Director

# Ohio Department of Medicaid's Maternal and Infant Health Measures

## Mahoning County

Ohio Department of Medicaid  
Bureau of Health Innovation and Quality  
Fall 2018

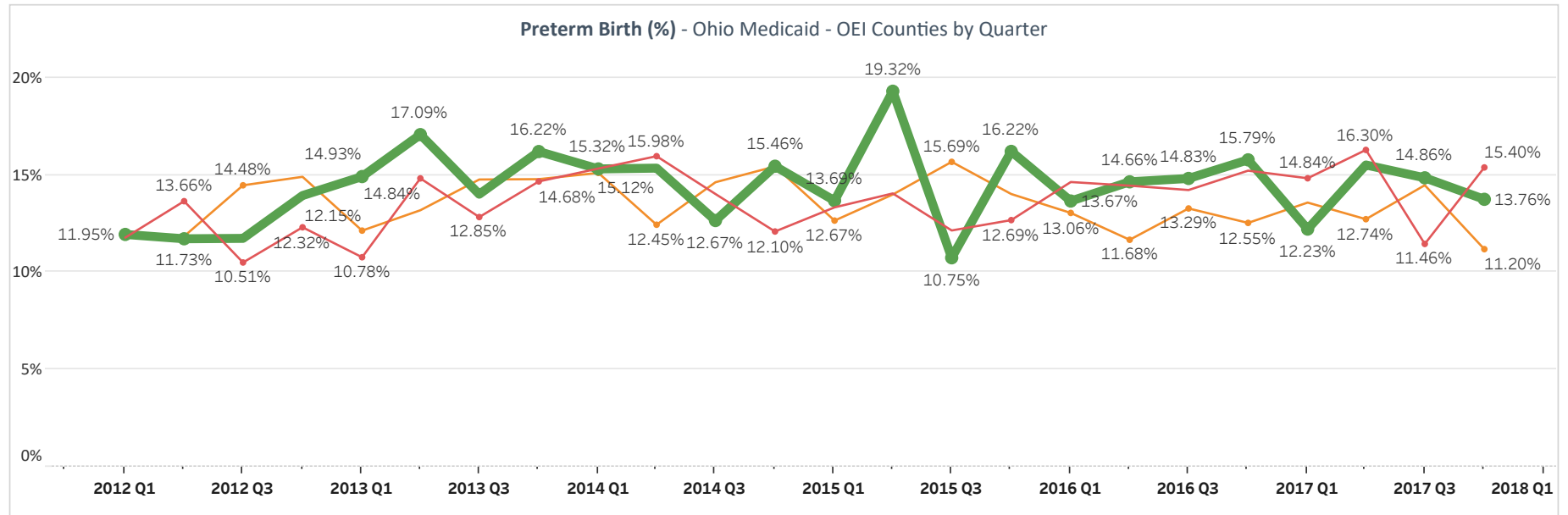
## Preterm Birth (%)

## Mahoning, Butler, Stark Counties - Preterm Birth (%)

### Trends by Quarter | CY 2012-2017

Counties

Butler Mahoning Stark

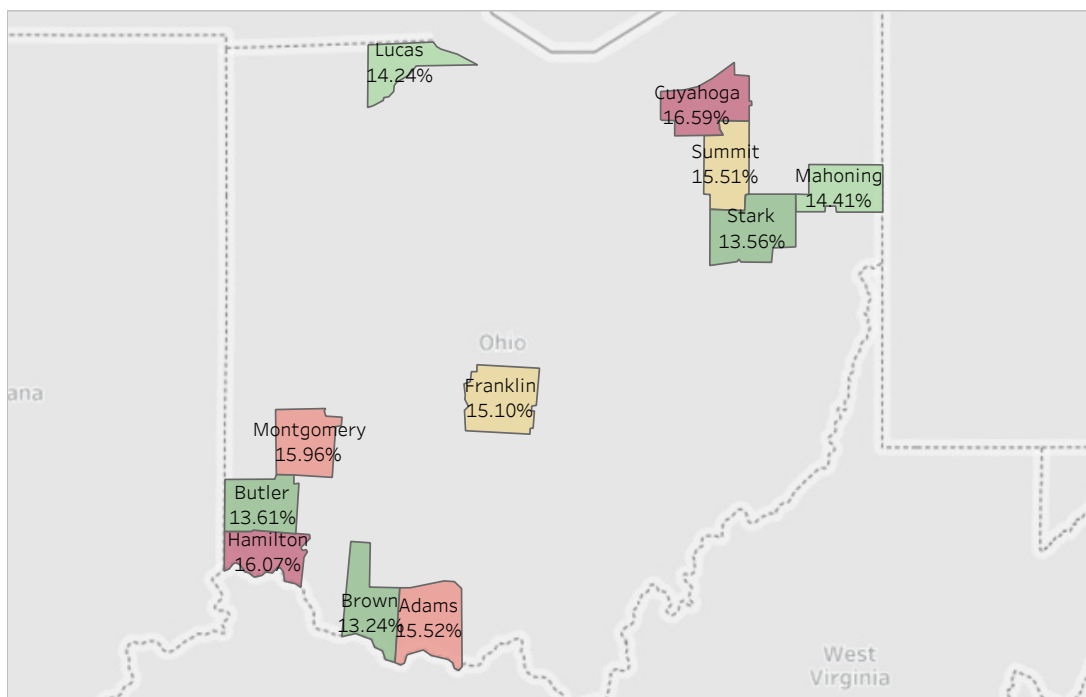


County	PTB Aggregate Rate Q1 2012 - Q4 2017	PTB Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	13.61%	14.39%	From 304 to 277 PTB Infants
<b>Mahoning</b>	14.41%	14.10%	From 217 to 194 PTB Infants
Stark	13.56%	13.04%	From 302 to 276 PTB Infants

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

## Mahoning, Butler, Stark Counties - Preterm Birth (%)

OEI County Quintiles | CY 2012-2017



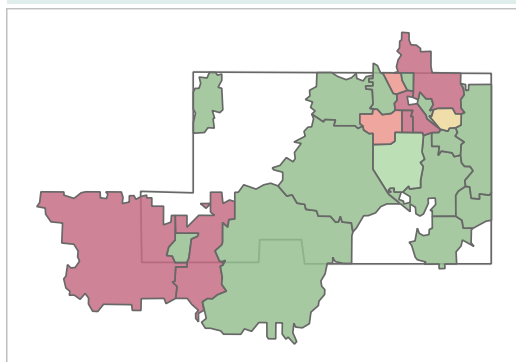
### Map Measure Ranges

- $\geq 0 < 13.622\%$
- $\geq 13.622\% < 14.419\%$
- $\geq 14.419\% < 15.516\%$
- $\geq 15.516\% < 16.055\%$
- $\geq 16.055\%$

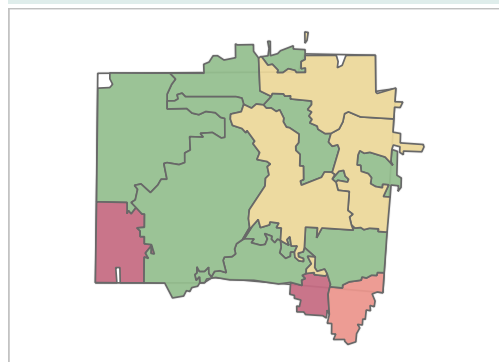
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

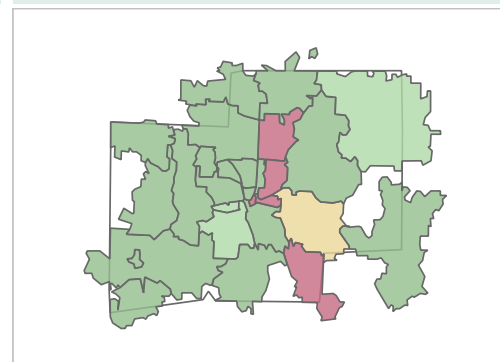
### Mahoning



### Butler

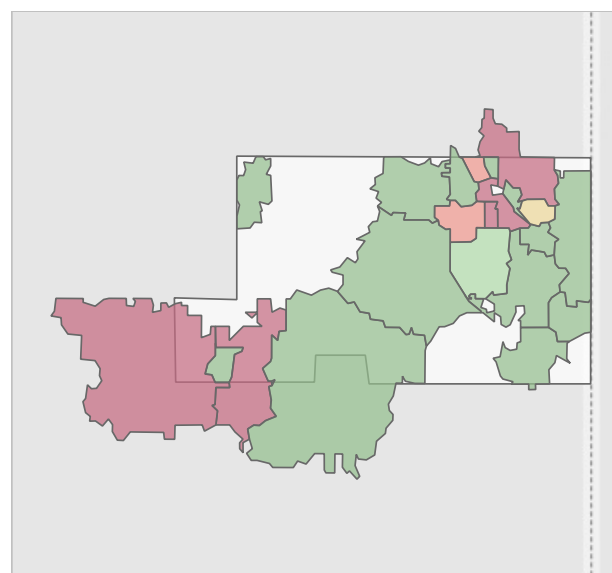
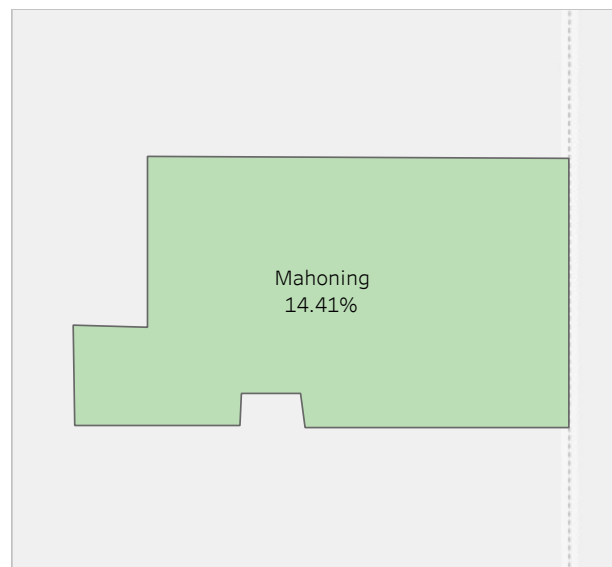
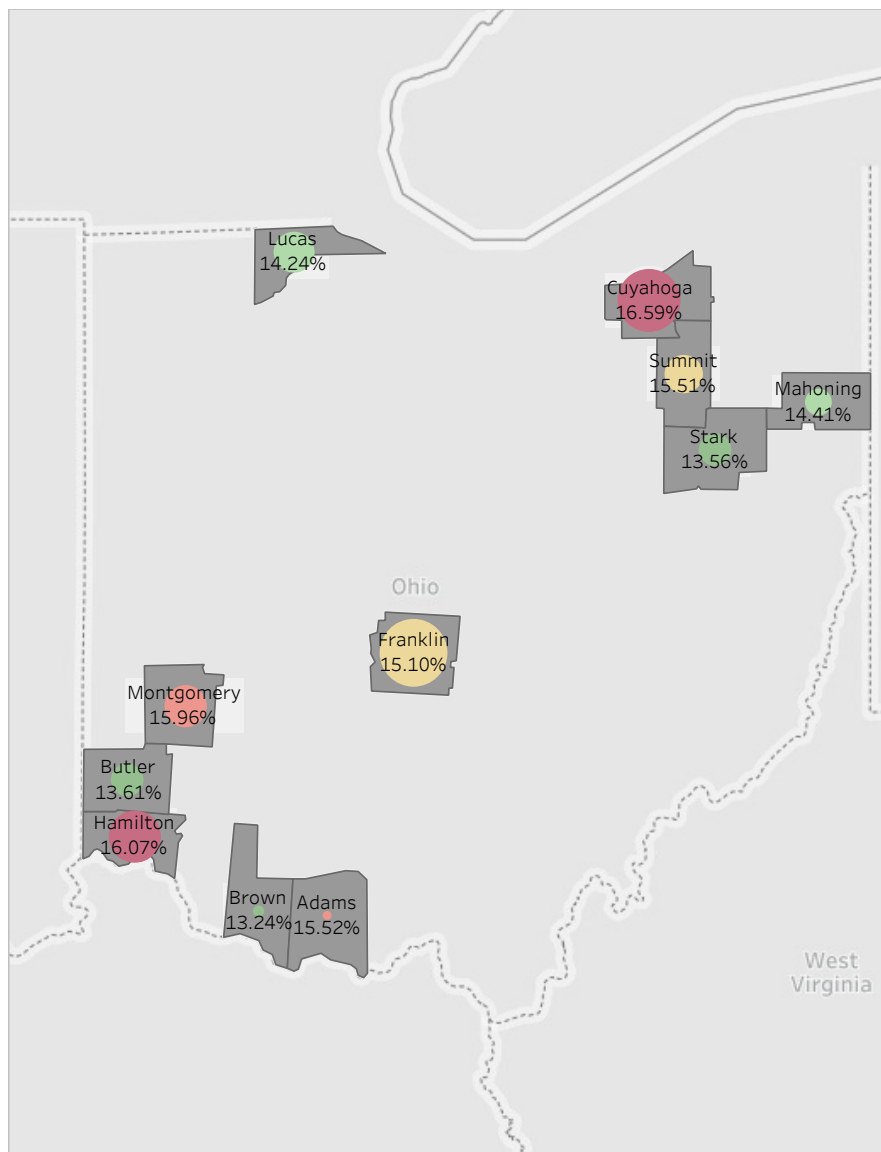


### Stark



## Mahoning County - Preterm Birth (%)

### OEI Quintiles | CY 2012-2017



#### Map Measure Ranges

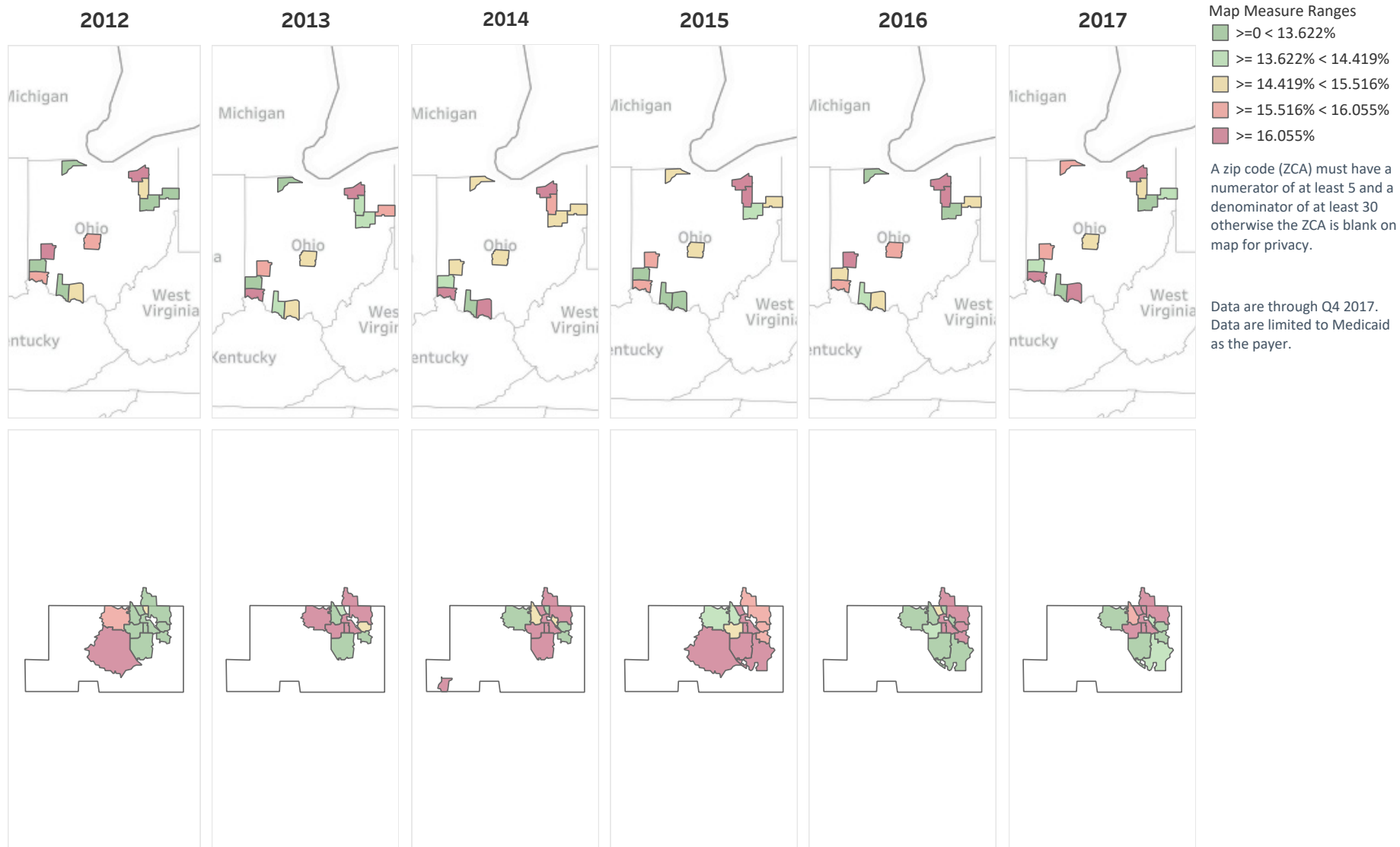
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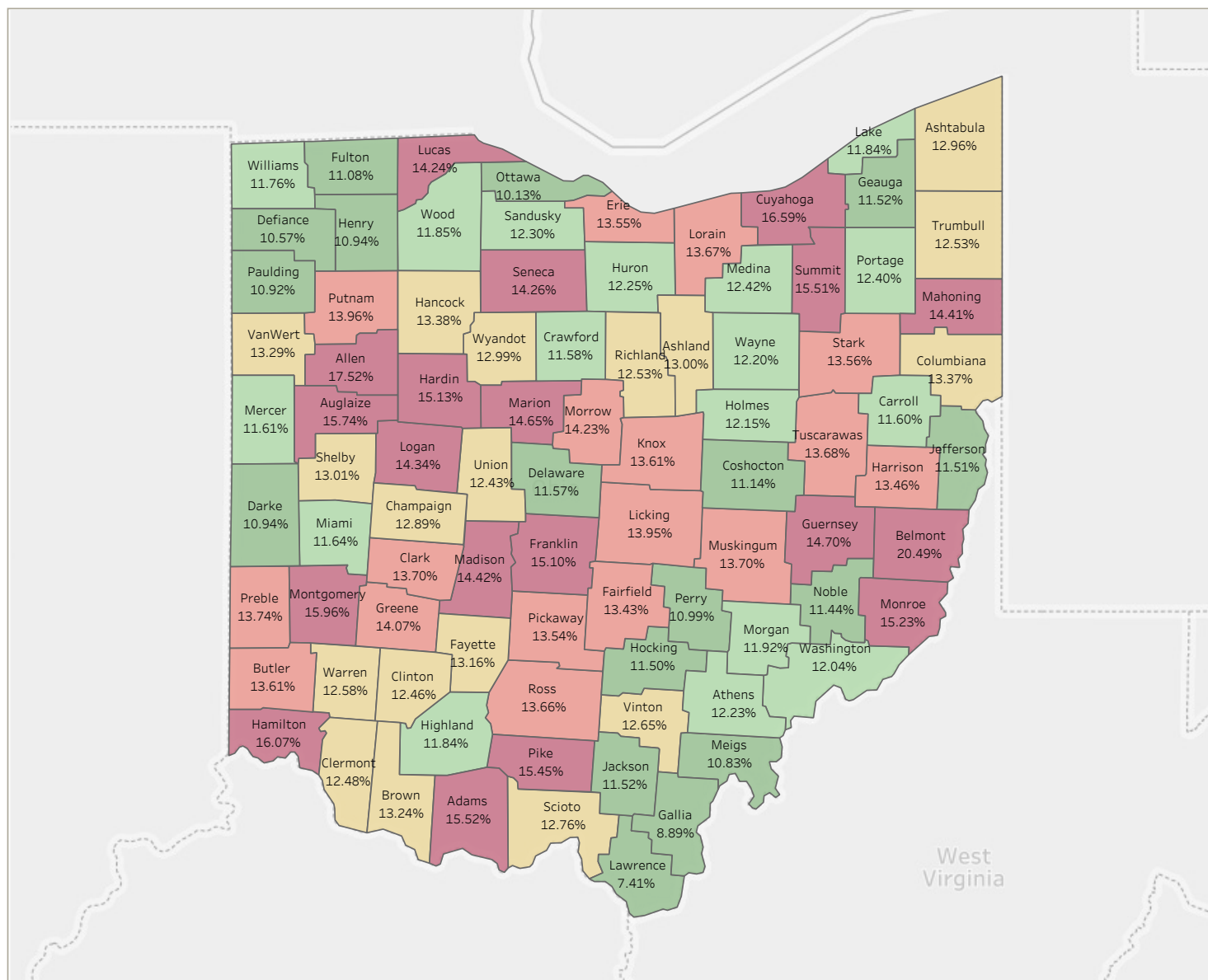
## Mahoning County - Preterm Birth (%)

### OEI Quintiles | CY 2012-2017 Yearly Comparison



## Statewide - Preterm Birth (%)

### Overall Quintiles by County | CY 2012 - 2017



#### Map Measure Ranges

- $\geq 0 < 11.574\%$
- $\geq 11.574\% < 12.429\%$
- $\geq 12.429\% < 13.407\%$
- $\geq 13.407\% < 14.235\%$
- $\geq 14.235\%$

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



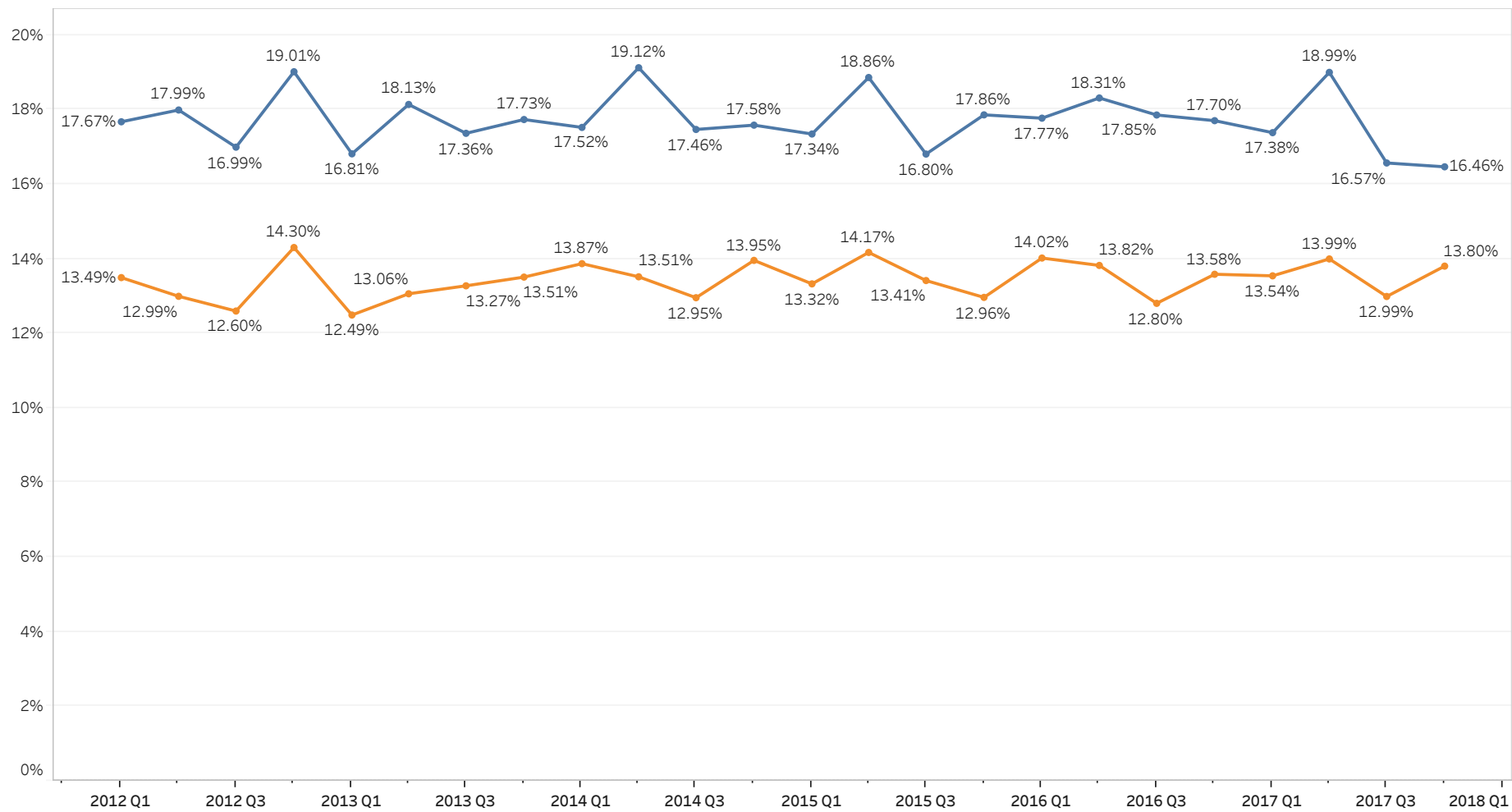
### Quarterly Trends by Race - Preterm Birth (%)

All OEI Counties | CY 2012-2017

Race

African American

Caucasian

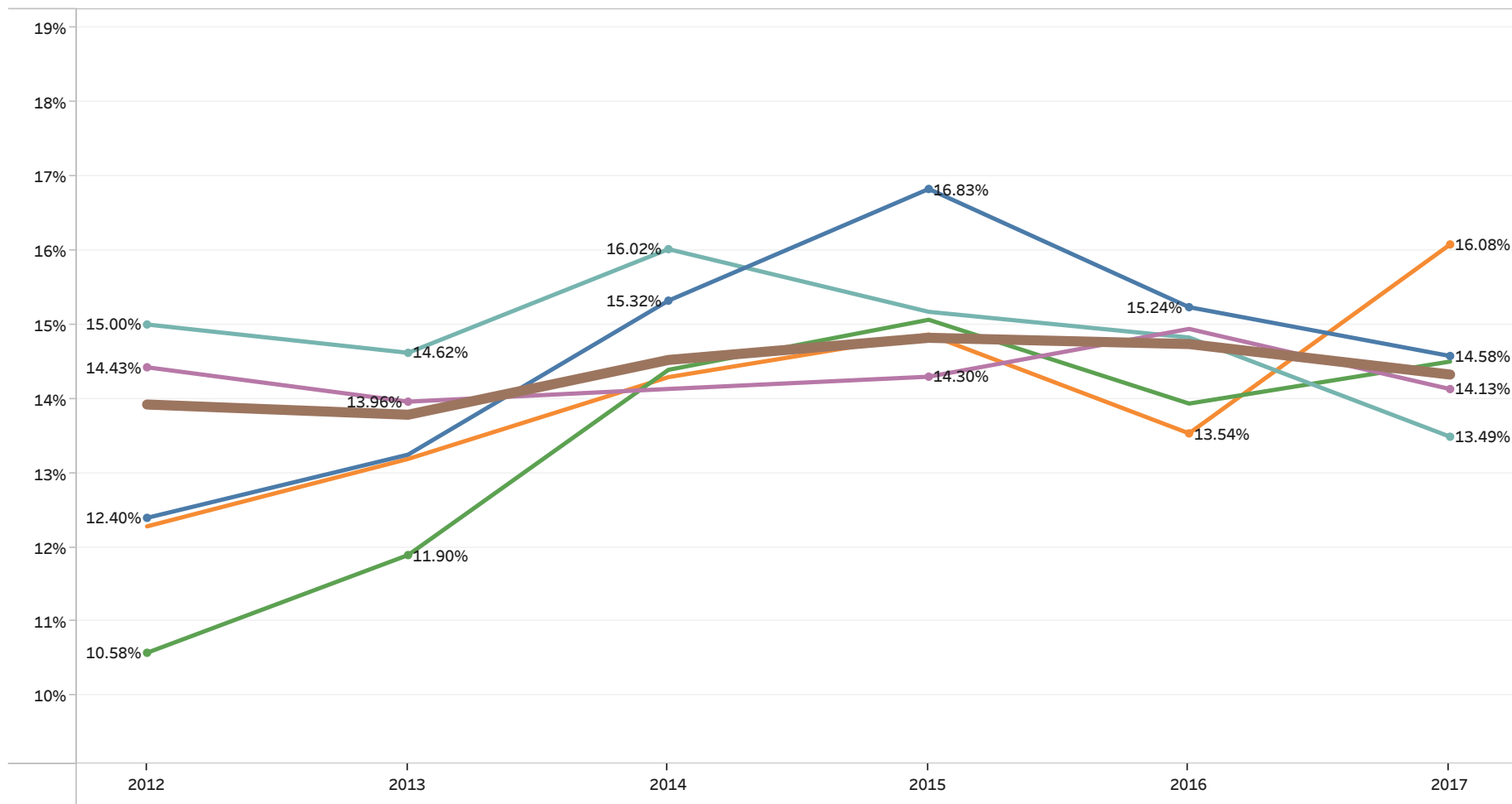


Data are limited to Medicaid as the payer.



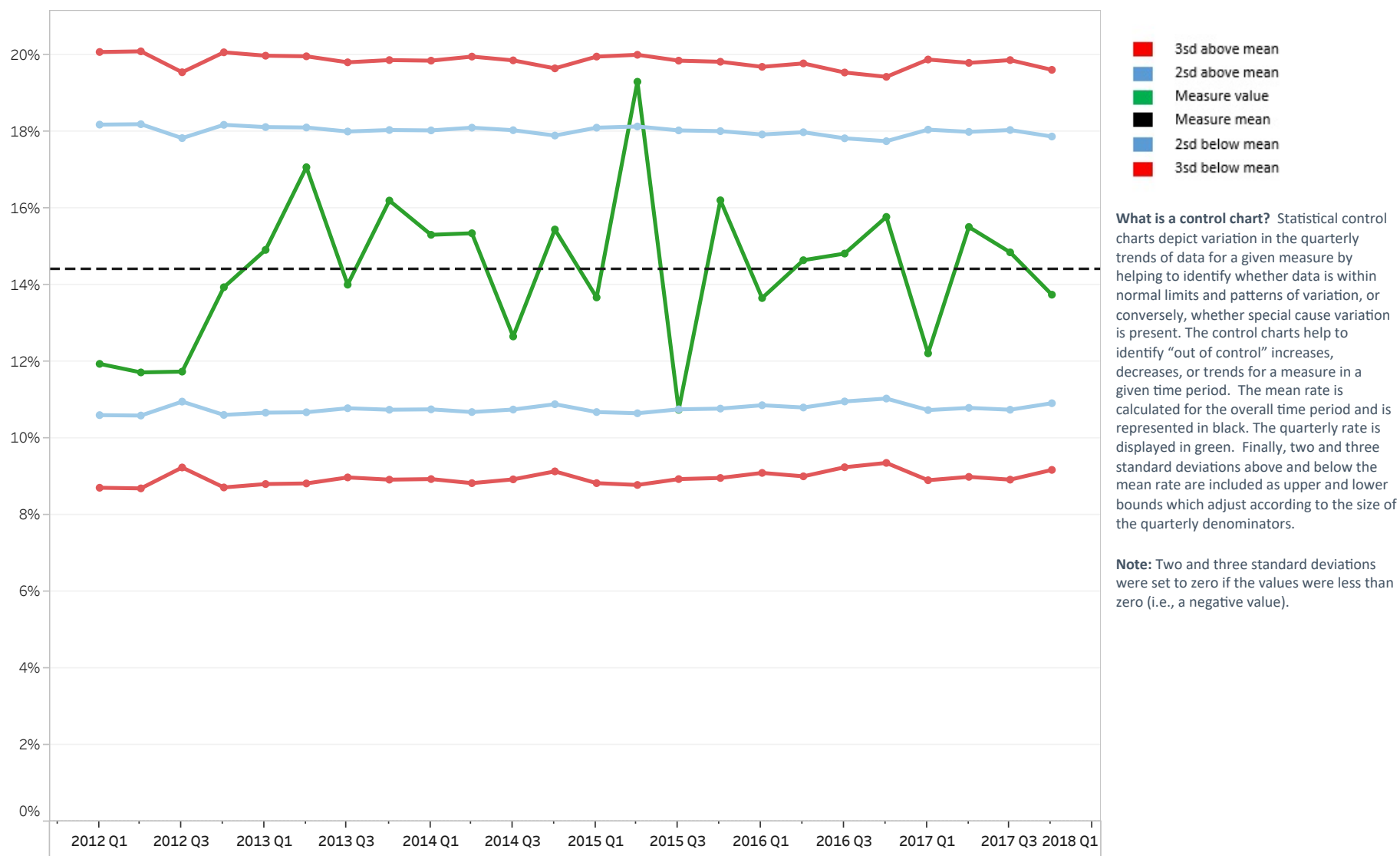
### Yearly Trends by MCP - Preterm Birth (%) All OEI Counties | CY 2012-2017

Medicaid Plan  
■ All Plans    ■ Buckeye    ■ CareSource    ■ Molina    ■ Paramount    ■ United



Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

## Mahoning County Quarterly Control Chart - Preterm Birth (%) CY 2012-2017



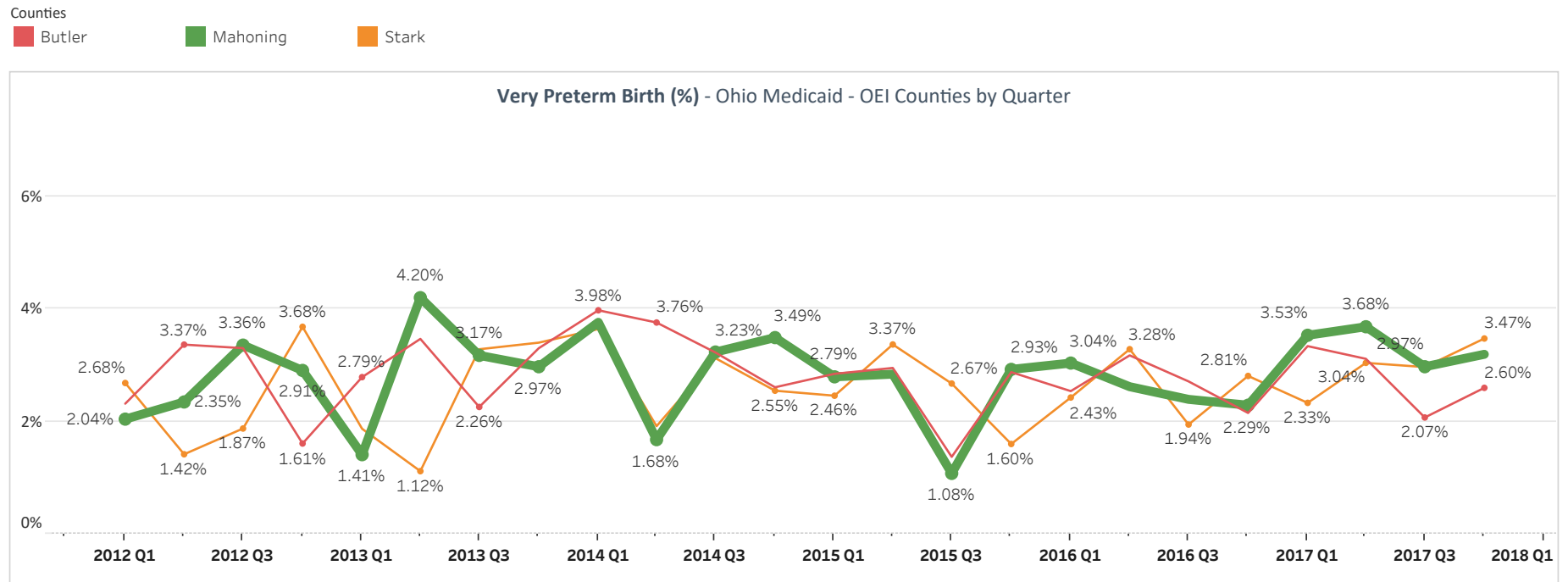
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## Very Preterm Birth (%)

## Mahoning, Butler, Stark Counties - Very Preterm Birth (%)

### Trends by Quarter | CY 2012-2017

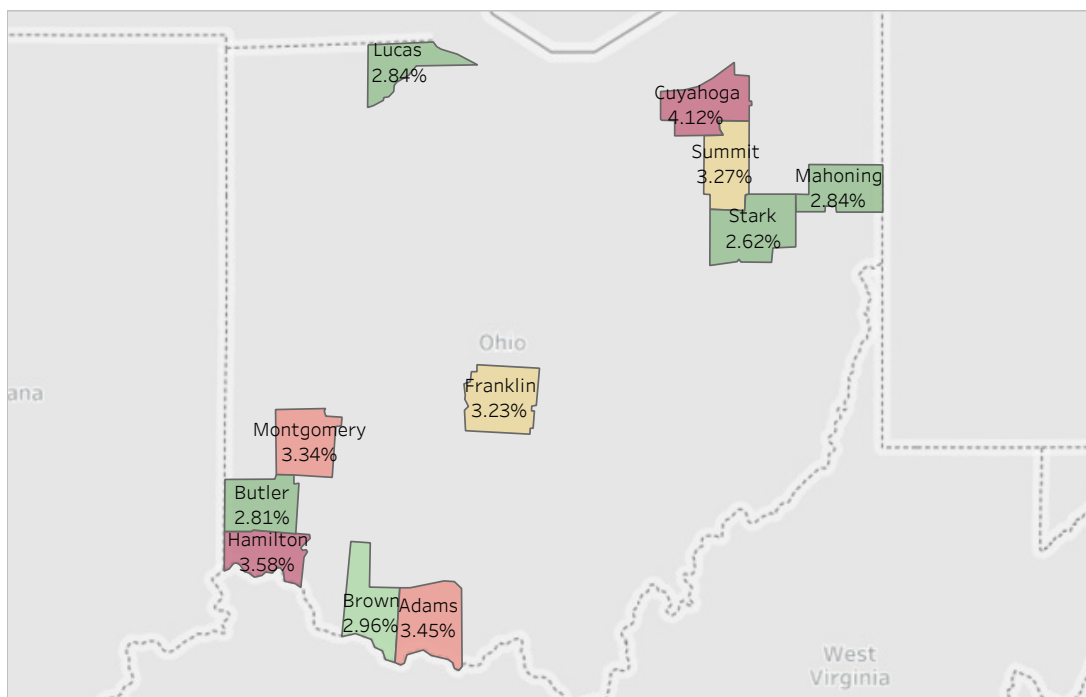


County	VPTB Aggregate Rate Q1 2012 - Q4 2017	VPTB Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	2.81%	2.75%	From 63 to 50 VPTB Infants
<b>Mahoning</b>	2.84%	3.34%	From 43 to 32 VPTB Infants
Stark	2.62%	2.95%	From 59 to 46 VPTB Infants

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

## Mahoning, Butler, Stark Counties - Very Preterm Birth (%)

### OEI County Quintiles | CY 2012-2017



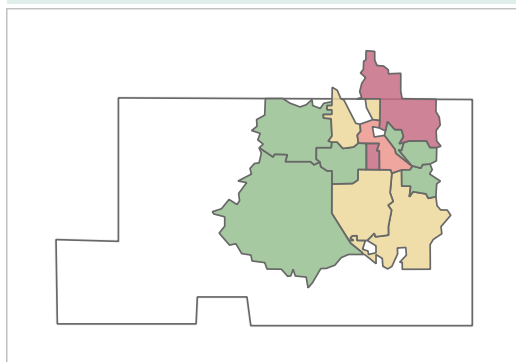
#### Map Measure Ranges

- $\geq 0 < 2.839\%$
- $\geq 2.839 < 2.966\%$
- $\geq 2.966 < 3.333\%$
- $\geq 3.333 < 3.573\%$
- $\geq 3.573\%$

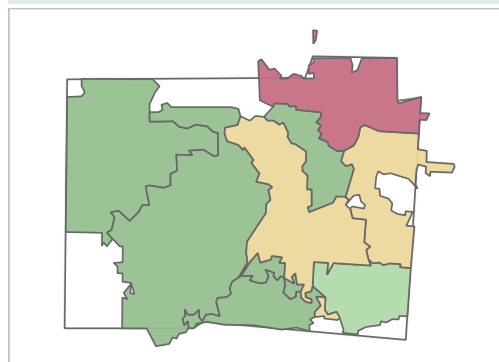
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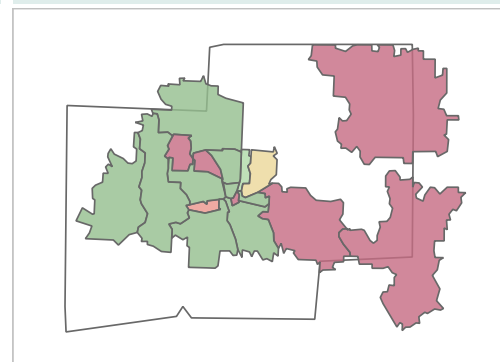
#### Mahoning



#### Butler

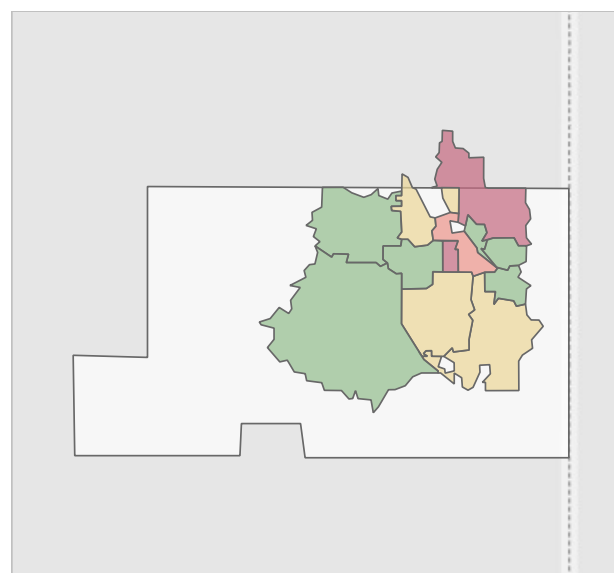
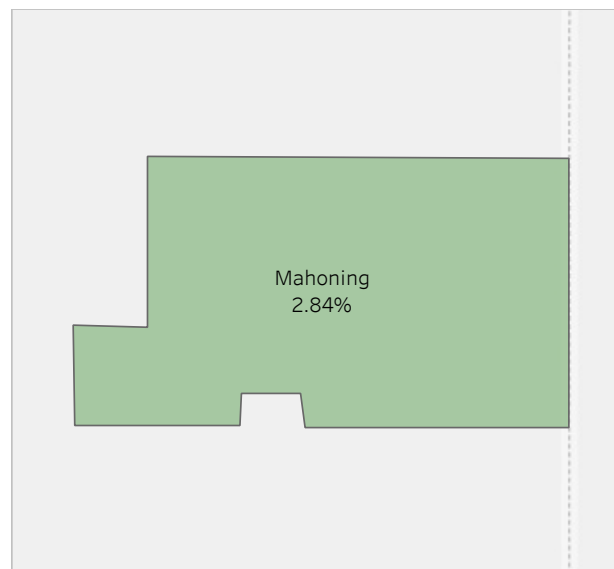
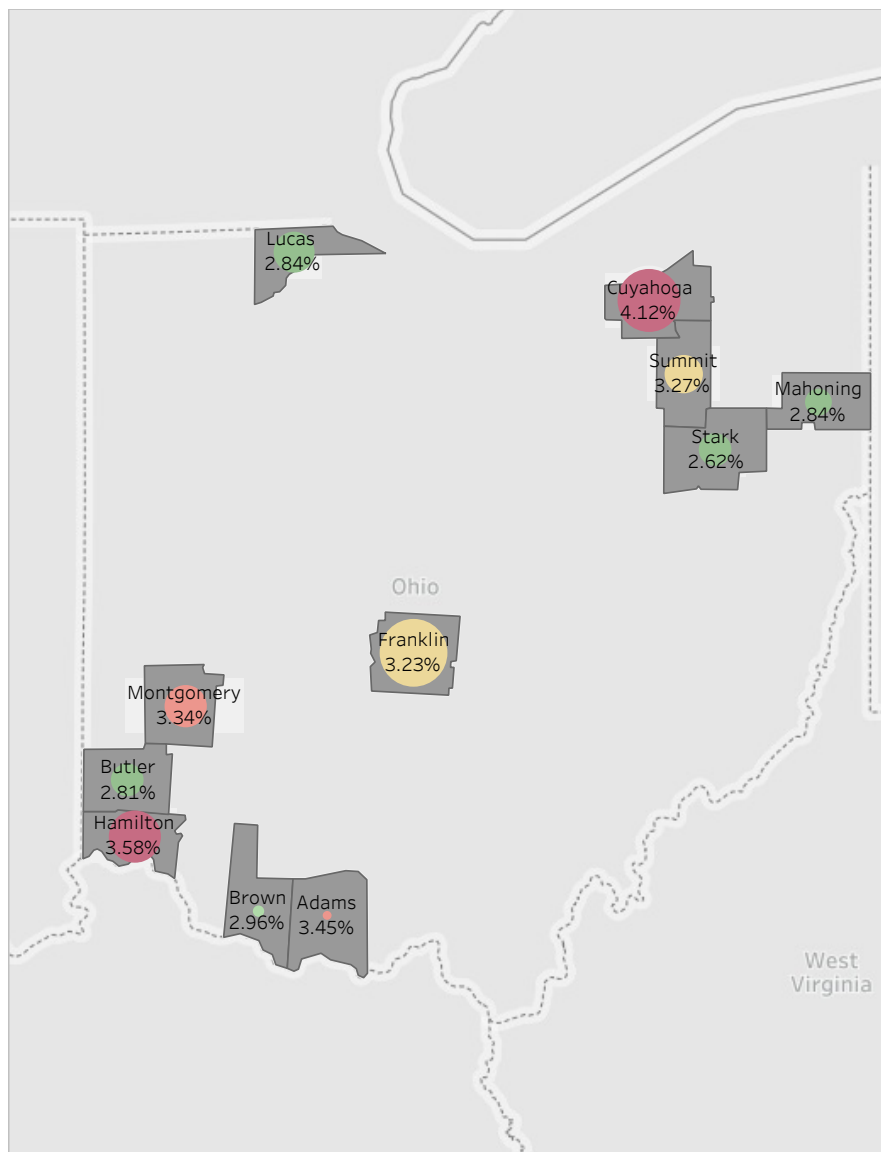


#### Stark



## Mahoning County - Very Preterm Birth (%)

### OEI Quintiles | CY 2012-2017



#### Map Measure Ranges

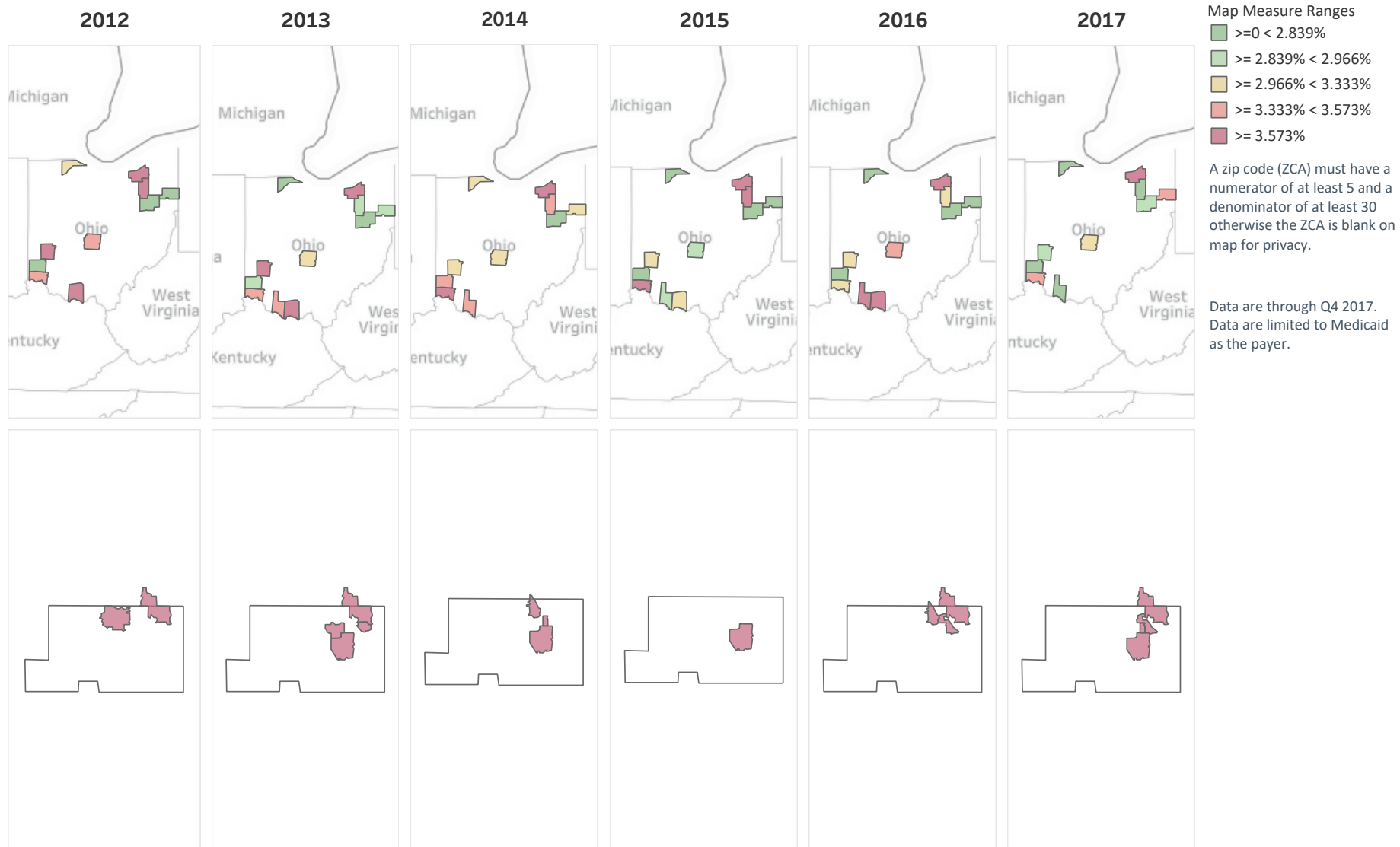
- $\geq 0 < 2.839\%$
- $\geq 2.839\% < 2.966\%$
- $\geq 2.966\% < 3.333\%$
- $\geq 3.333\% < 3.573\%$
- $\geq 3.573\%$

A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

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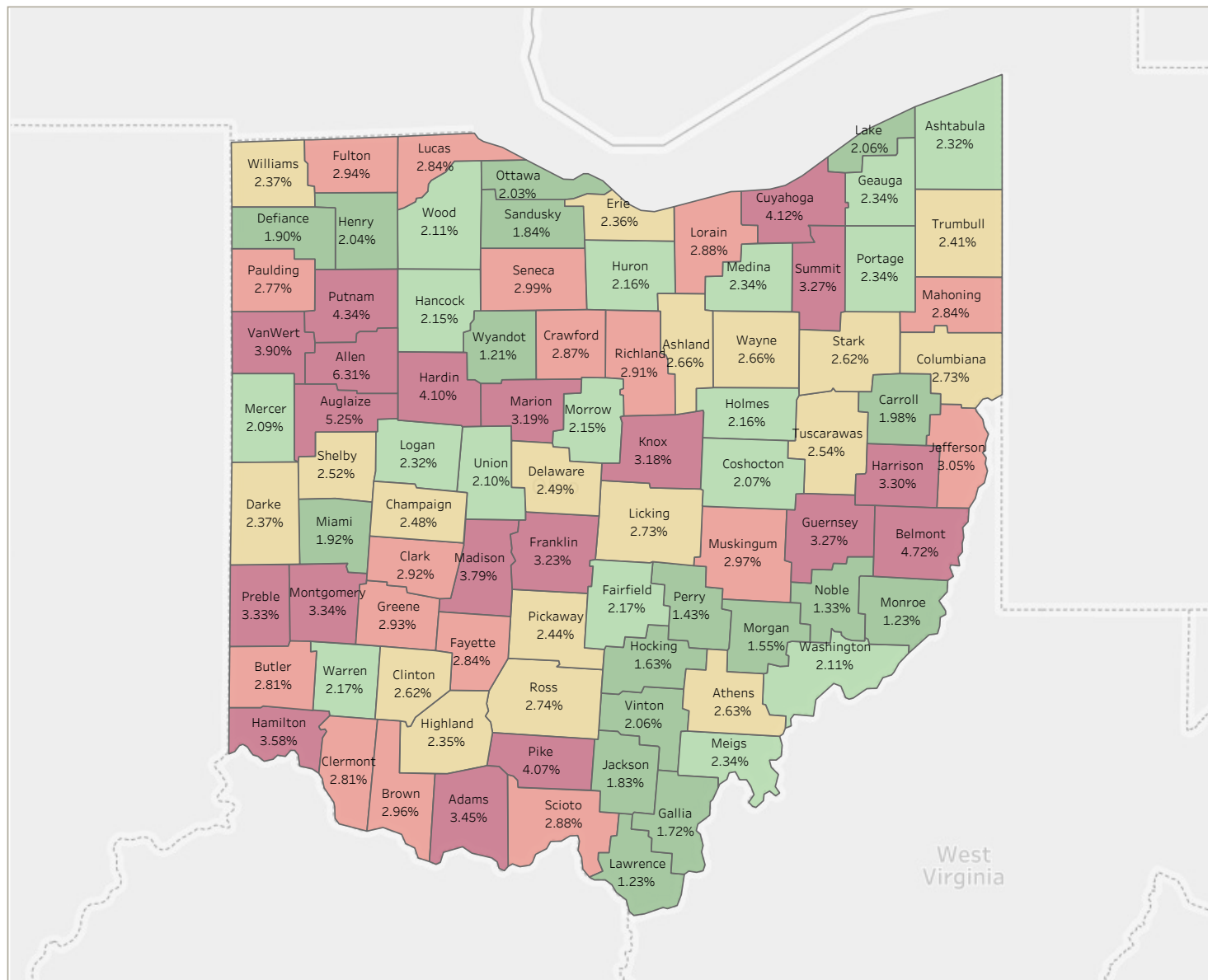
## Mahoning County - Very Preterm Birth (%)

### OEI Quintiles | CY 2012-2017 Yearly Comparison



## Statewide - Very Preterm Birth (%)

### Overall Quintiles by County | CY 2012 - 2017



#### Map Measure Ranges

- $\geq 0 < 2.066\%$
- $\geq 2.066\% < 2.346\%$
- $\geq 2.346\% < 2.756\%$
- $\geq 2.756\% < 3.115\%$
- $\geq 3.115\%$

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.





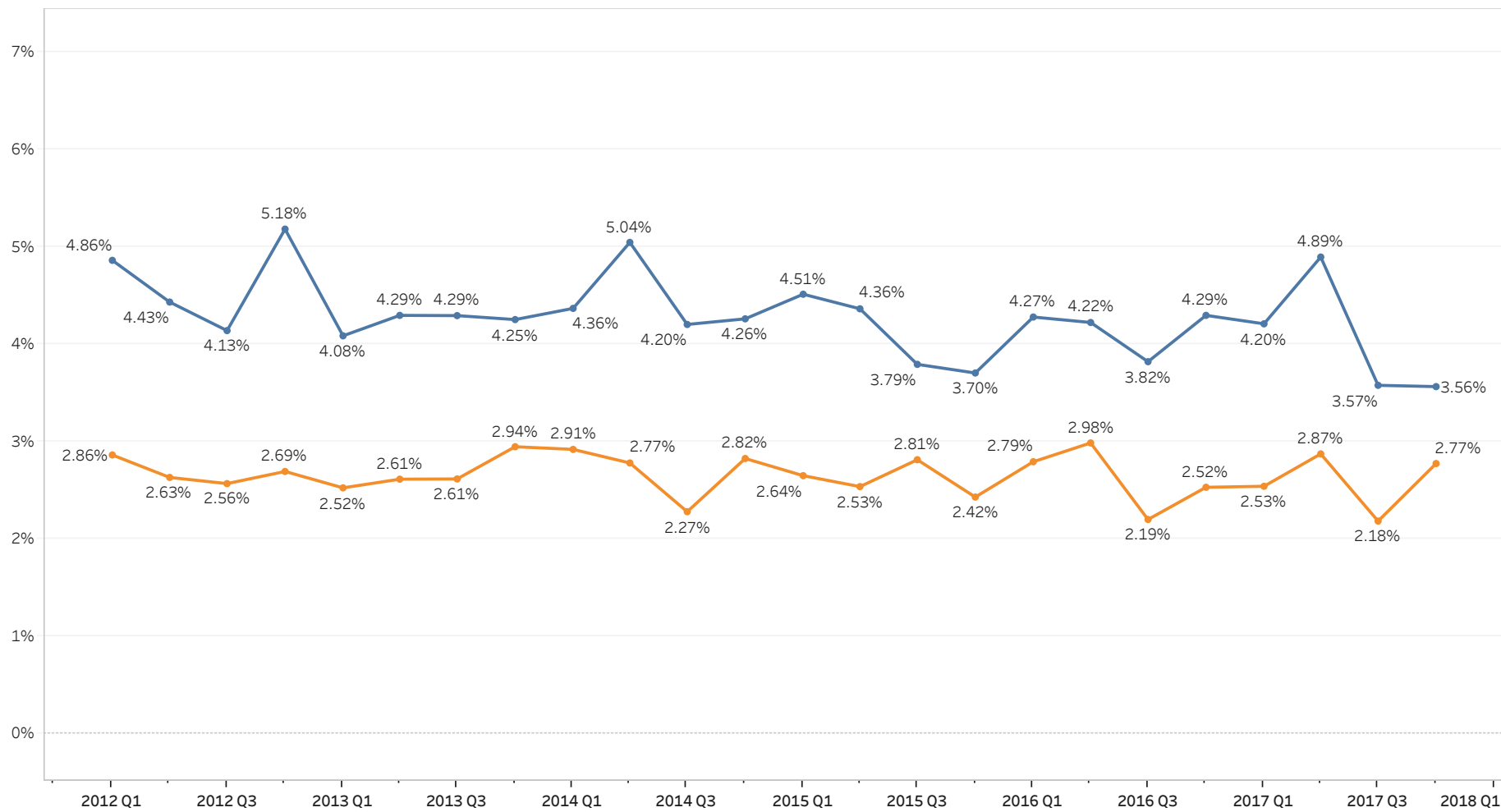
### Quarterly Trends by Race - Very Preterm Birth (%)

All OEI Counties | CY 2012-2017

Race

African American

Caucasian



Data are limited to Medicaid as the payer.



### Yearly Trends by MCP - Very Preterm Birth (%) All OEI Counties | CY 2012-2017

Medicaid Plan

All Plans

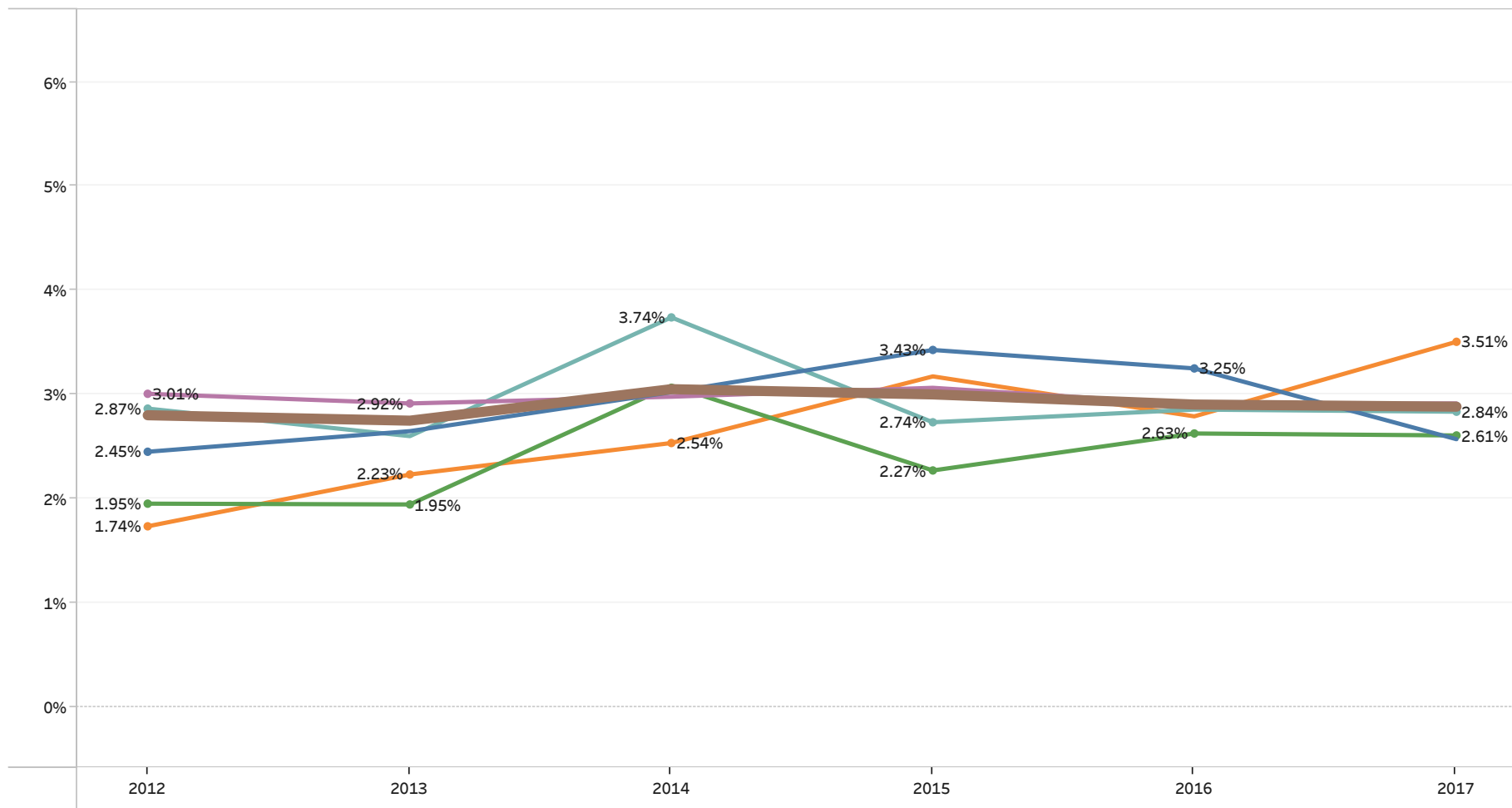
Buckeye

CareSource

Molina

Paramount

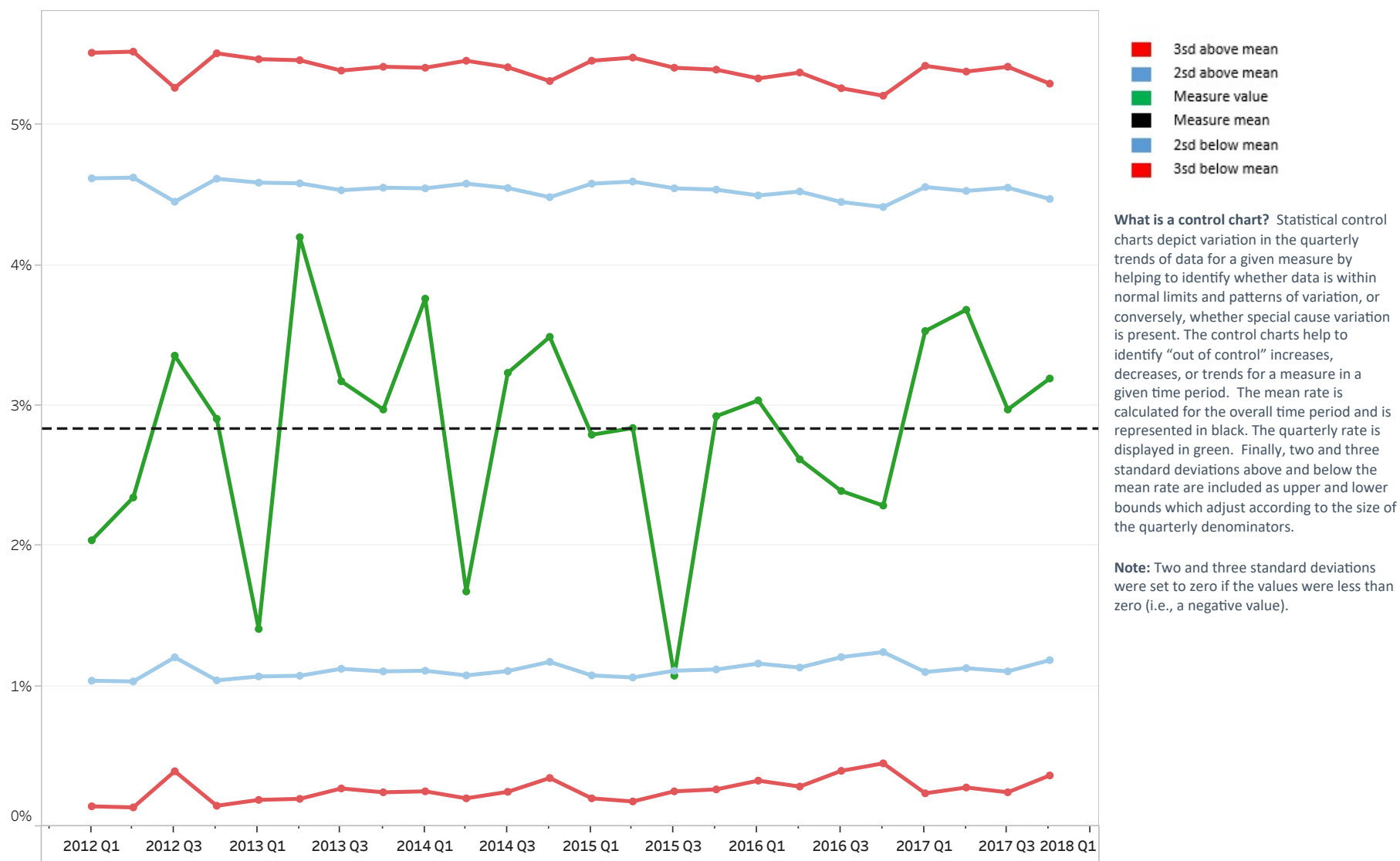
United



Data are through Q4 2017.

Data are limited to Medicaid as the payer.

## Mahoning County Quarterly Control Chart - Very Preterm Birth (%) CY 2012-2017

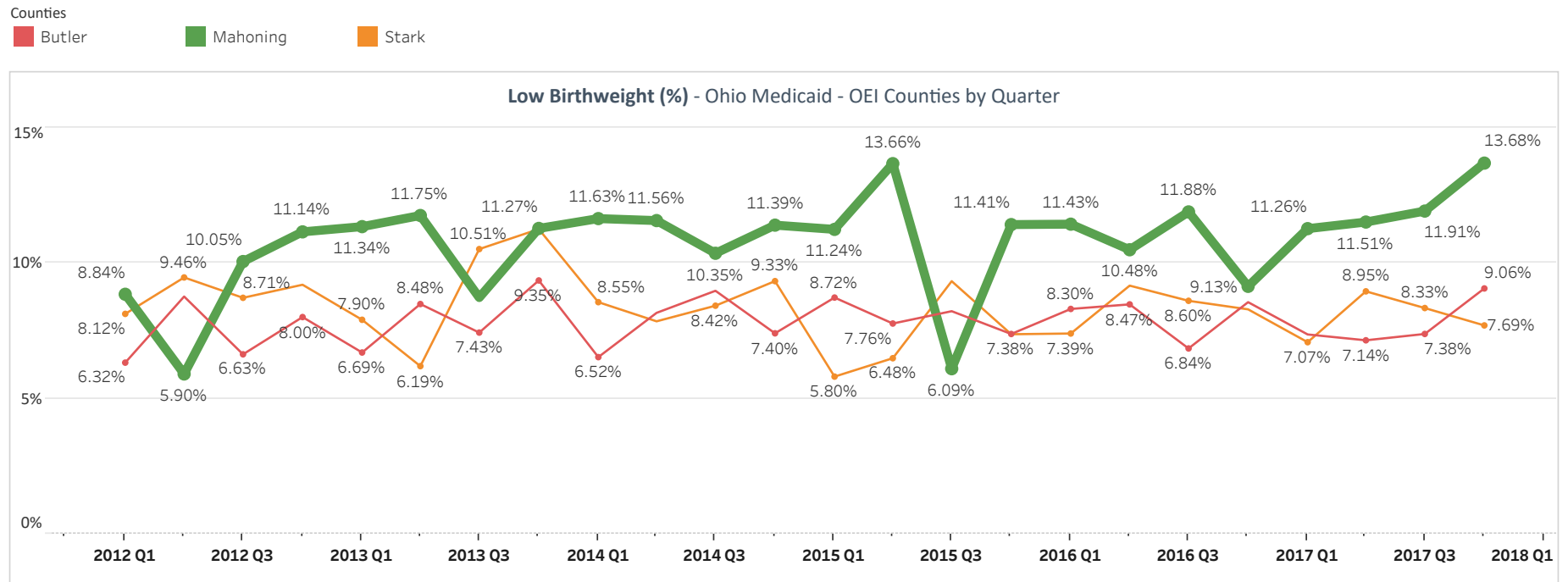


Data are limited to Medicaid as the payer.

## Low Birthweight (%)

## Mahoning, Butler, Stark Counties - Low Birthweight (%)

### Trends by Quarter | CY 2012-2017

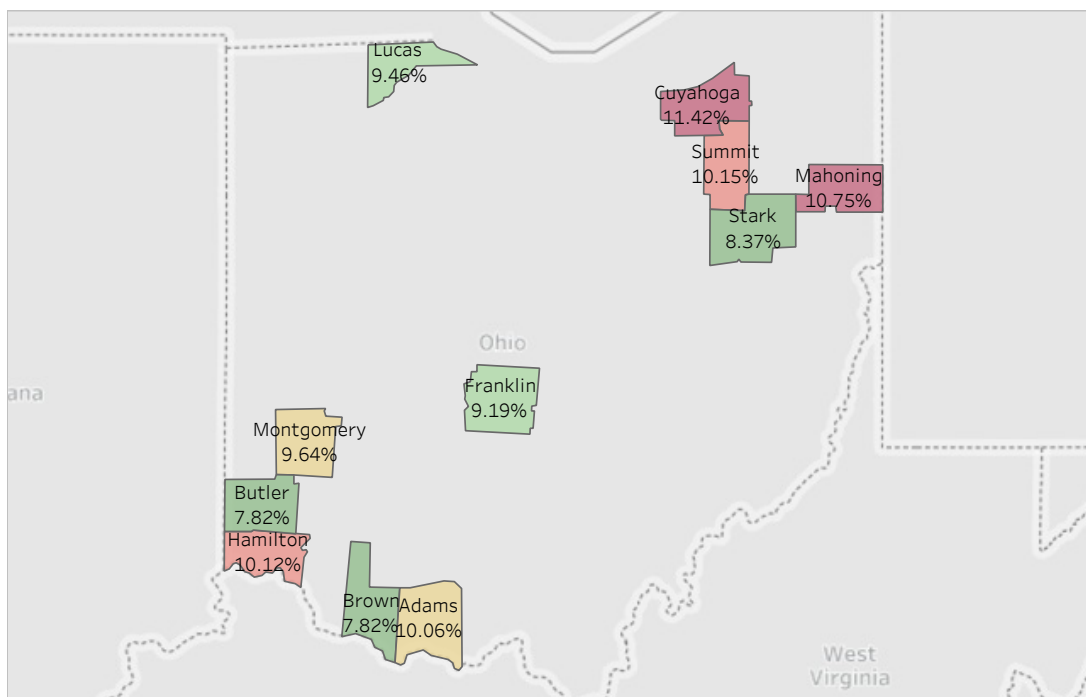


County	LBW Rate Aggregate Q1 2012 - Q4 2017	LBW Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	7.82%	7.72%	From 170 to 149 LBW Infants
<b>Mahoning</b>	10.75%	12.13%	From 158 to 138 LBW Infants
Stark	8.37%	8.02%	From 181 to 160 LBW Infants

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

## Mahoning, Butler, Stark Counties - Low Birthweight (%)

### OEI County Quintiles | CY 2012-2017



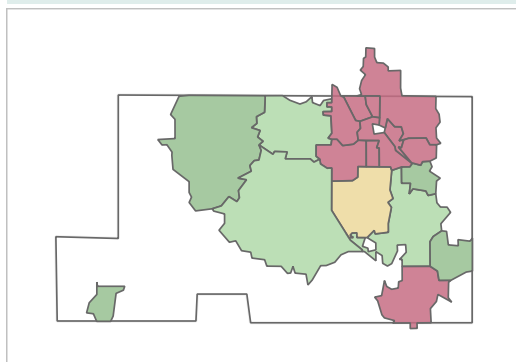
#### Map Measure Ranges

- $\geq 0 < 8.377\%$
- $\geq 8.377\% < 9.467\%$
- $\geq 9.467\% < 10.113\%$
- $\geq 10.113\% < 10.740\%$
- $\geq 10.740\%$

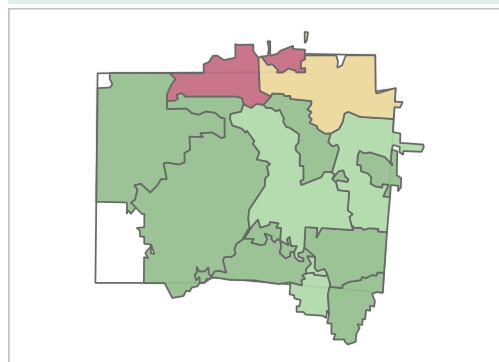
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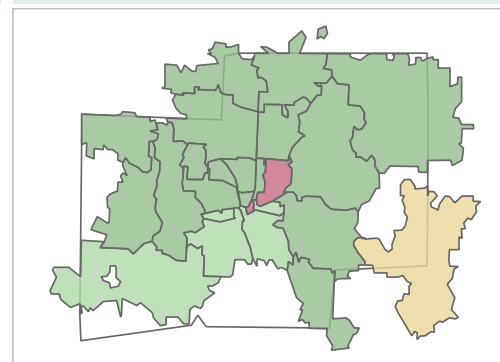
#### Mahoning



#### Butler

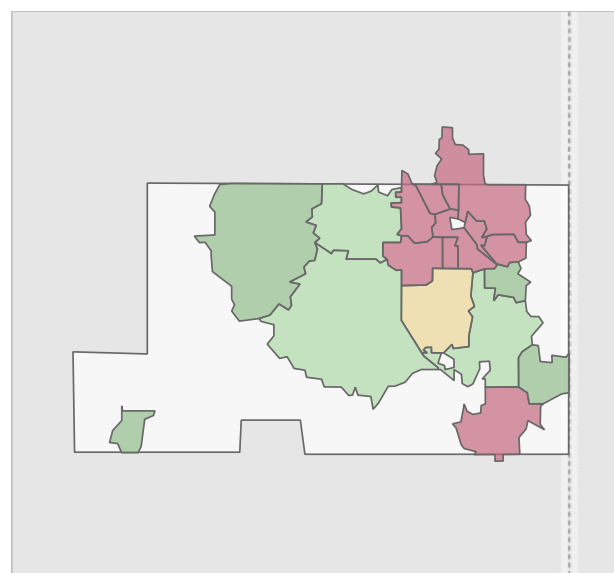
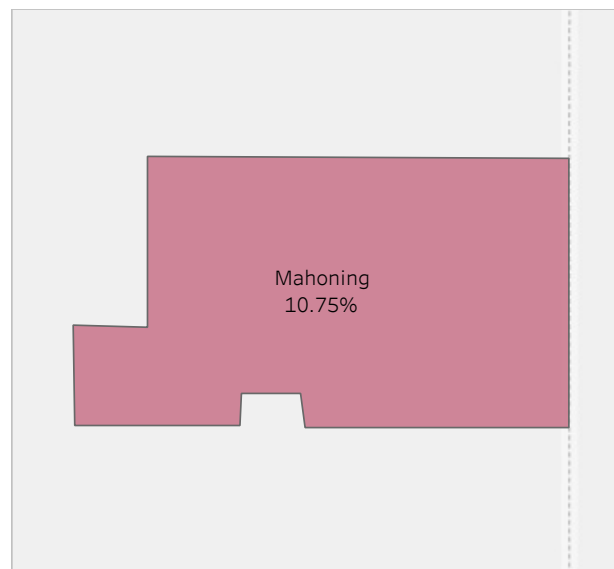
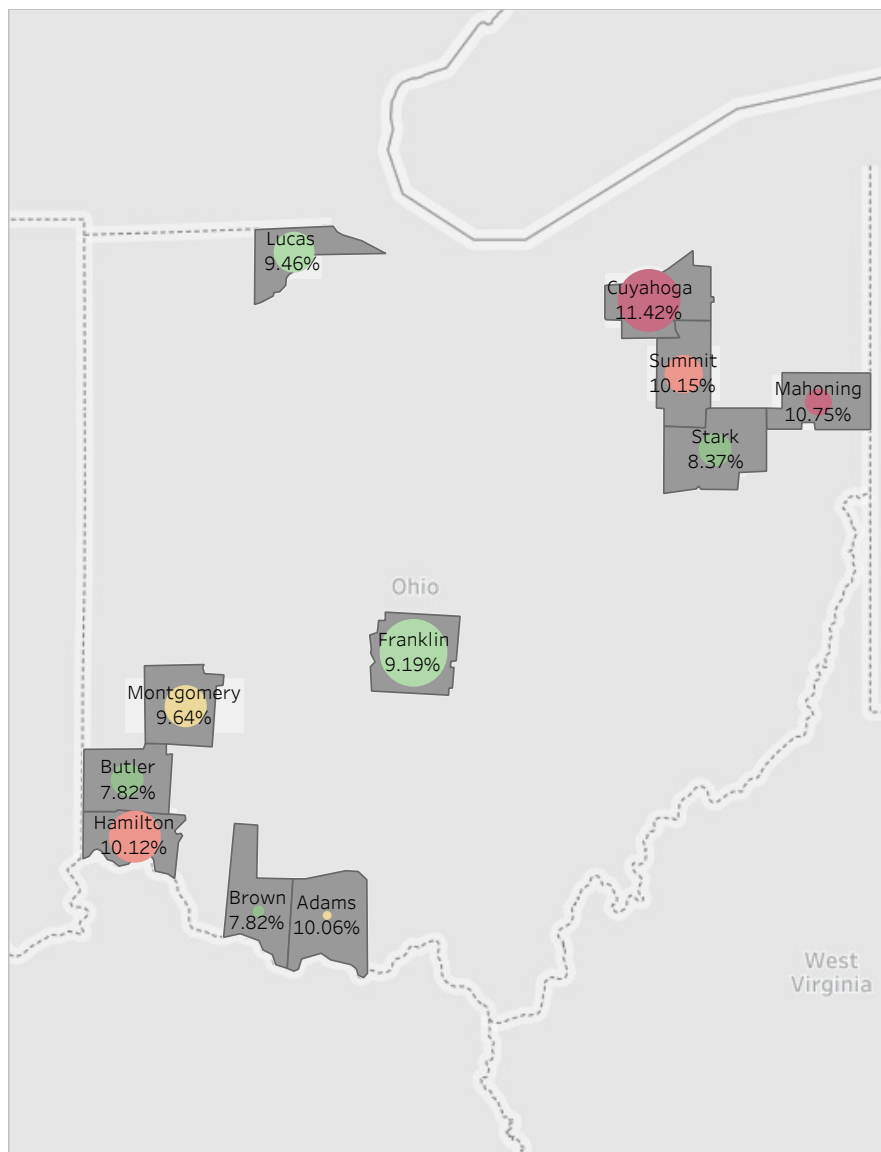


#### Stark



## Mahoning County - Low Birthweight (%)

### OEI Quintiles | CY 2012-2017



#### Map Measure Ranges

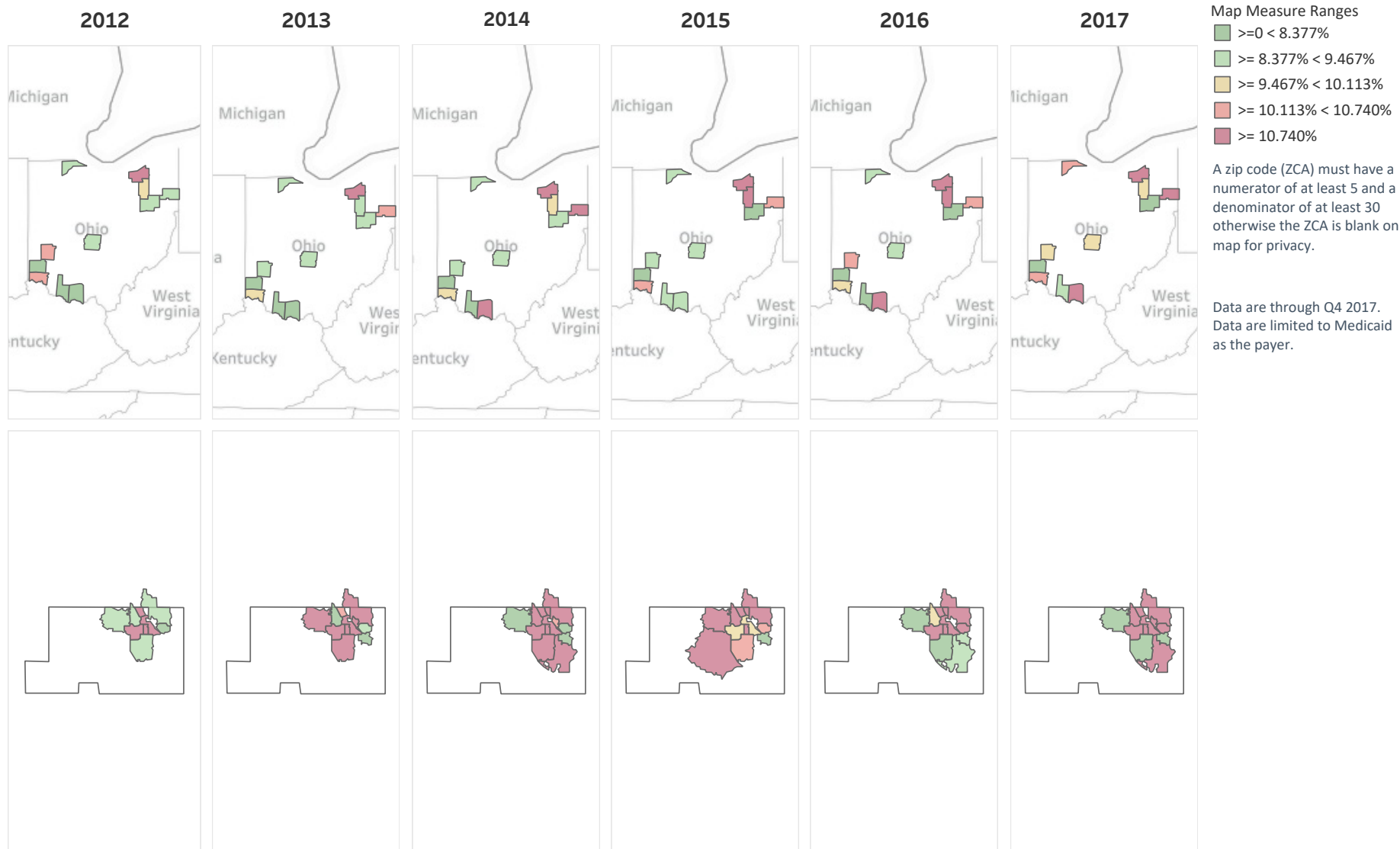
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## Mahoning County - Low Birthweight (%)

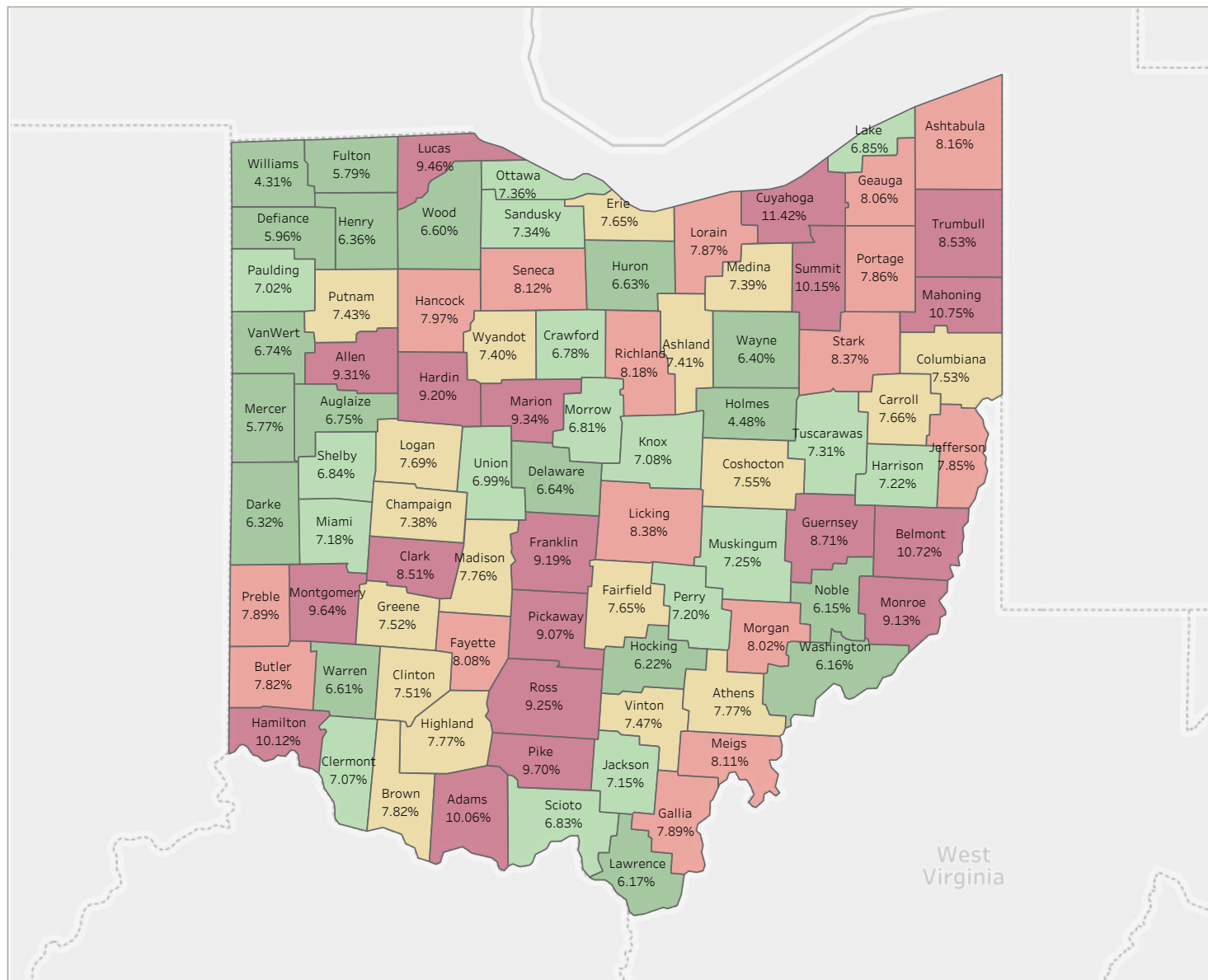
### OEI Quintiles | CY 2012-2017 Yearly Comparison





## Statewide - Low Birthweight (%)

### Overall Quintiles by County | CY 2012 - 2017



#### Map Measure Ranges

- >=0 < 6.765%
- >= 6.765% < 7.370%
- >= 7.370% < 7.821%
- >= 7.821% < 8.448%
- >= 8.448%

Data are through Q4 2017.

Data are limited to Medicaid as the payer.

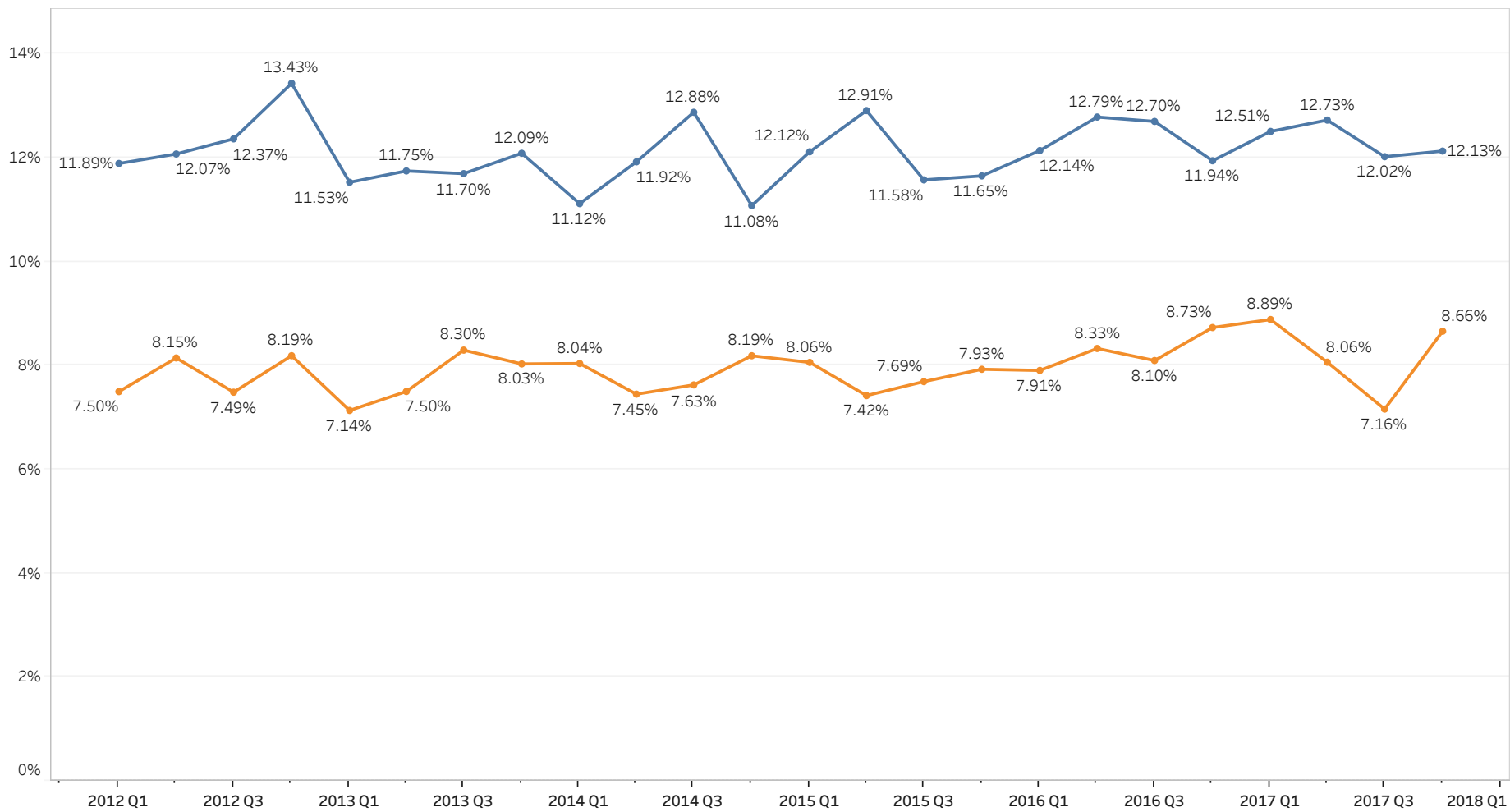


## Quarterly Trends by Race - Low Birthweight (%)

All OEI Counties | CY 2012-2017

### Race

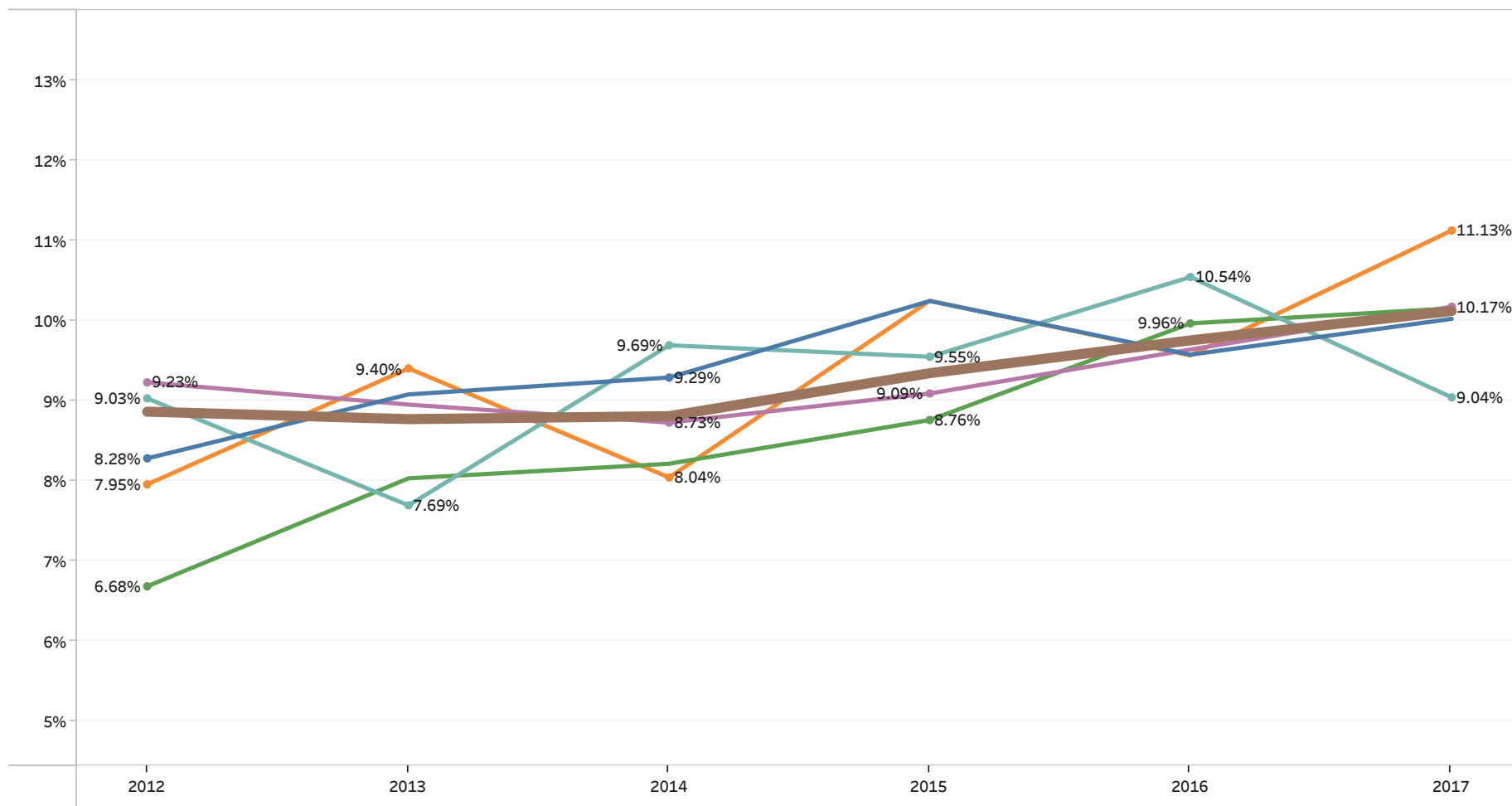
African American Caucasian



Data are limited to Medicaid as the payer.

### Yearly Trends by MCP - Low Birthweight (%) All OEI Counties | CY 2012-2017

Medicaid Plan  
■ All Plans ■ Buckeye ■ CareSource ■ Molina ■ Paramount ■ United



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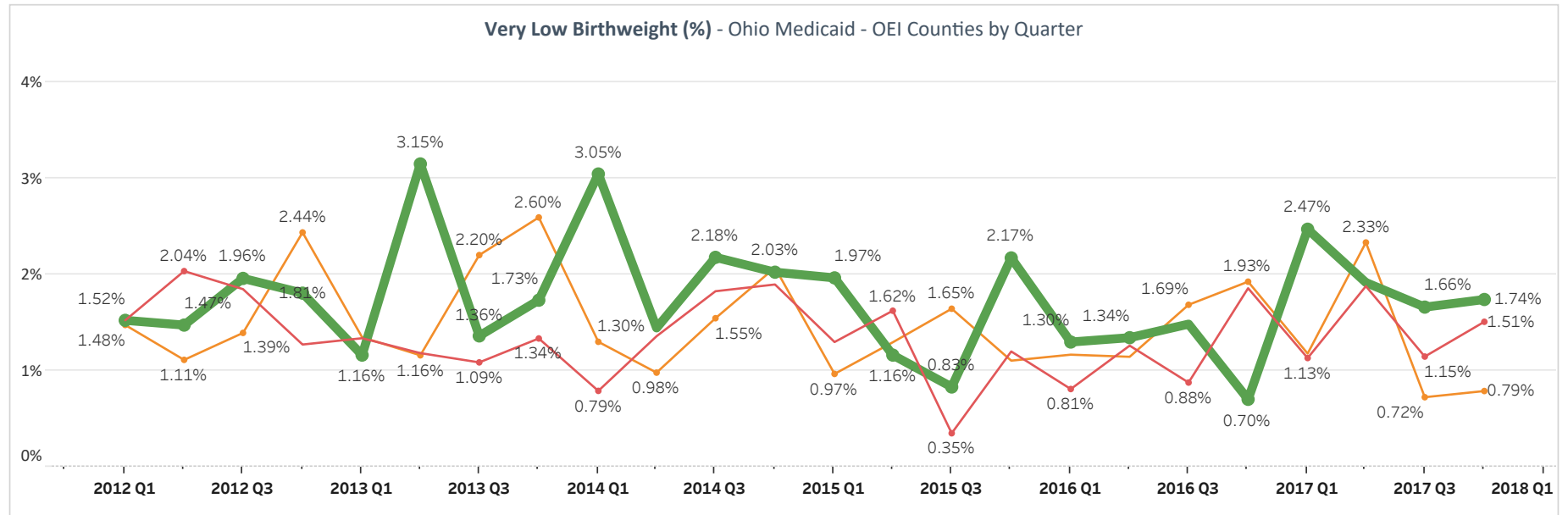
## Very Low Birthweight (%)

## Mahoning, Butler, Stark Counties - Very Low Birthweight (%)

### Trends by Quarter | CY 2012-2017

Counties

Butler Mahoning Stark

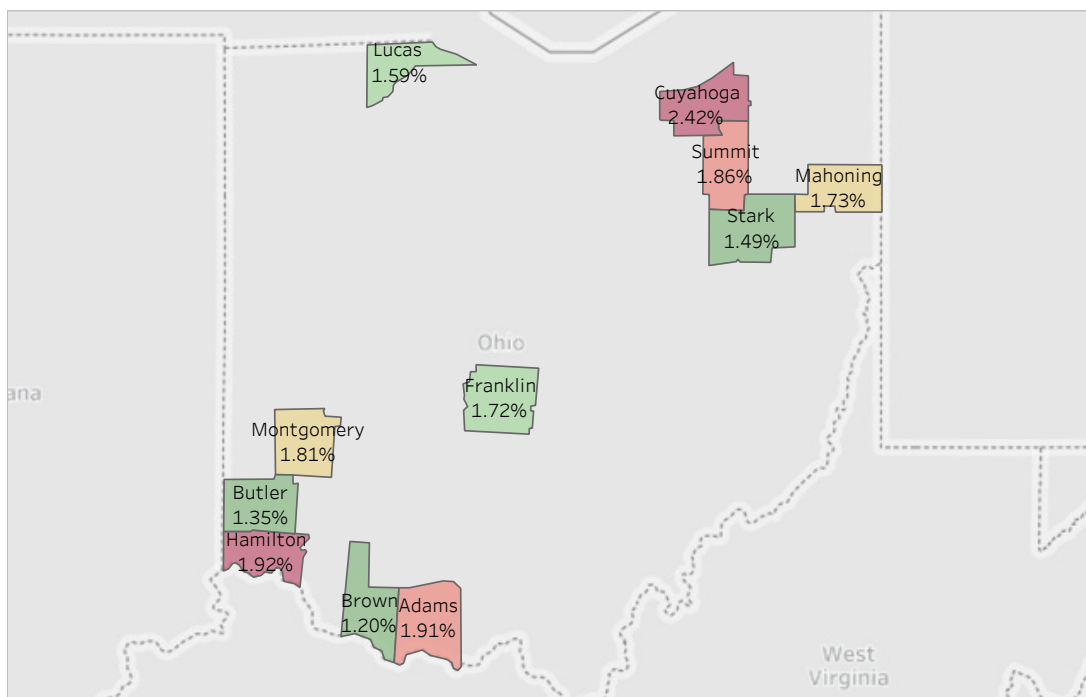


County	VLBW Aggregate Rate Q1 2012 - Q4 2017	VLBW Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	1.35%	1.41%	From 29 to 20 VLBW Infants
Mahoning	1.73%	1.94%	From 25 to 17 VLBW Infants
Stark	1.49%	1.25%	From 32 to 23 VLBW Infants

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

## Mahoning, Butler, Stark Counties - Very Low Birthweight (%)

### OEI County Quintiles | CY 2012-2017



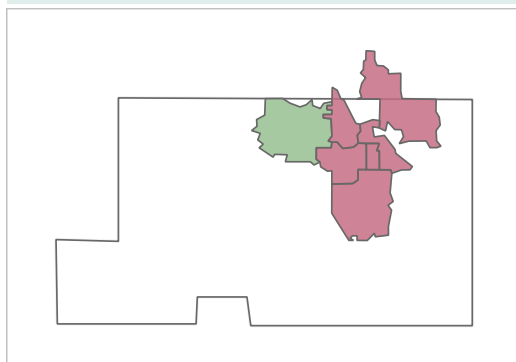
#### Map Measure Ranges

- $\geq 0 < 1.505\%$
- $\geq 1.505\% < 1.726\%$
- $\geq 1.726\% < 1.849\%$
- $\geq 1.849\% < 1.915\%$
- $\geq 1.915\%$

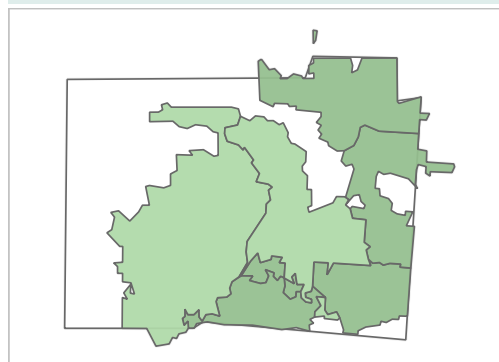
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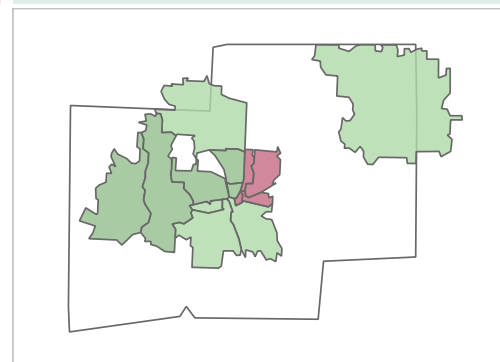
**Mahoning**



**Butler**

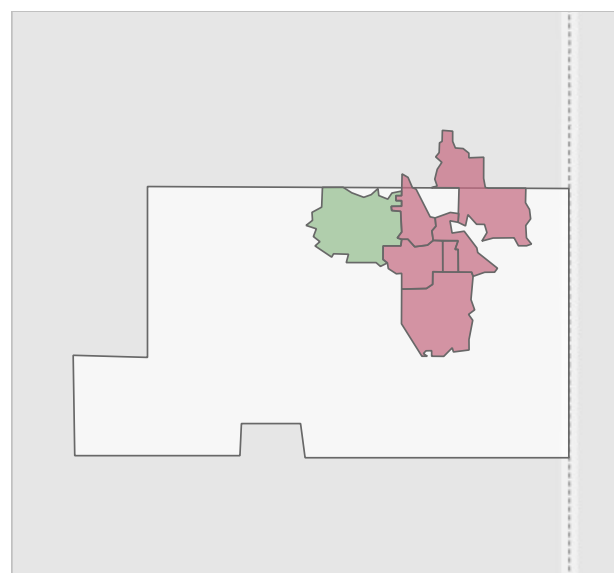
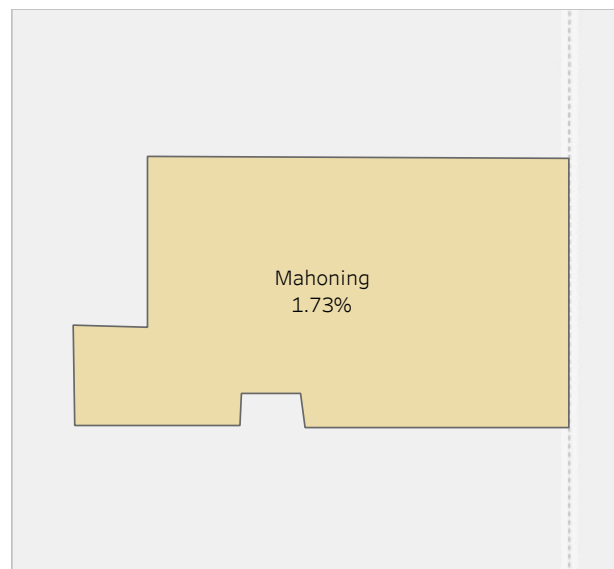
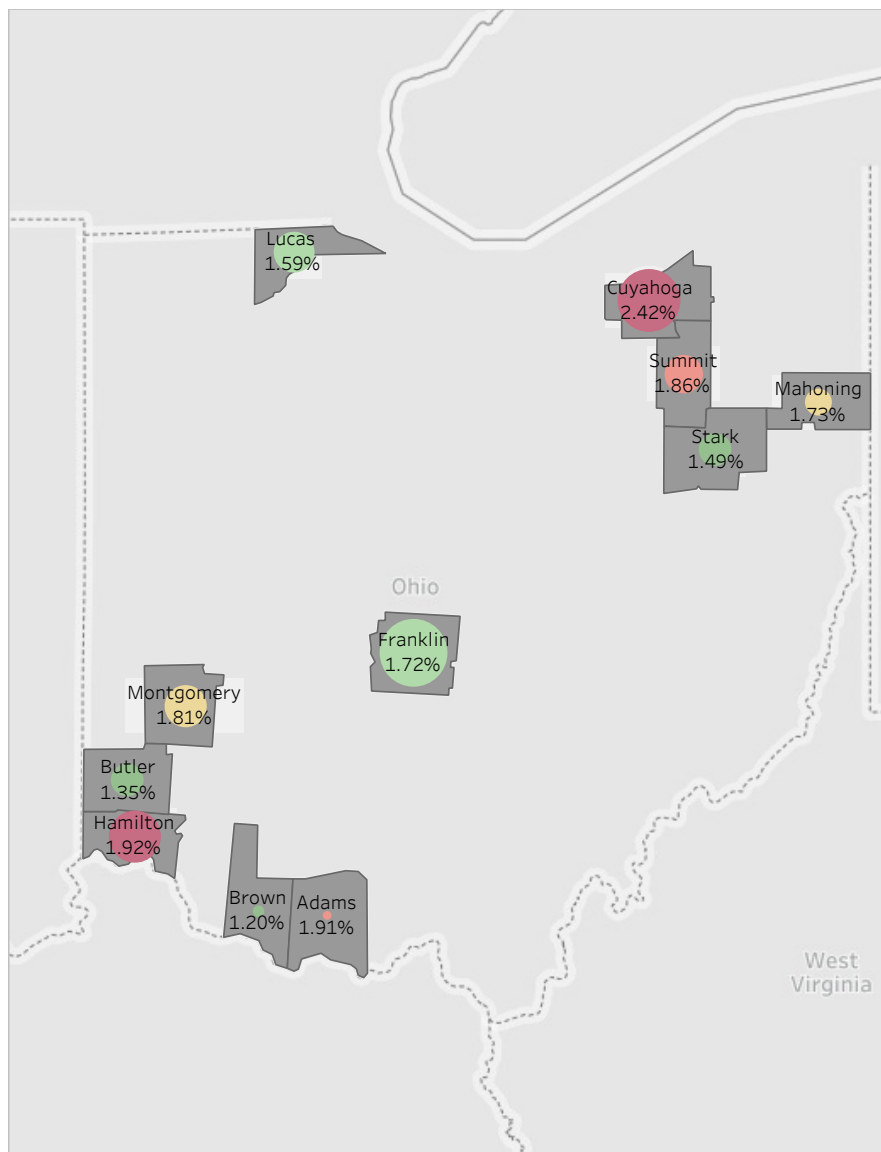


**Stark**



## Mahoning County - Very Low Birthweight (%)

### OEI Quintiles | CY 2012-2017



#### Map Measure Ranges

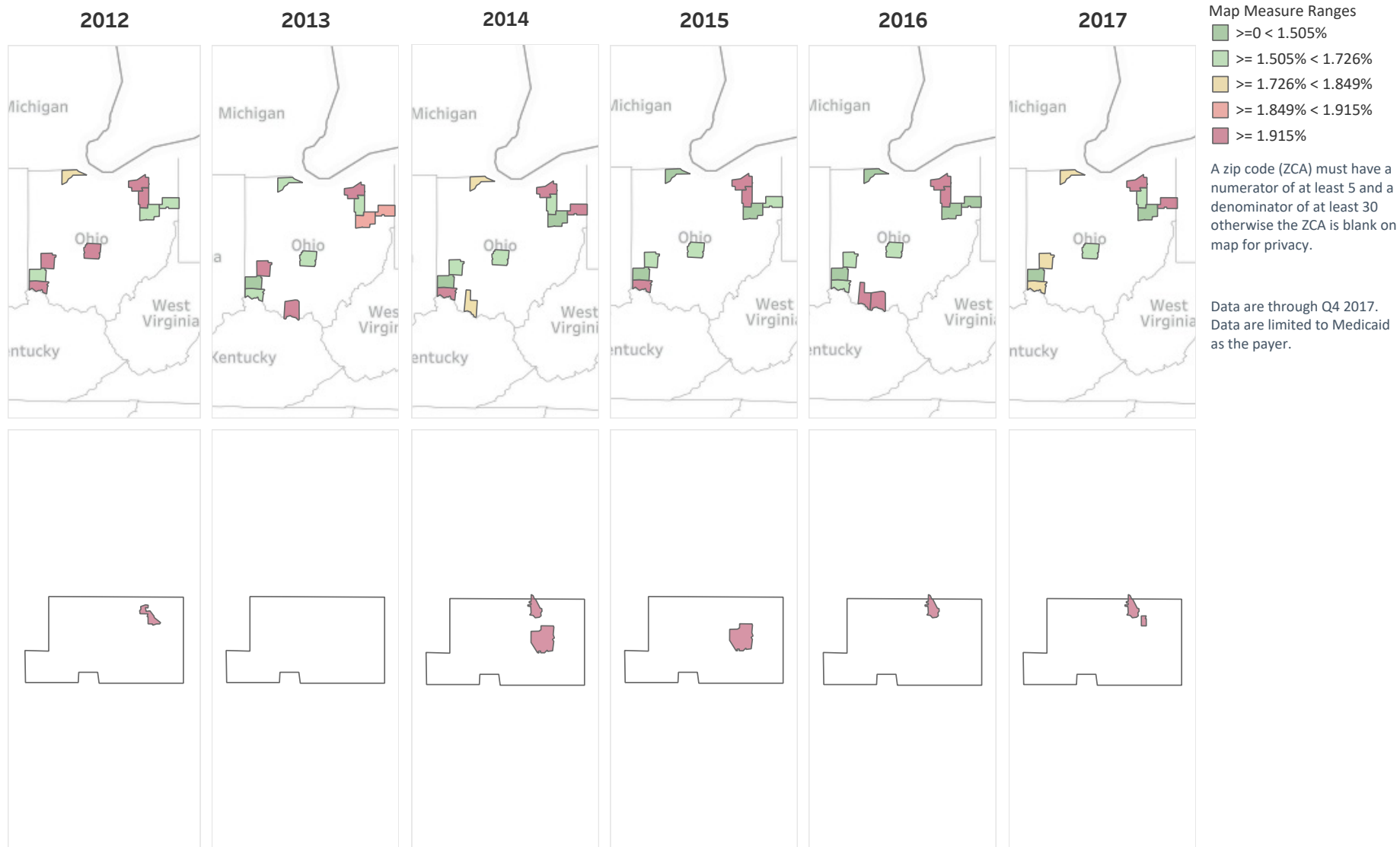
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## Mahoning County - Very Low Birthweight (%)

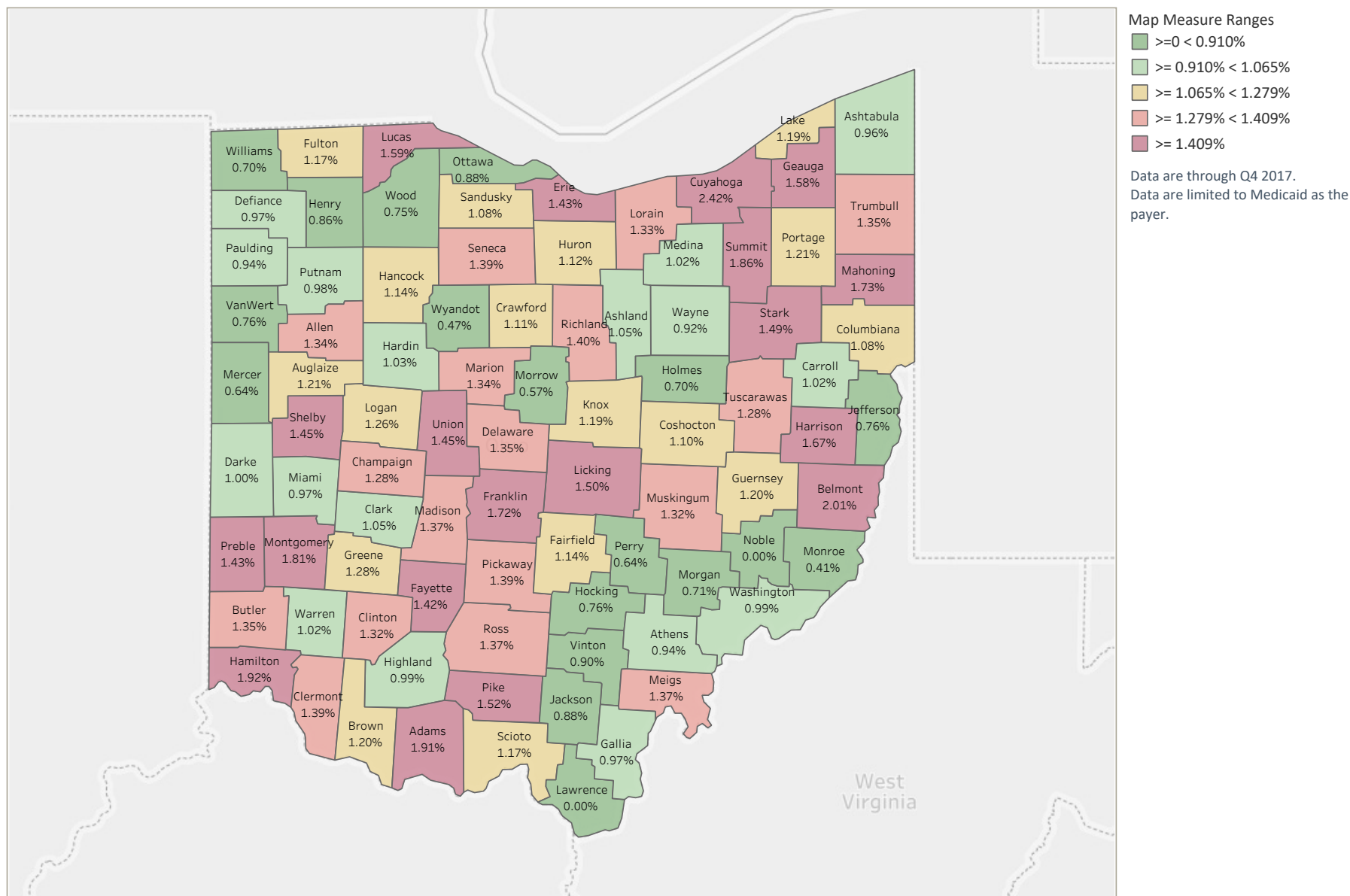
### OEI Quintiles | CY 2012-2017 Yearly Comparison





## Statewide - Very Low Birthweight (%)

### Overall Quintiles by County | CY 2012 - 2017





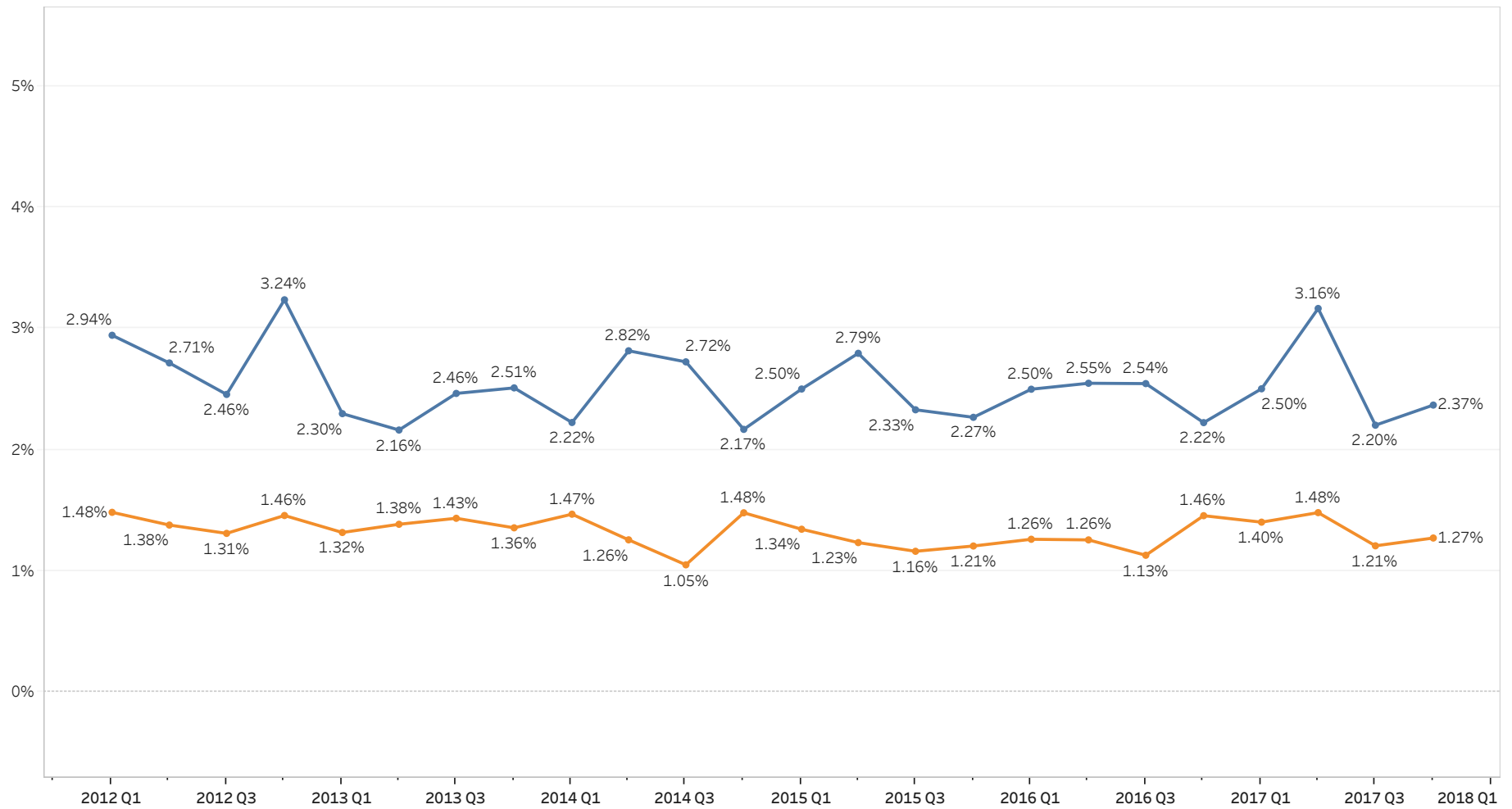
## Quarterly Trends by Race - Very Low Birthweight (%)

All OEI Counties | CY 2012-2017

Race

African American

Caucasian



Data are limited to Medicaid as the payer.



### Yearly Trends by MCP - Very Low Birthweight (%) All OEI Counties | CY 2012-2017

Medicaid Plan  
All Plans

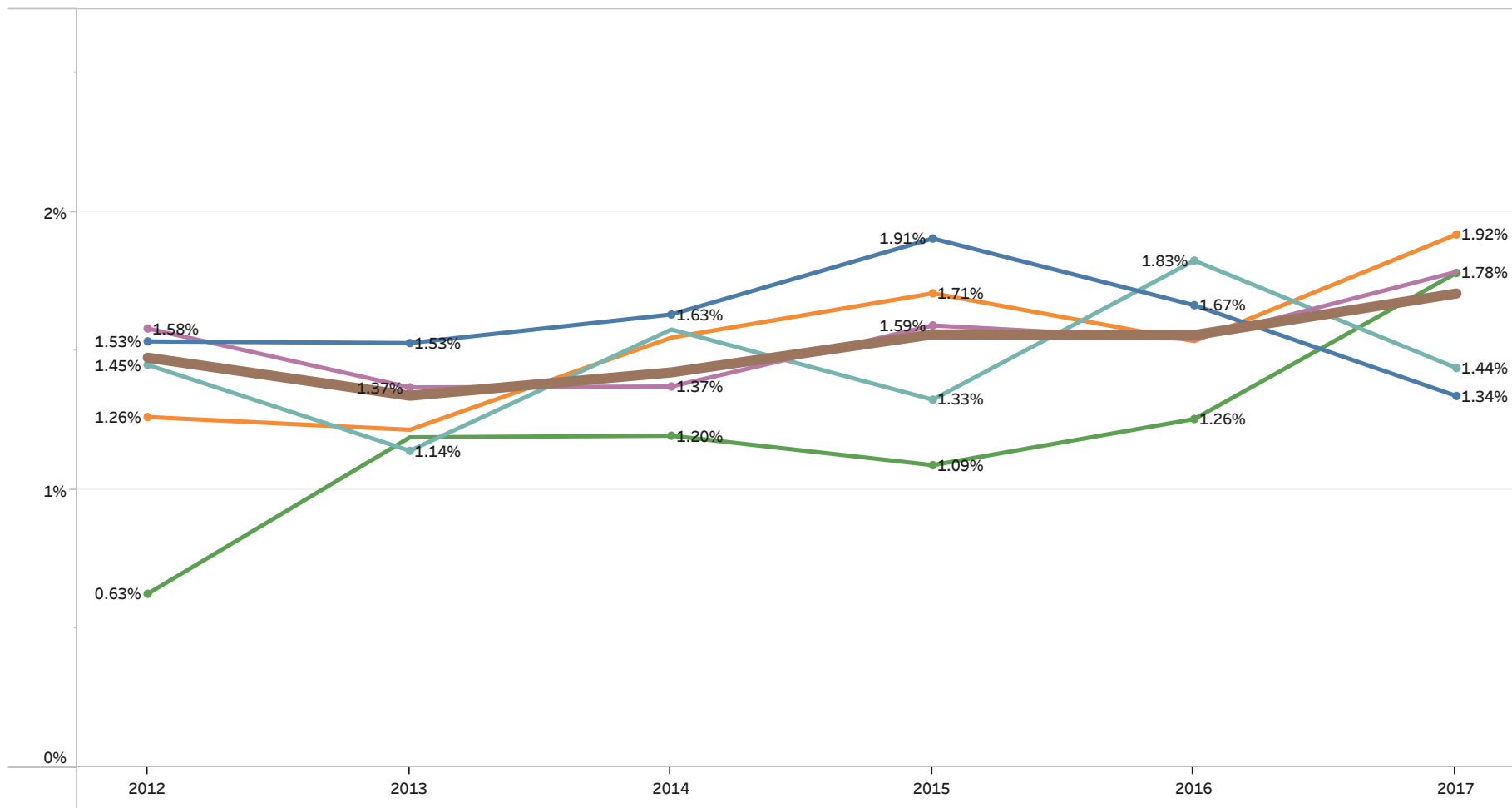
Buckeye

CareSource

Molina

Paramount

United



Data are through Q4 2017.  
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## **Infant Mortality Rate (ODM Cohort Method Using ODM Data)**

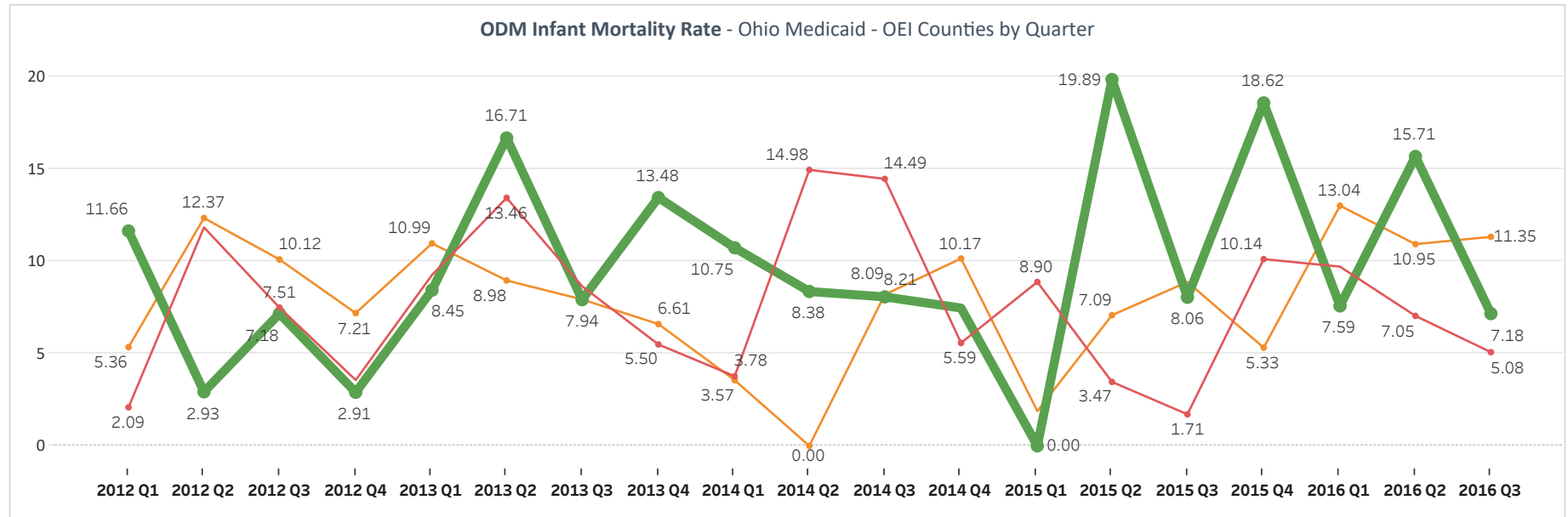
## Mahoning, Butler, Stark Counties - ODM Infant Mortality Rate Trends by Quarter | CY 2012-2016

Counties

Butler

Mahoning

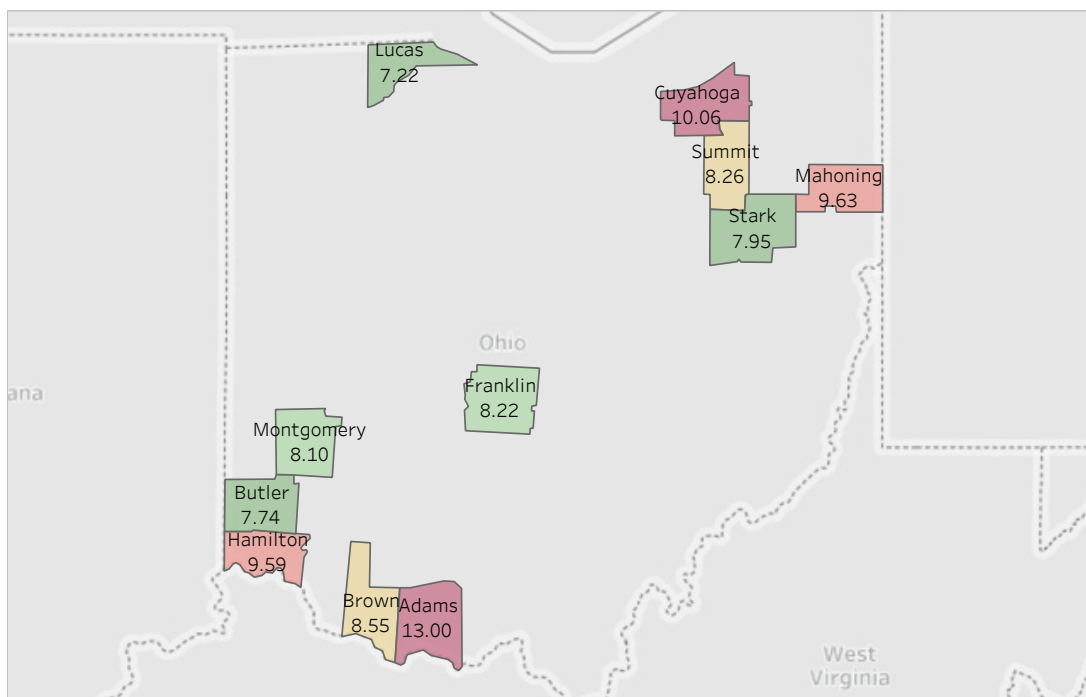
Stark



County	Infant Mortality Aggregate Rate Q1 2012 - Q3 2016	Infant Mortality Current Rate Q4 2015 - Q3 2016	Annual Target for Real Impact*
Butler	7.74	7.95	From 17 to 10 Deaths
<b>Mahoning</b>	9.63	12.09	From 14 to 8 Deaths
Stark	7.95	10.15	From 18 to 11 Deaths

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q3 2016) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q3 2016. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

## Mahoning, Butler, Stark Counties - ODM Infant Mortality Rate OEI County Quintiles | CY 2012-2016



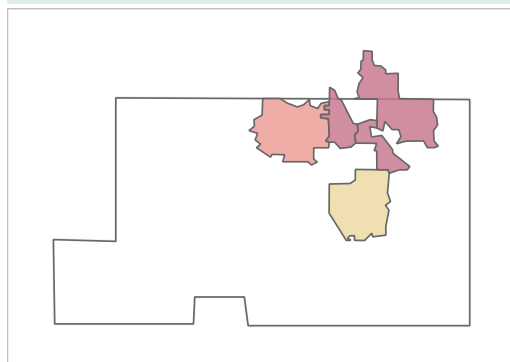
### Map Measure Ranges

- $\geq 0 < 7.959$
- $\geq 7.959 < 8.234$
- $\geq 8.234 < 9.582$
- $\geq 9.582 < 10.047$
- $\geq 10.047$

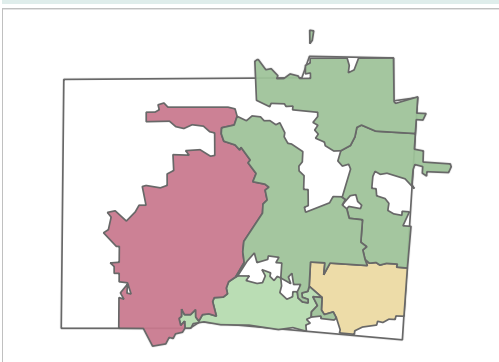
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q3 2016.  
Data are limited to Medicaid as the payer.

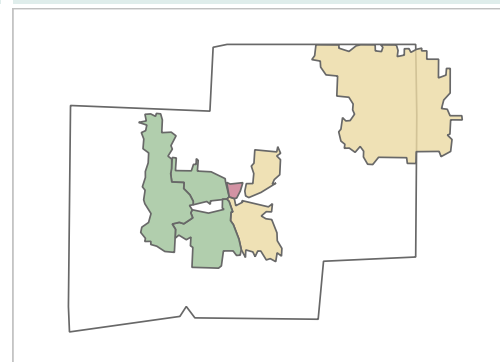
### Mahoning



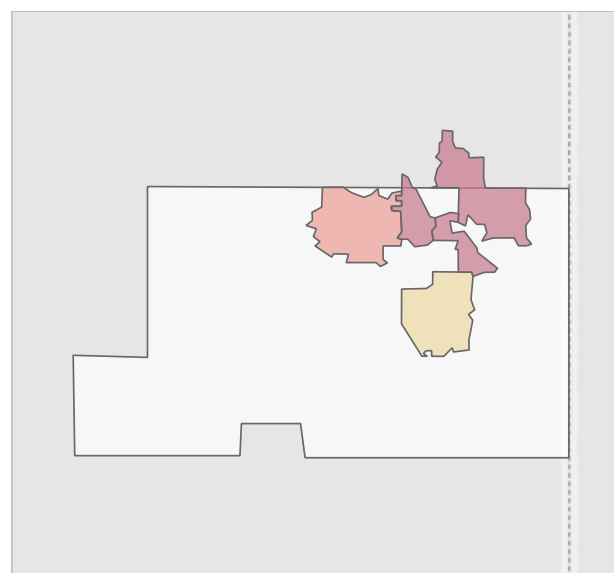
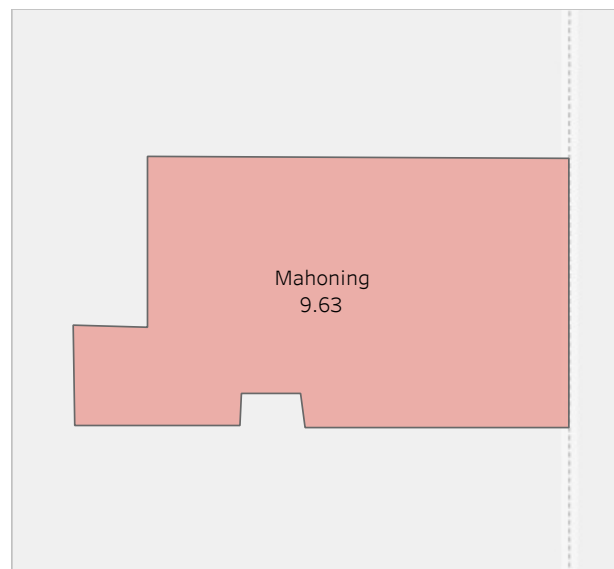
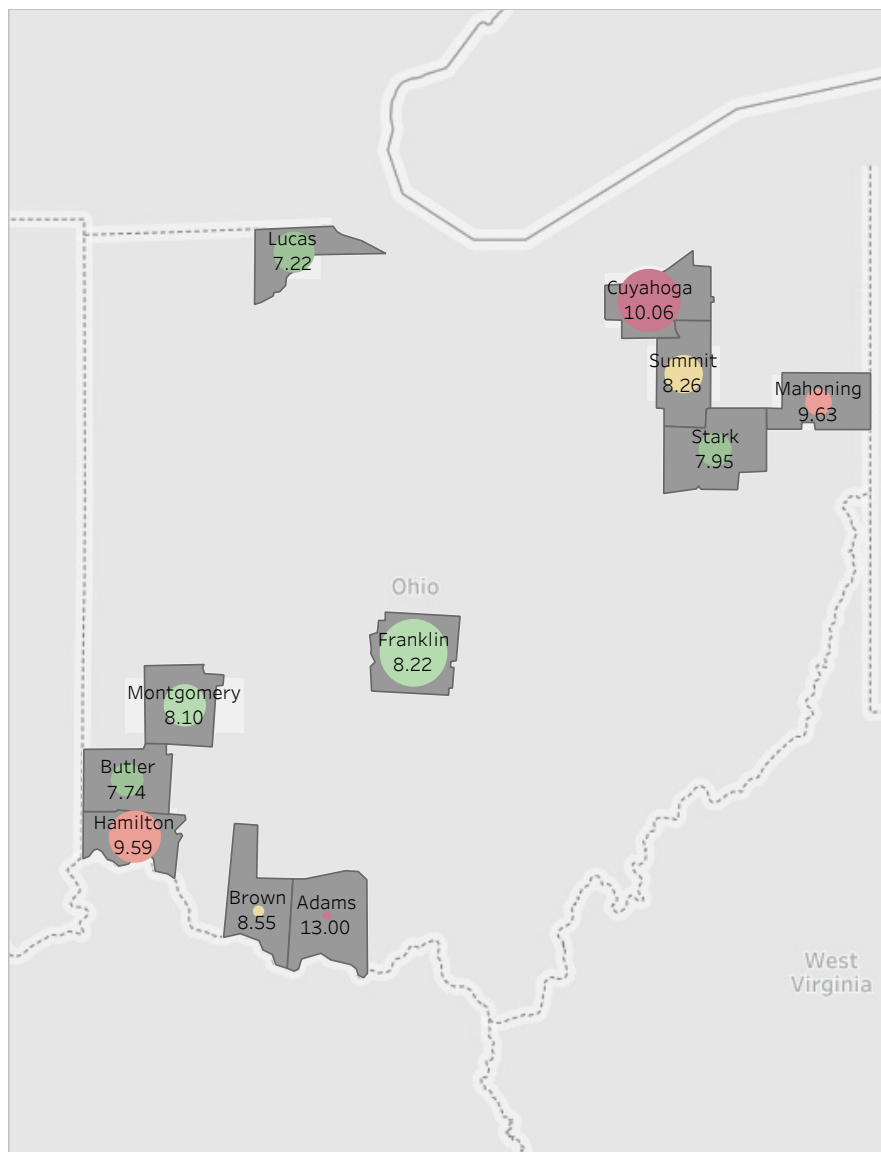
### Butler



### Stark



## Mahoning County - ODM Infant Mortality Rate OEI Quintiles | CY 2012-2016



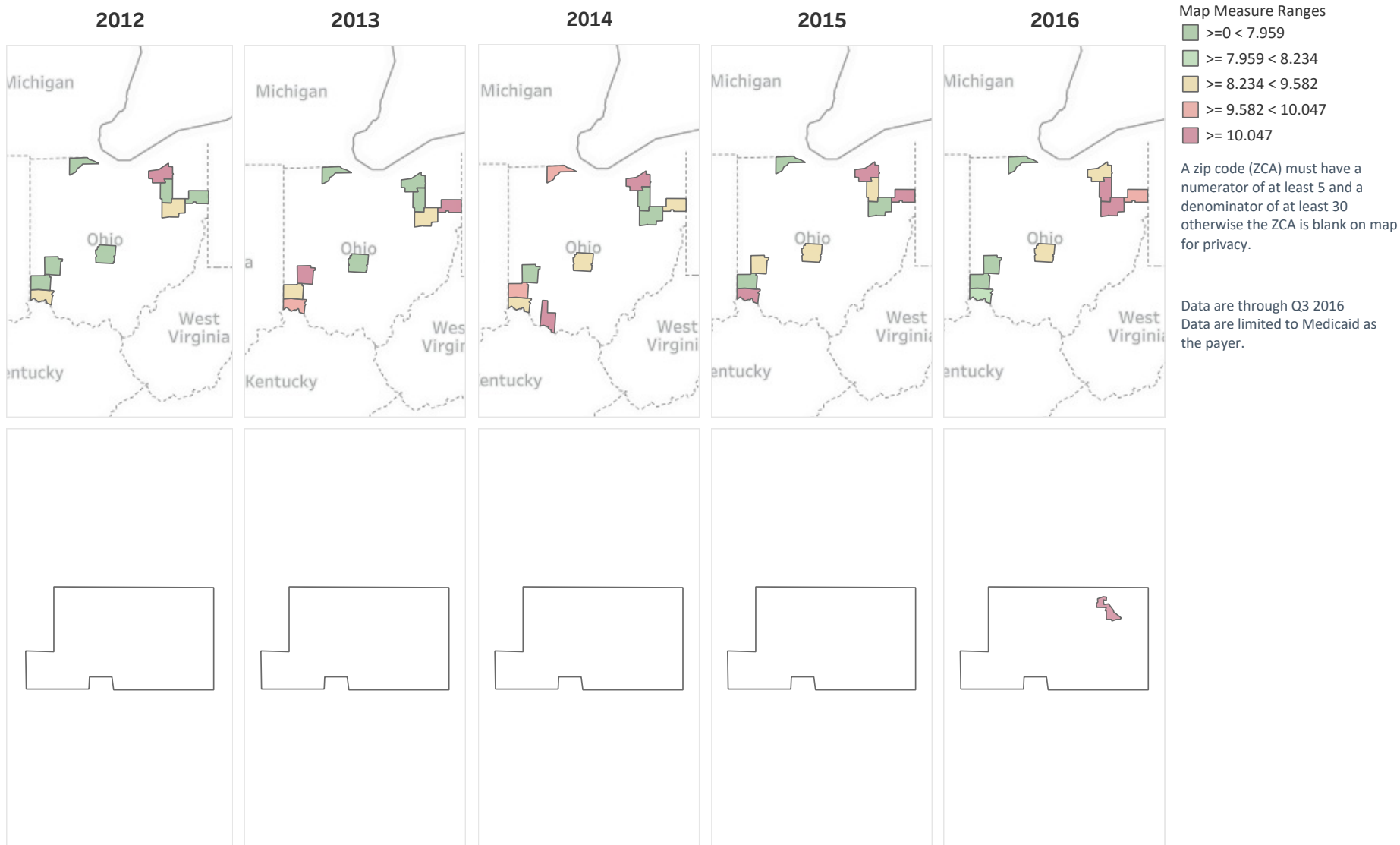
### Map Measure Ranges

- $\geq 0 < 7.959$
- $\geq 7.959 < 8.234$
- $\geq 8.234 < 9.582$
- $\geq 9.582 < 10.047$
- $\geq 10.047$

A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

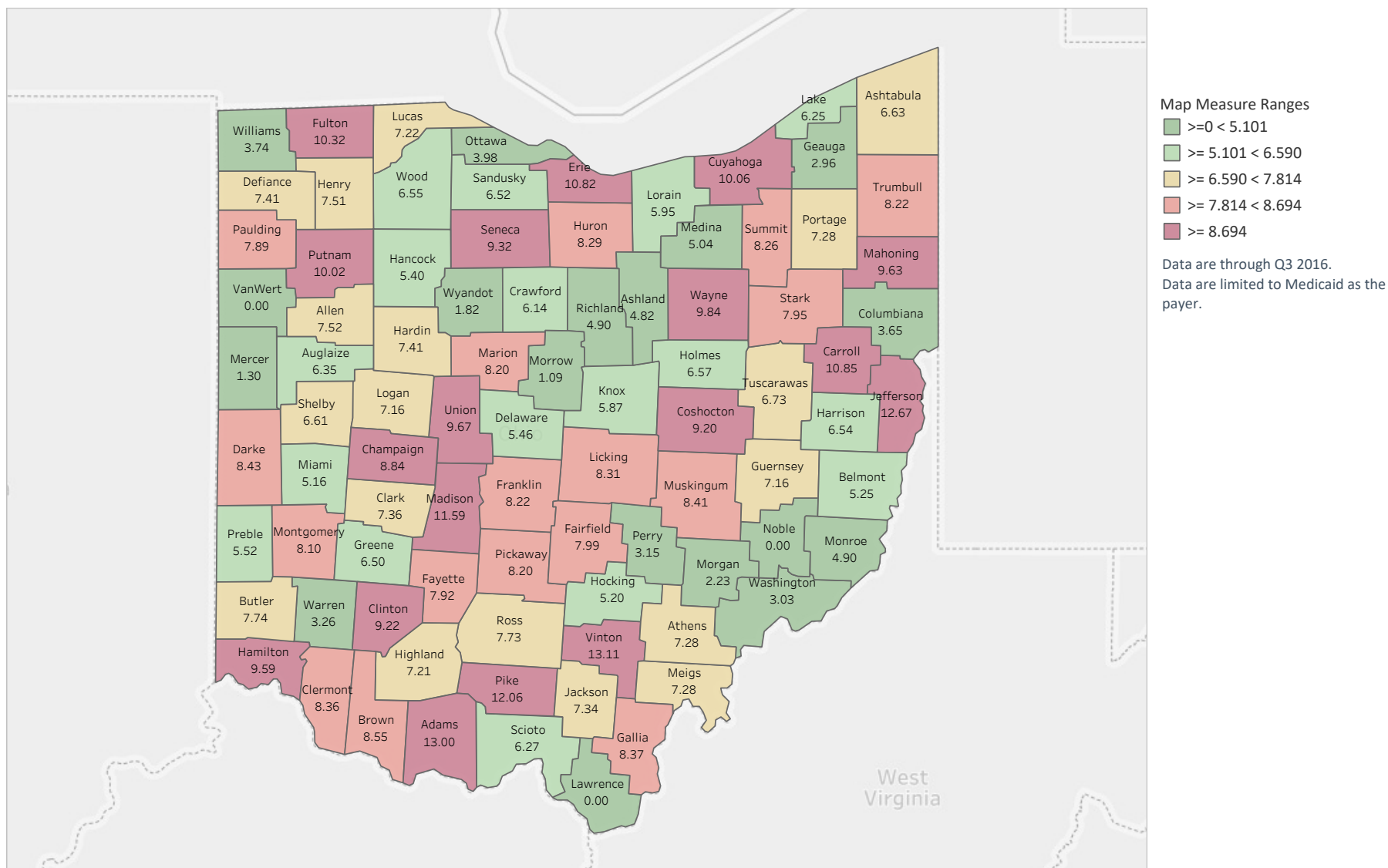
Data are through Q3 2016.  
Data are limited to Medicaid as the payer.

## Mahoning County - ODM Infant Mortality Rate OEI Quintiles | CY 2012-2016 Yearly Comparison





## Statewide - ODM Infant Mortality Rate Overall Quintiles by County | CY 2012 - 2016



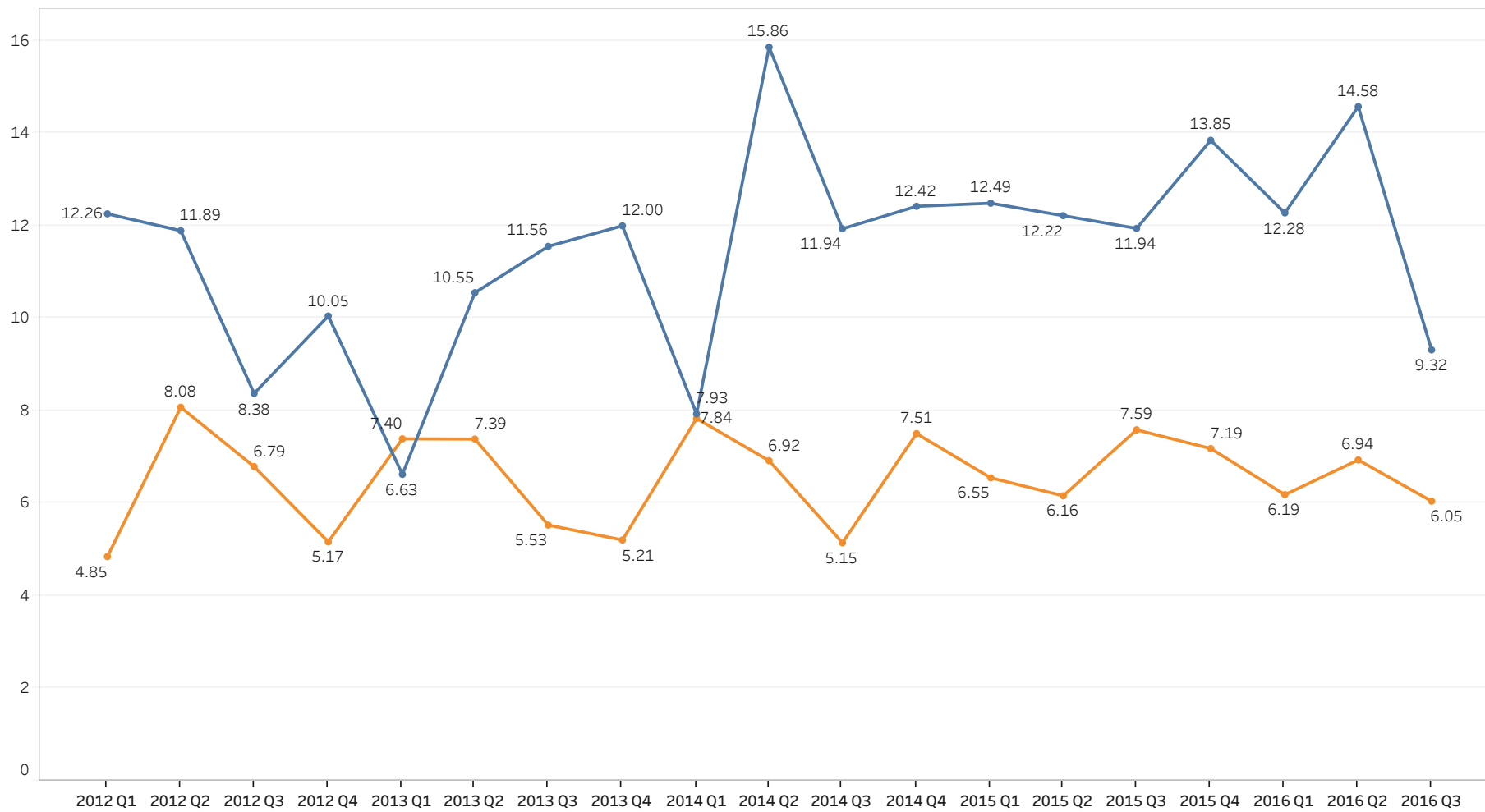


## Quarterly Trends by Race - ODM Infant Mortality Rate All OEI Counties | CY 2012-2016

Race

African American

Caucasian



Data are limited to Medicaid as the payer.



### Yearly Trends by MCP - ODM Infant Mortality Rate All OEI Counties | CY 2012-2016

Medicaid Plan

All Plans

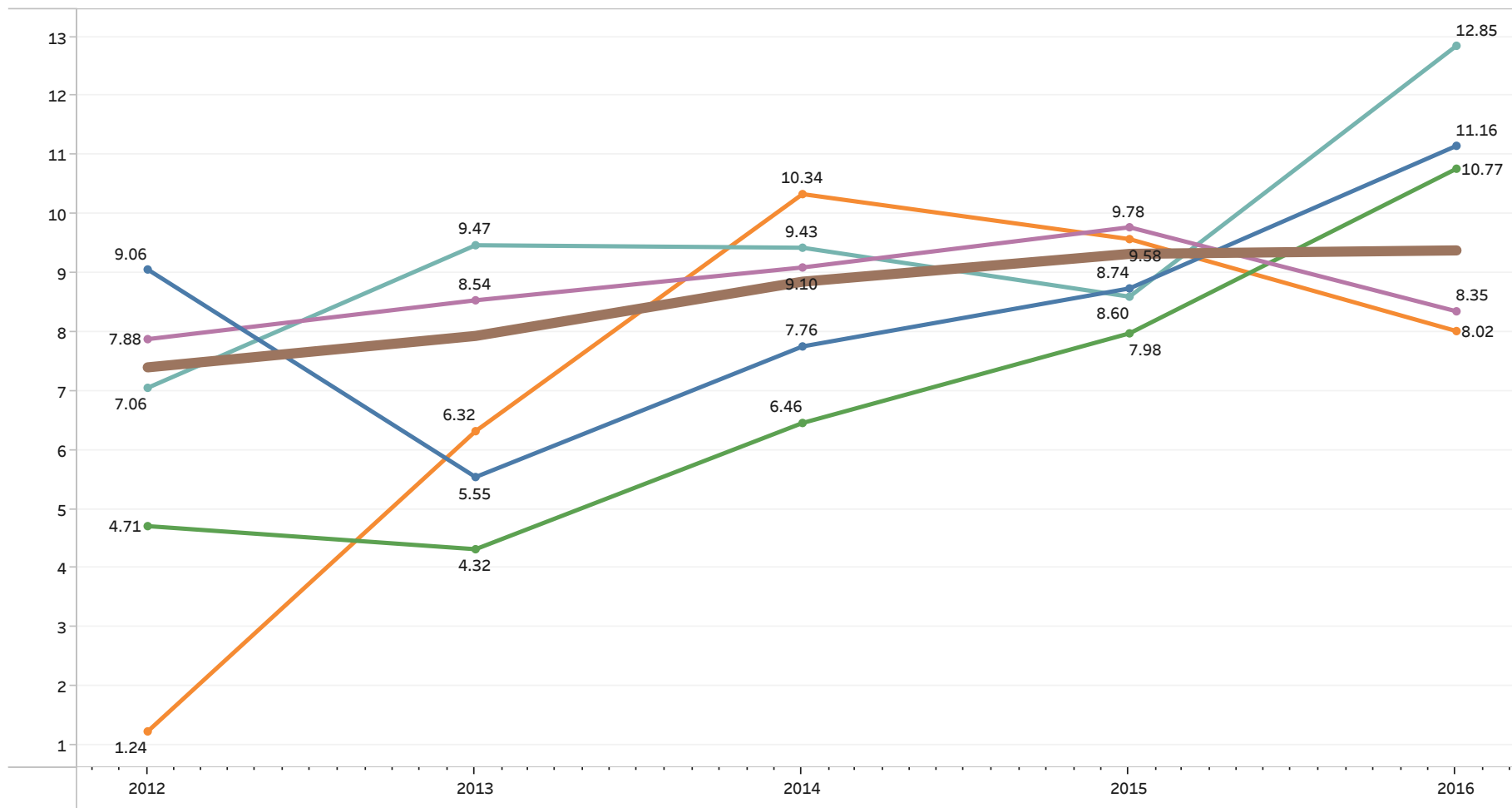
Buckeye

CareSource

Molina

Paramount

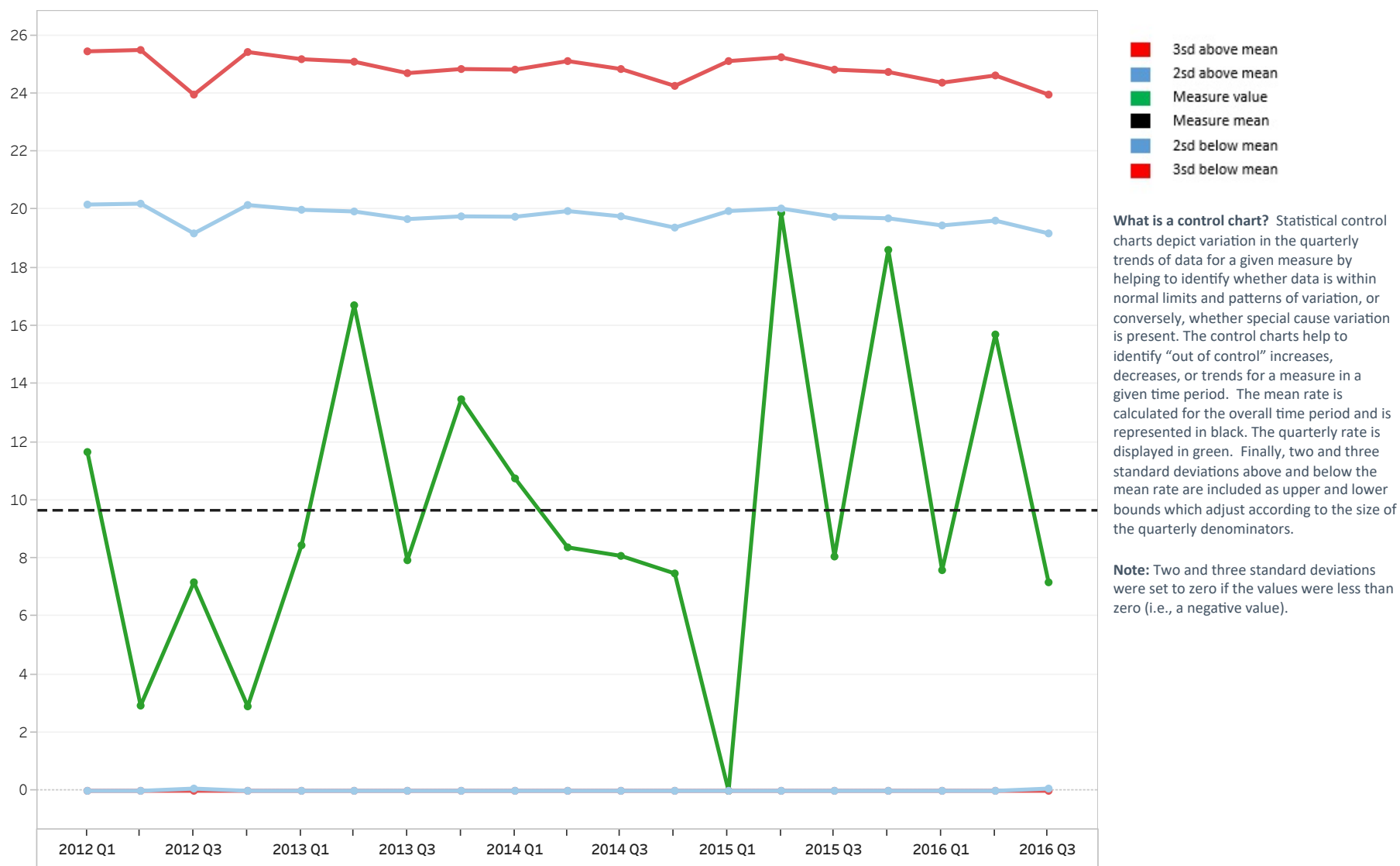
United



Data are through Q3 2016.

Data are limited to Medicaid as the payer.

## Mahoning County Quarterly Control Chart - ODM Infant Mortality Rate CY 2012-2016



Data are limited to Medicaid as the payer.

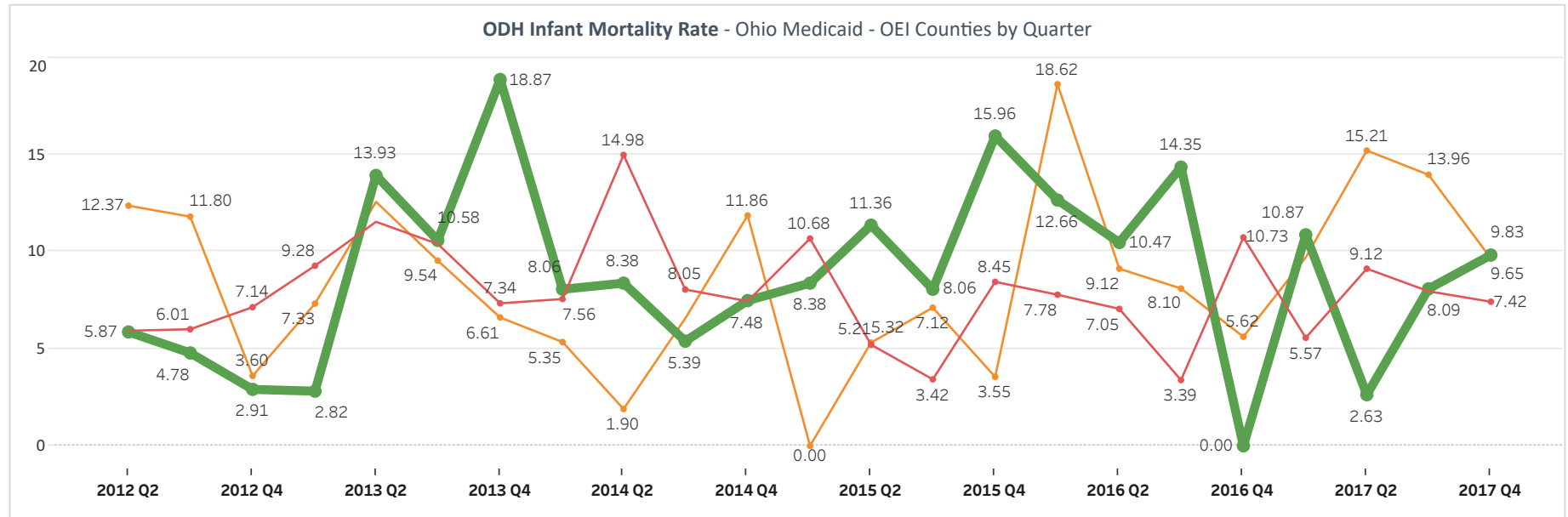


## **Infant Mortality Rate (ODH Raw Deaths/Births Method)**

## Mahoning, Butler, Stark Counties - ODH Infant Mortality Rate Trends by Quarter | CY 2012-2017

Counties

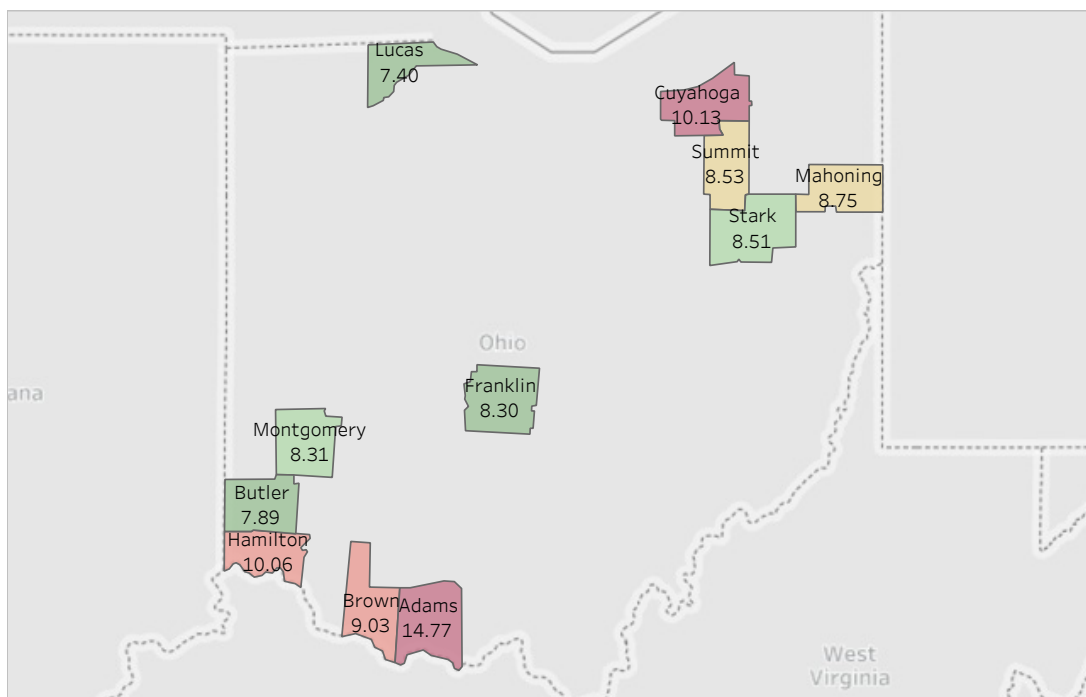
Butler Mahoning Stark



County	ODH Infant Mortality Aggregate Rate Q2 2012 - Q4 2017	ODH Infant Mortality Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	7.89	7.54	From 18 to 11 Deaths
<b>Mahoning</b>	8.75	7.86	From 13 to 7 Deaths
Stark	8.51	12.20	From 19 to 12 Deaths

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q2 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q2 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

## Mahoning, Butler, Stark Counties - ODH Infant Mortality Rate OEI County Quintiles | CY 2012-2017



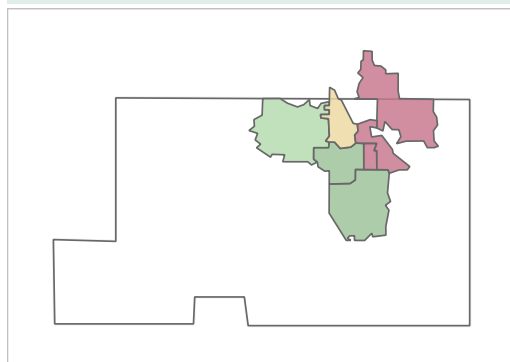
### Map Measure Ranges

- $\geq 0 < 8.307$
- $\geq 8.307 < 8.521$
- $\geq 8.521 < 9.016$
- $\geq 9.016 < 10.122$
- $\geq 10.122$

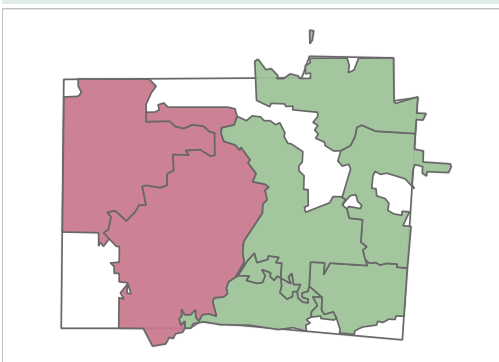
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

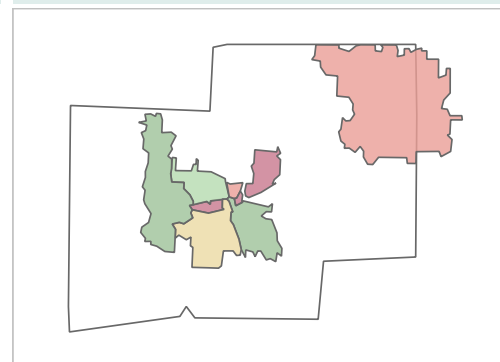
**Mahoning**



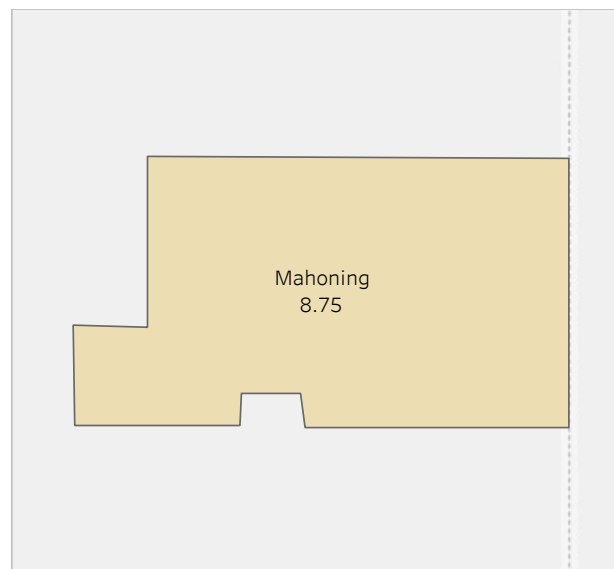
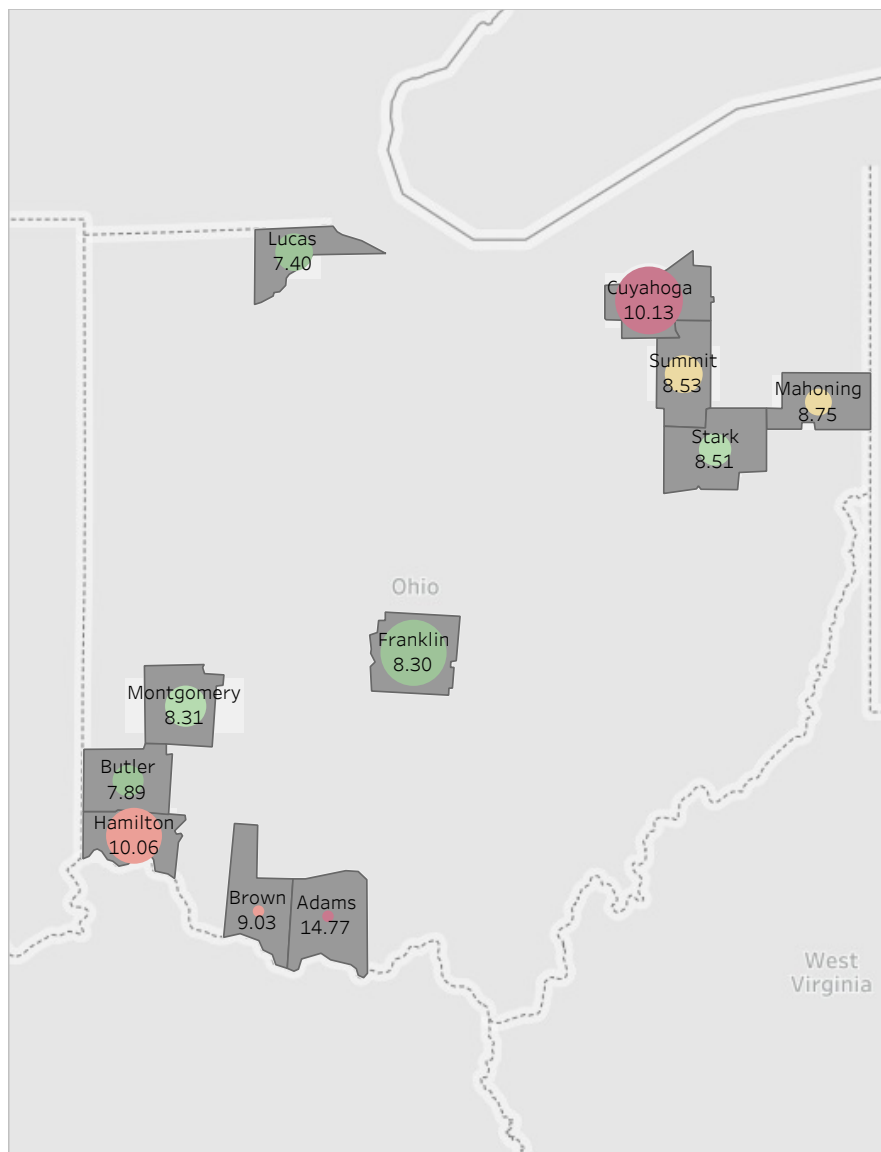
**Butler**



**Stark**



## Mahoning County - ODH Infant Mortality Rate OEI Quintiles | CY 2012-2017

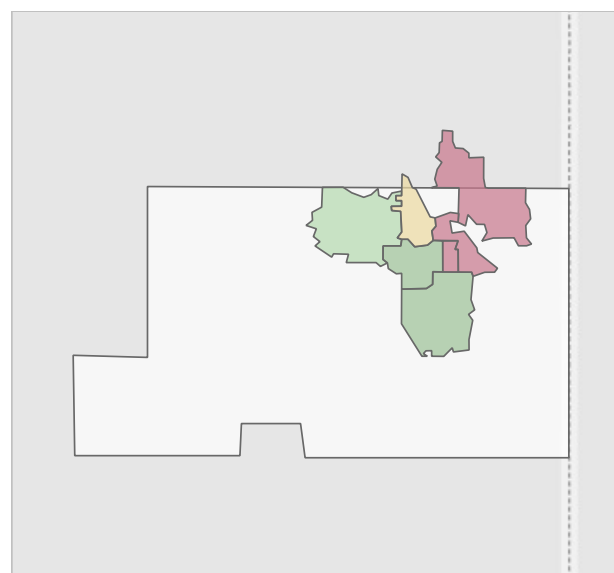


### Map Measure Ranges

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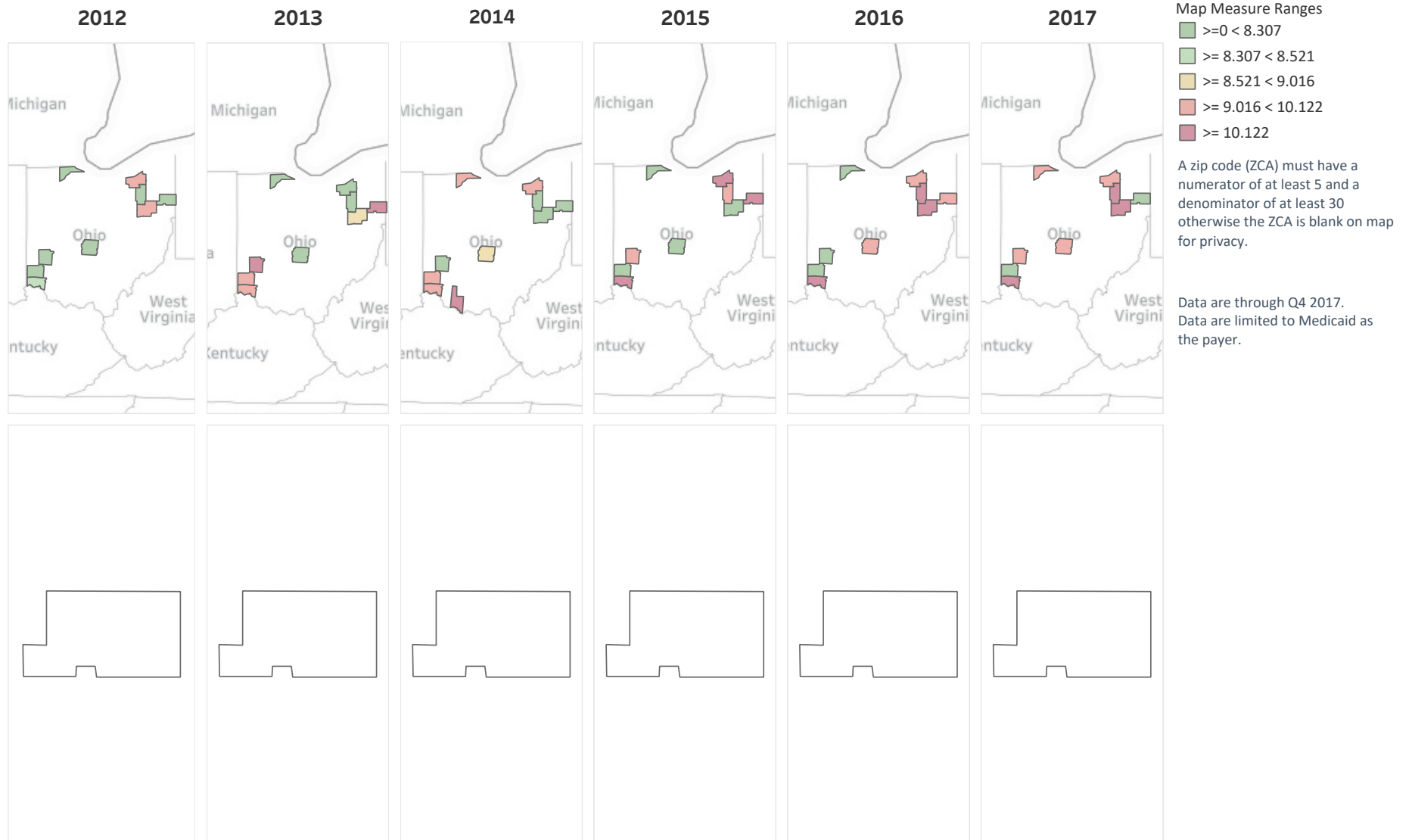
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

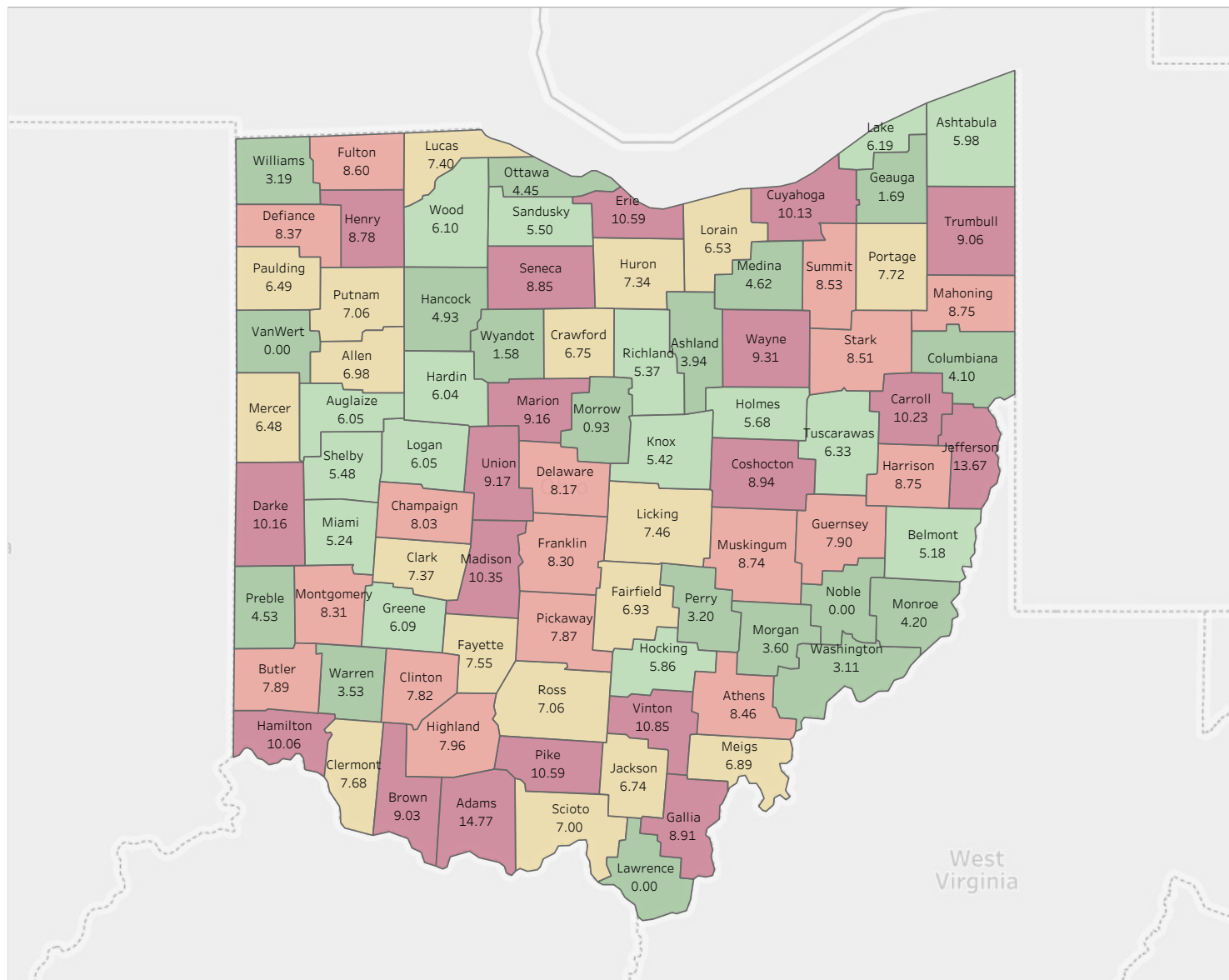




## Mahoning County - ODH Infant Mortality Rate OEI Quintiles | CY 2012-2017 Yearly Comparison



## Statewide - ODH Infant Mortality Rate Overall Quintiles by County | CY 2012 - 2017



### Map Measure Ranges

- $\geq 0 < 5.057$
- $\geq 5.057 < 6.405$
- $\geq 6.405 < 7.768$
- $\geq 7.768 < 8.767$
- $\geq 8.767$

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

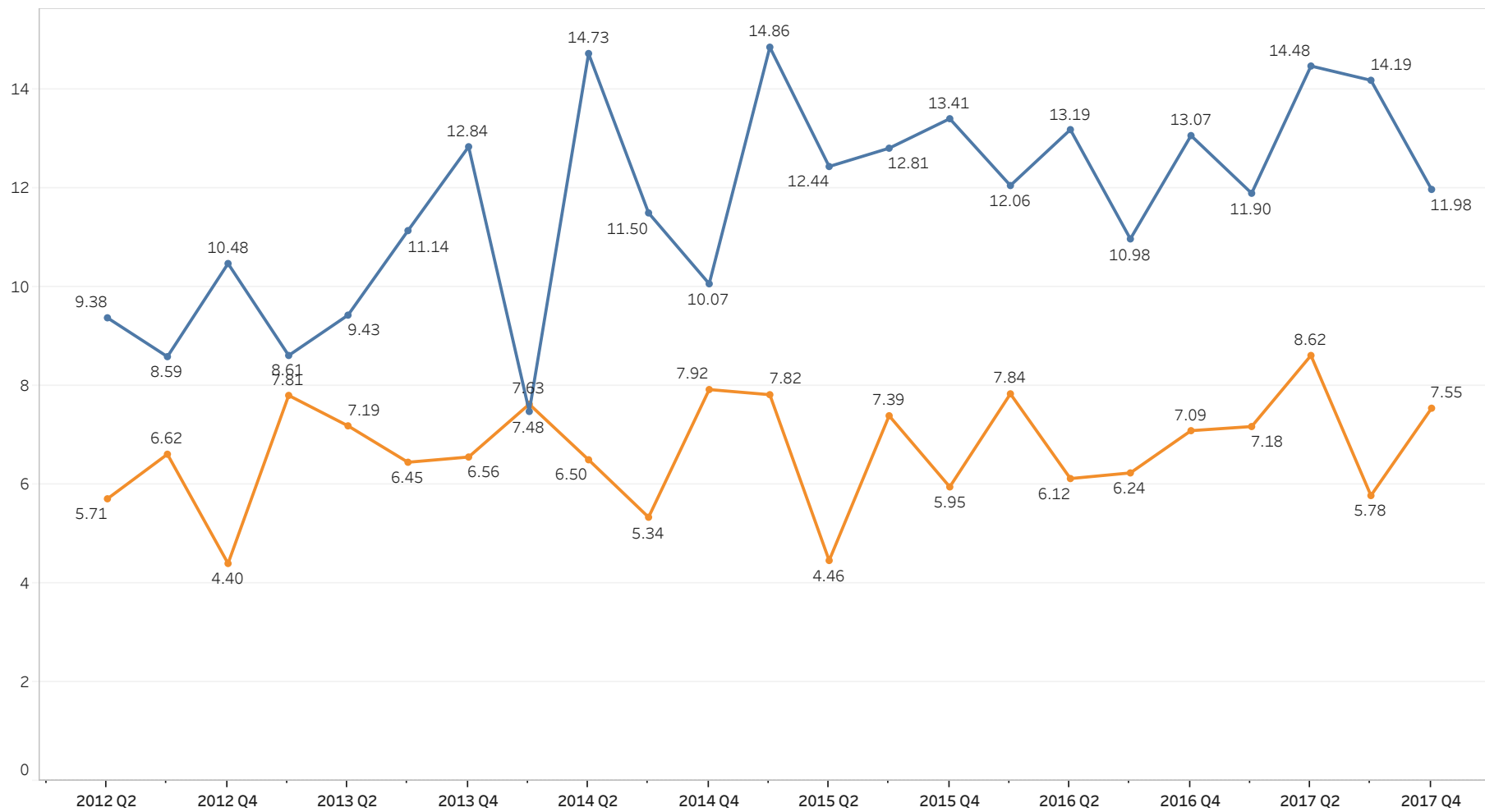


## Quarterly Trends by Race - ODH Infant Mortality Rate All OEI Counties | CY 2012-2017

Race

African American

Caucasian



Data are limited to Medicaid as the payer.



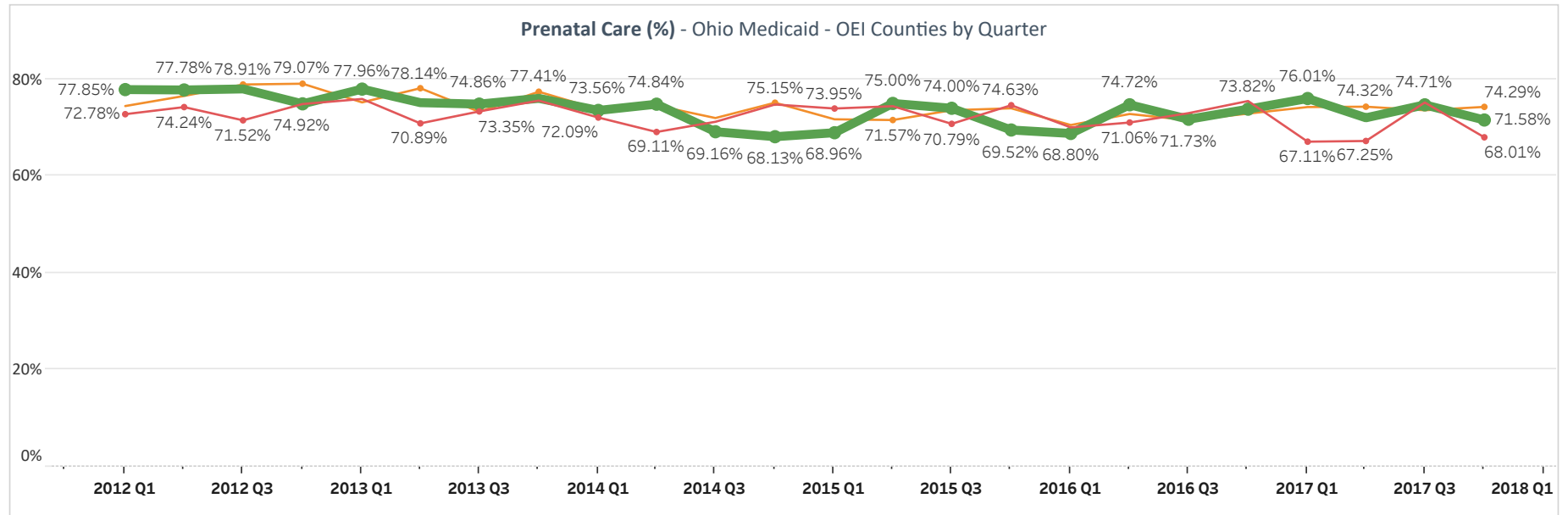
## Prenatal Care (%)

## Mahoning, Butler, Stark Counties - Prenatal Care (%)

### Trends by Quarter | CY 2012-2017

Counties

Butler Mahoning Stark



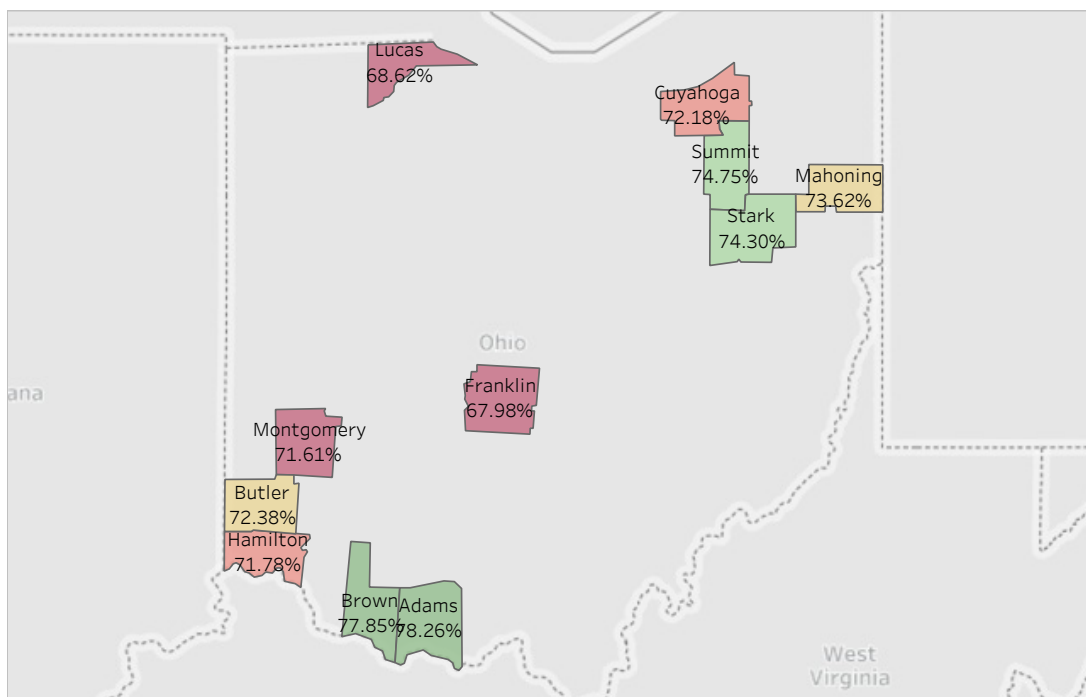
County	Prenatal Aggregate Rate Q1 2012 - Q4 2017	Prenatal Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	72.38%	69.60%	From 1285 to 1316 Women
<b>Mahoning</b>	73.62%	73.53%	From 1005 to 1031 Women
Stark	74.30%	74.10%	From 1464 to 1495 Women

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.



## Mahoning, Butler, Stark Counties - Prenatal Care (%)

### OEI County Quintiles | CY 2012-2017



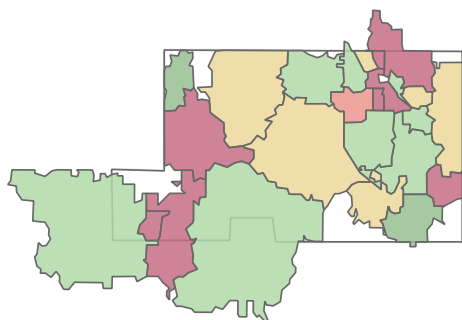
#### Map Measure Ranges

- $\geq 0 < 71.621\%$
- $\geq 71.621\% < 72.192\%$
- $\geq 72.192\% < 74.292\%$
- $\geq 74.292\% < 77.835\%$
- $\geq 77.835\%$

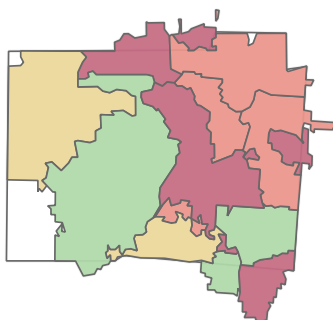
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

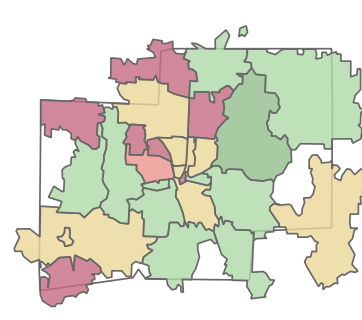
Mahoning



Butler

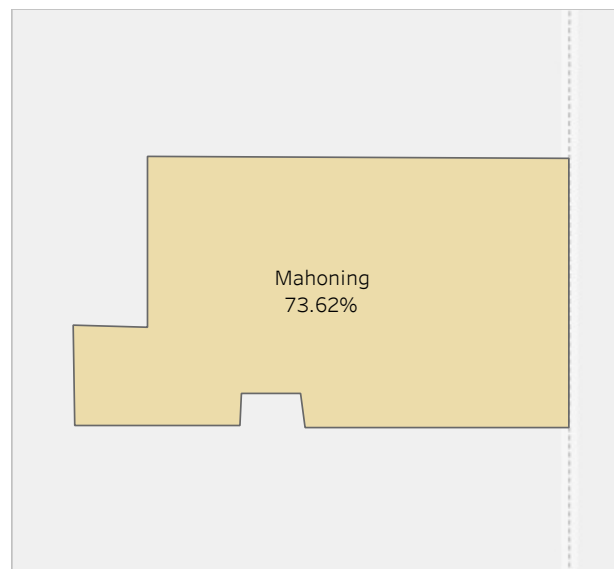
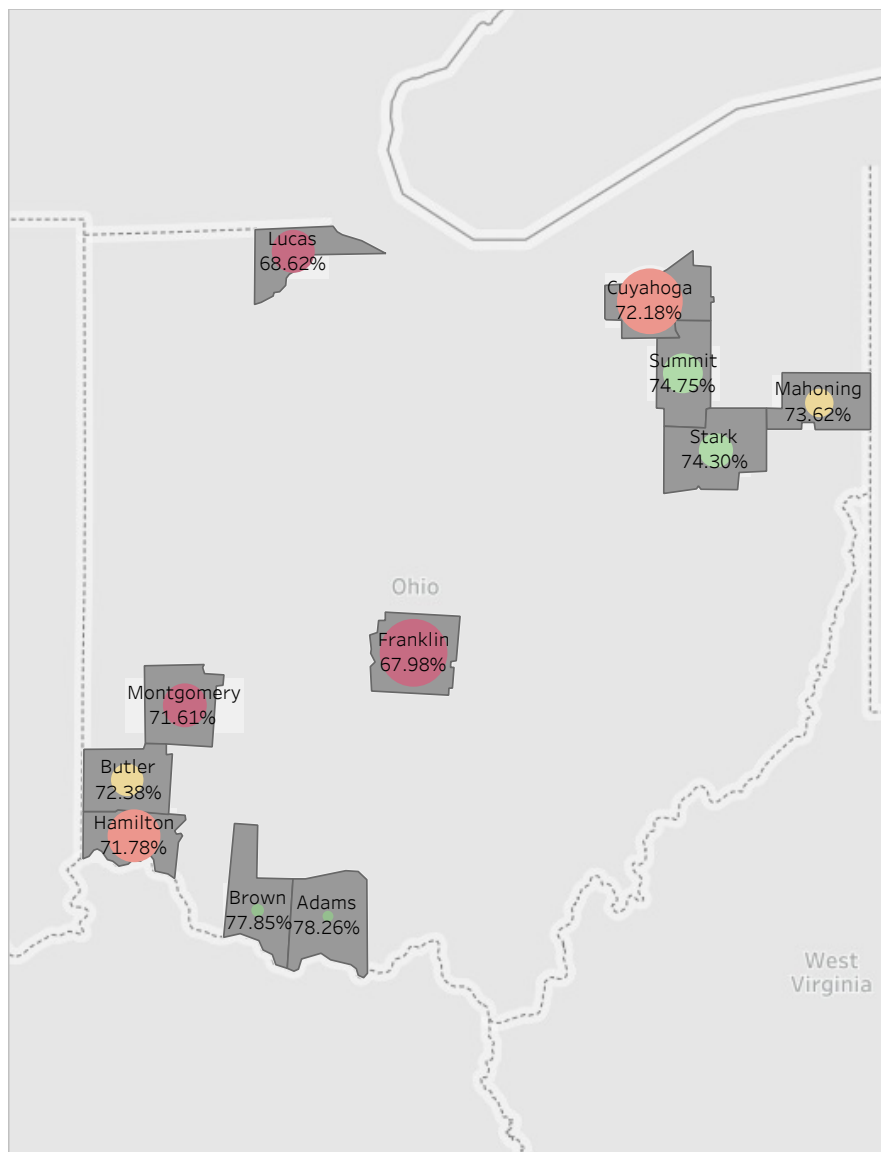


Stark



## Mahoning County - Prenatal Care (%)

### OEI Quintiles | CY 2012-2017

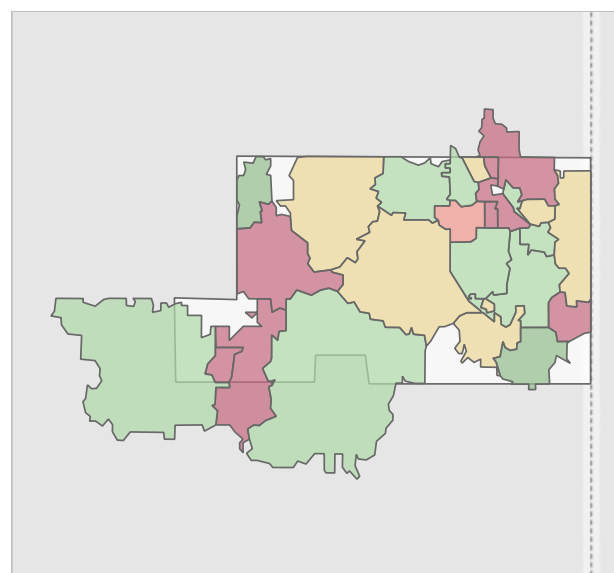


#### Map Measure Ranges

- $\geq 0 < 71.621\%$
- $\geq 71.621\% < 72.192\%$
- $\geq 72.192\% < 74.292\%$
- $\geq 74.292\% < 77.835\%$
- $\geq 77.835\%$

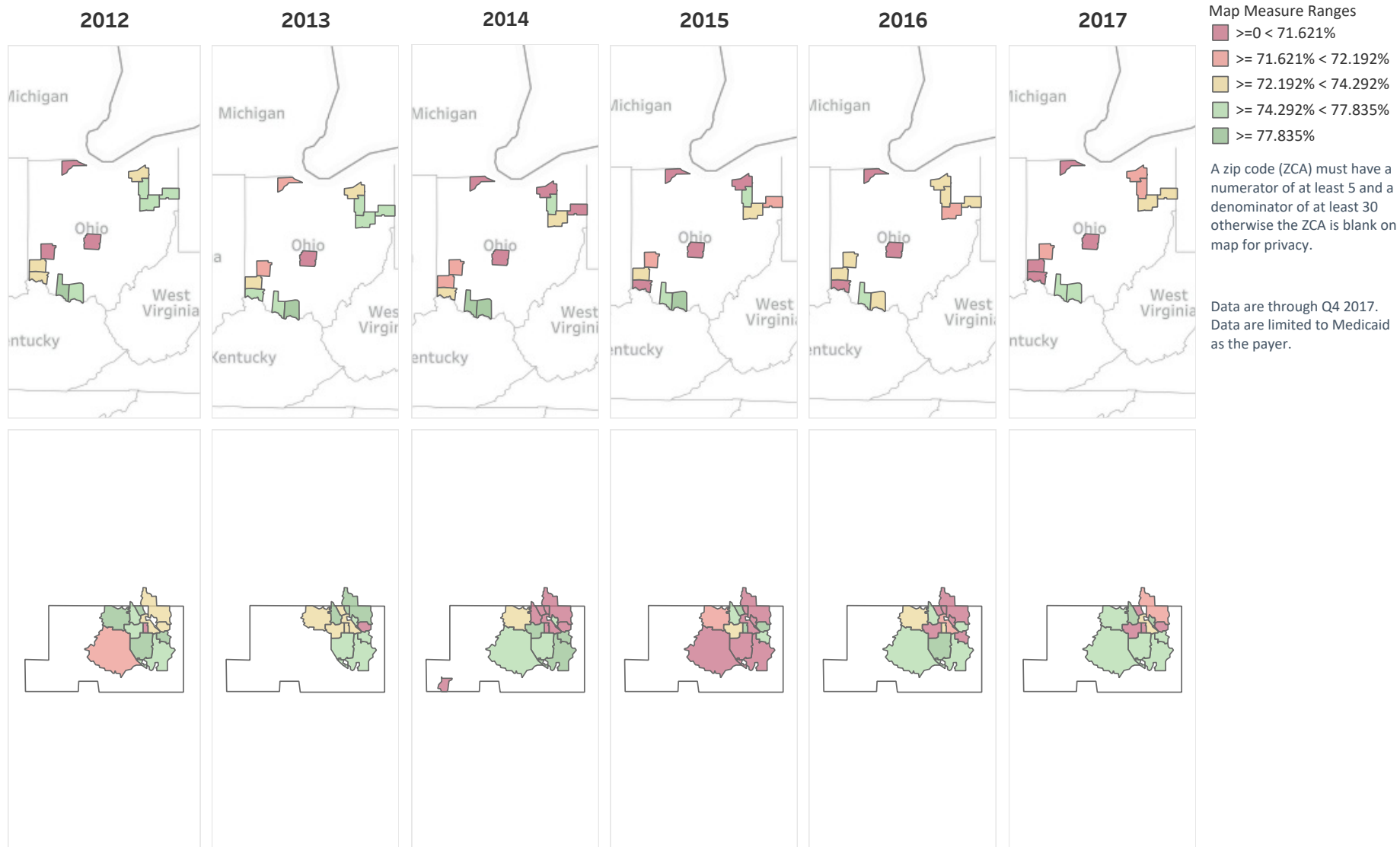
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



## Mahoning County - Prenatal Care (%)

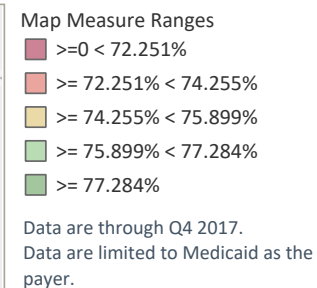
### OEI Quintiles | CY 2012-2017 Yearly Comparison





### Statewide - Prenatal Care (%)

## Overall Quintiles by County | CY 2012 - 2017





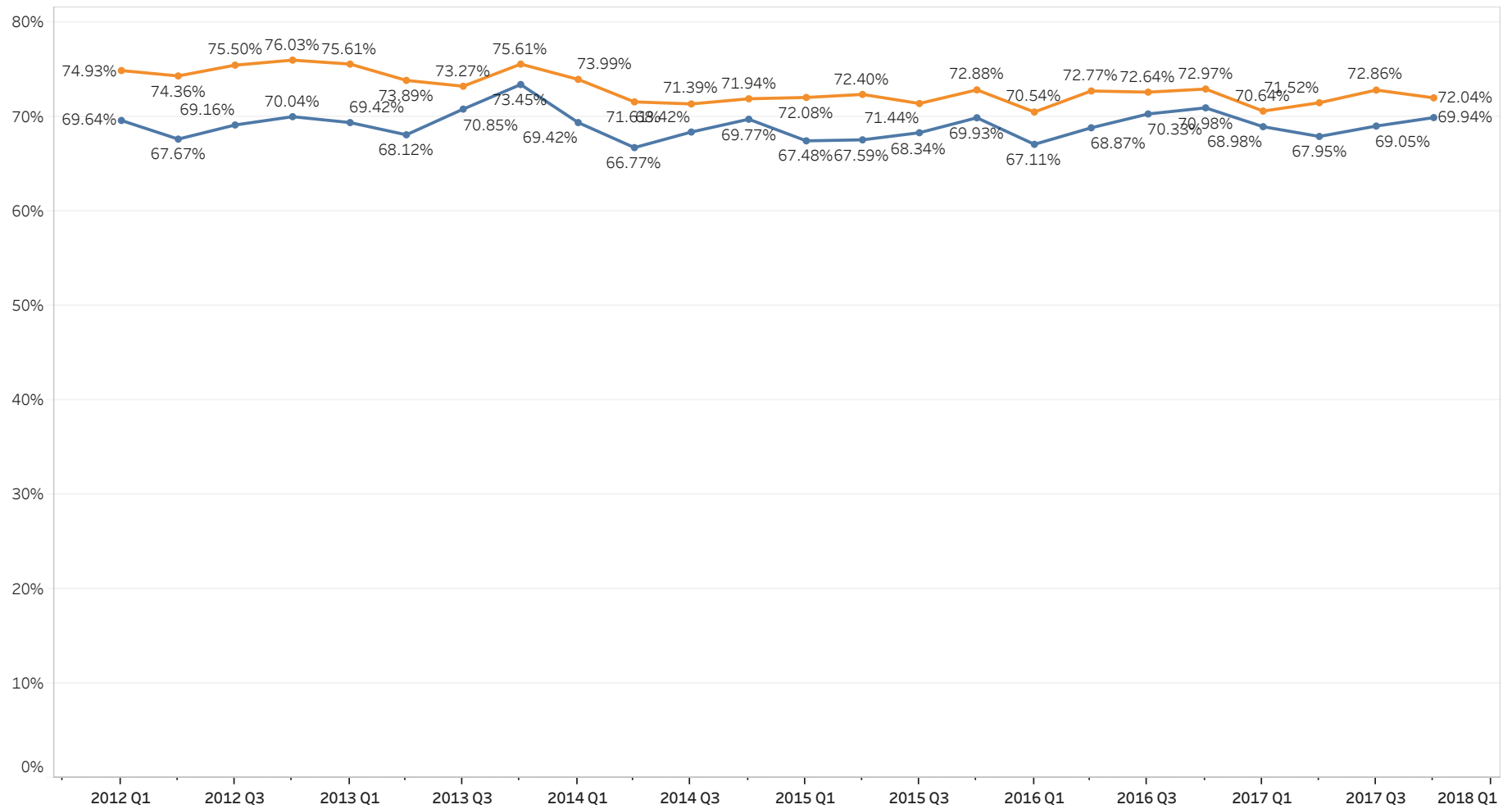
### Quarterly Trends by Race - Prenatal Care (%)

All OEI Counties | CY 2012-2017

Race

African American

Caucasian



Data are limited to Medicaid as the payer.



### Yearly Trends by MCP - Prenatal Care (%) All OEI Counties | CY 2012-2017

Medicaid Plan  
All Plans

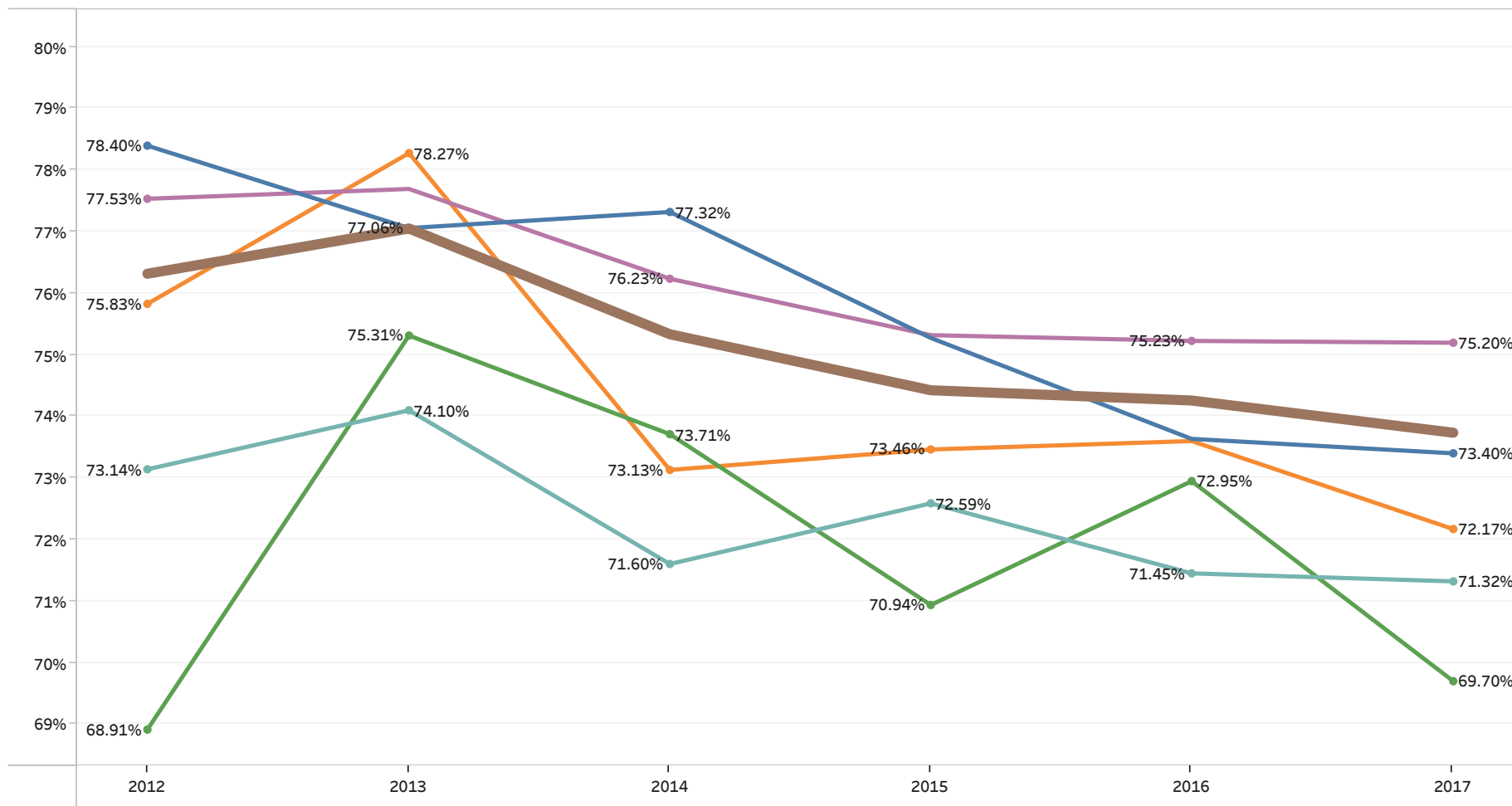
Buckeye

CareSource

Molina

Paramount

United



Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



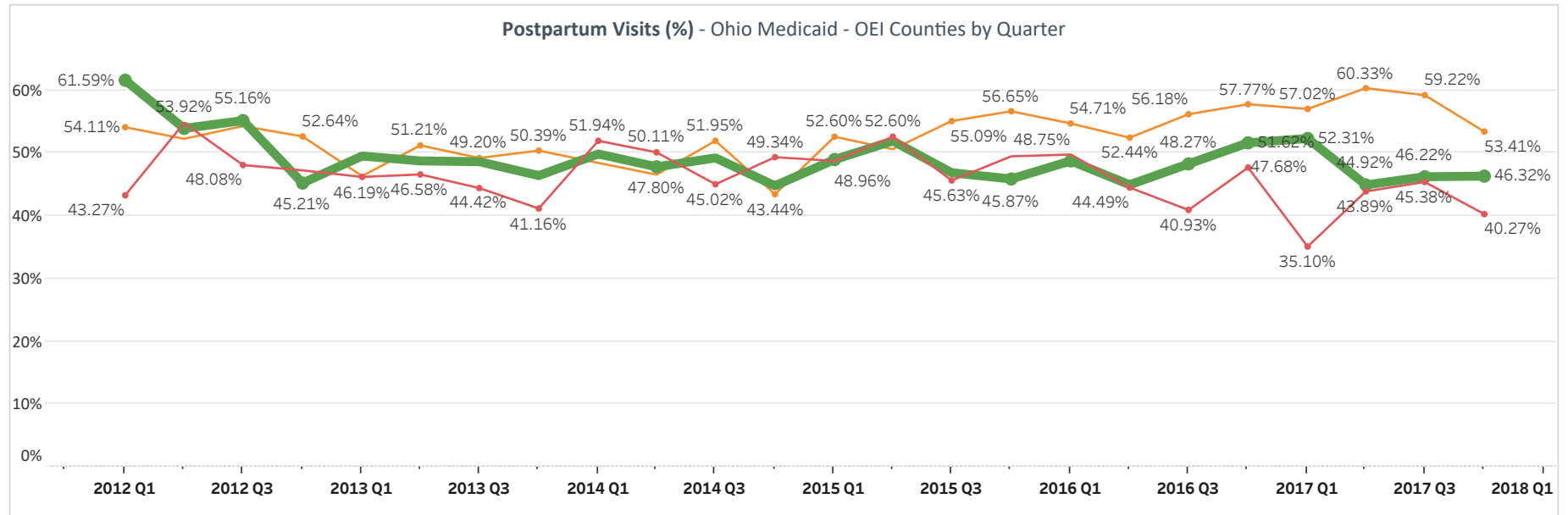
## Postpartum Visits (%)

## Mahoning, Butler, Stark Counties - Postpartum Visits (%)

### Trends by Quarter | CY 2012-2017

Counties

Butler Mahoning Stark



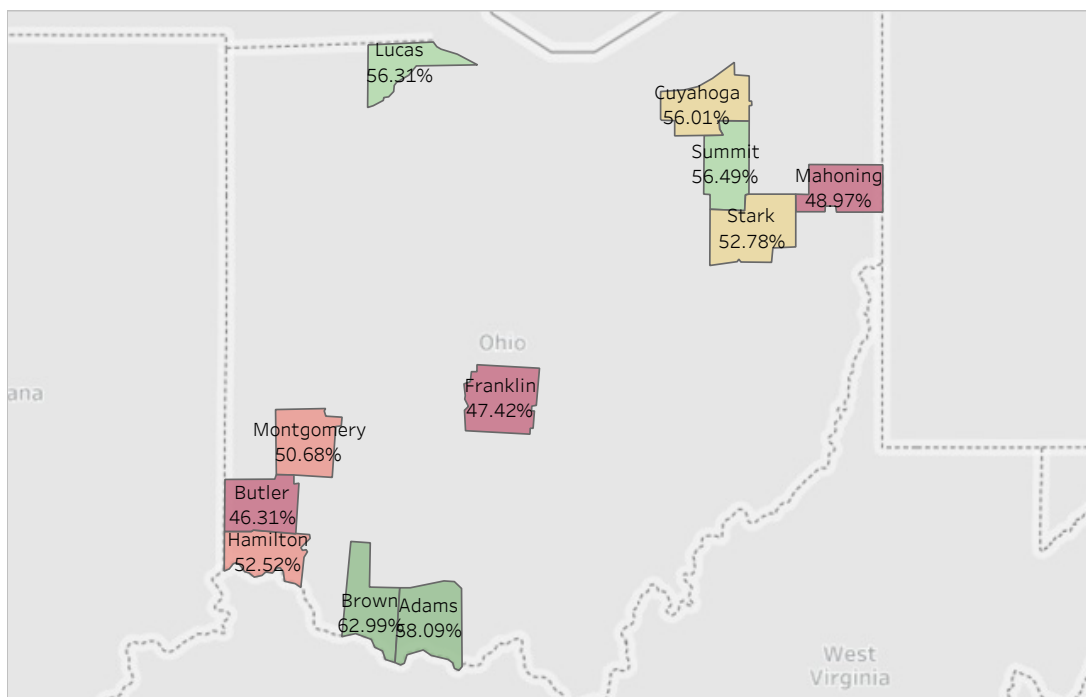
County	Postpartum Aggregate Rate Q1 2012 - Q4 2017	Postpartum Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	46.31%	41.32%	From 822 to 857 Women
<b>Mahoning</b>	48.97%	47.40%	From 668 to 699 Women
Stark	52.78%	57.58%	From 1040 to 1076 Women

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

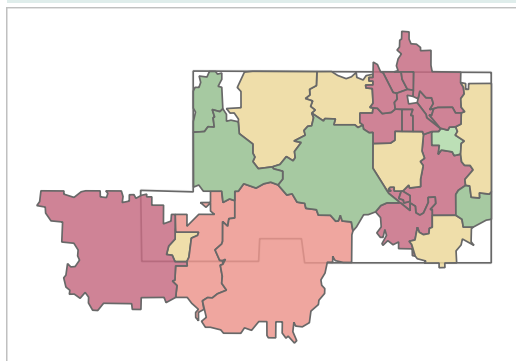


## Mahoning, Butler, Stark Counties - Postpartum Visits (%)

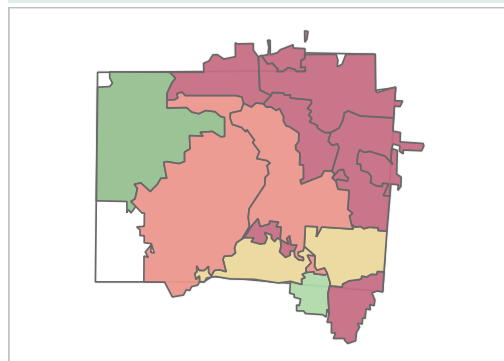
### OEI County Quintiles | CY 2012-2017



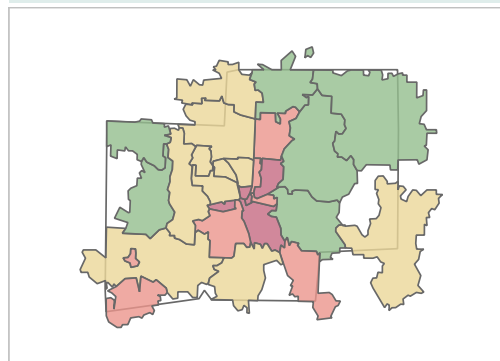
Mahoning



Butler

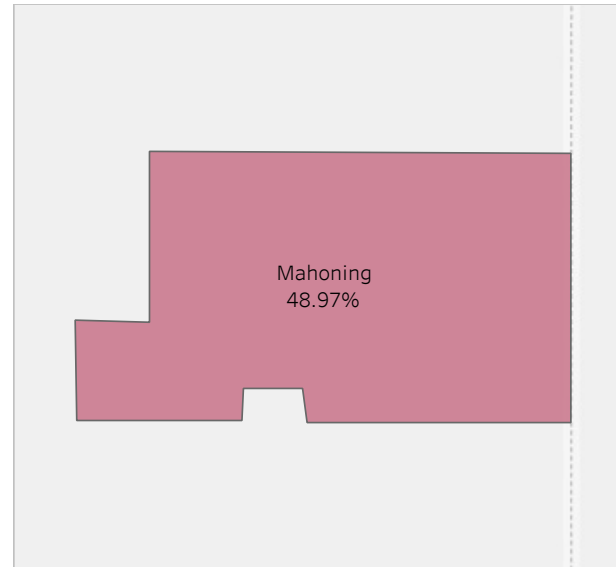
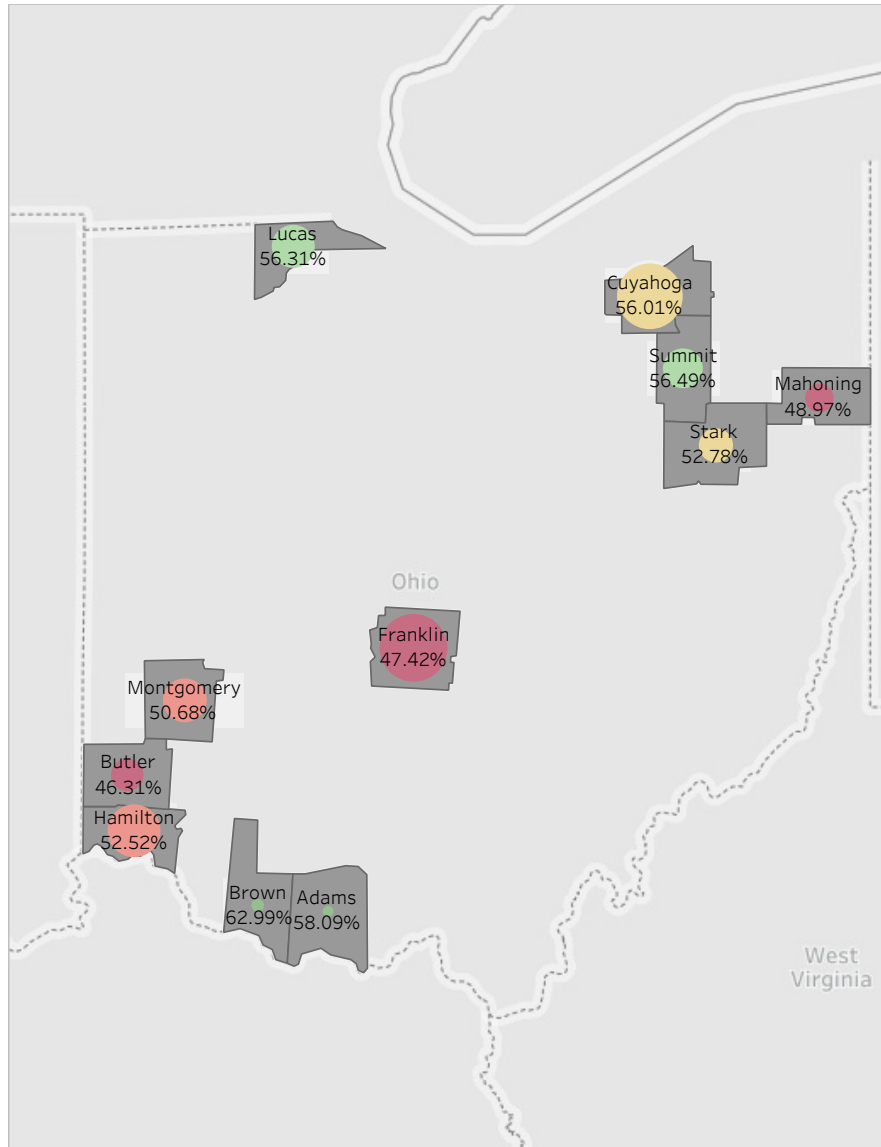


Stark



## Mahoning County - Postpartum Visits (%)

OEI Quintiles | CY 2012-2017

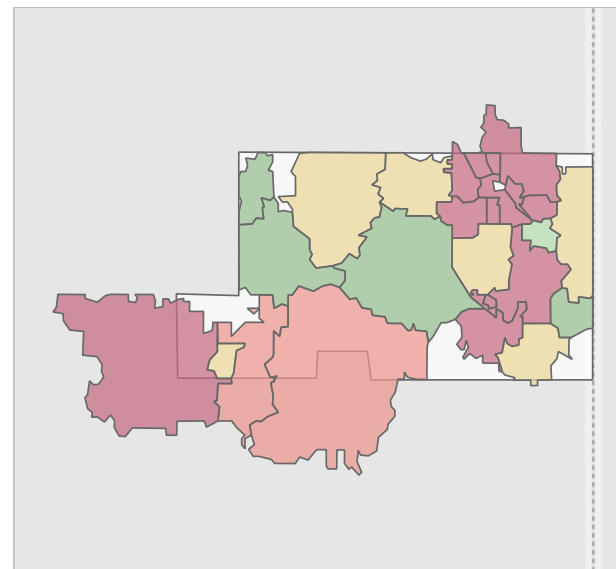


### Map Measure Ranges

- >= 0 < 48.984%
- >= 48.984% < 52.531%
- >= 52.531% < 56.298%
- >= 56.298% < 58.081%
- >= 58.081%

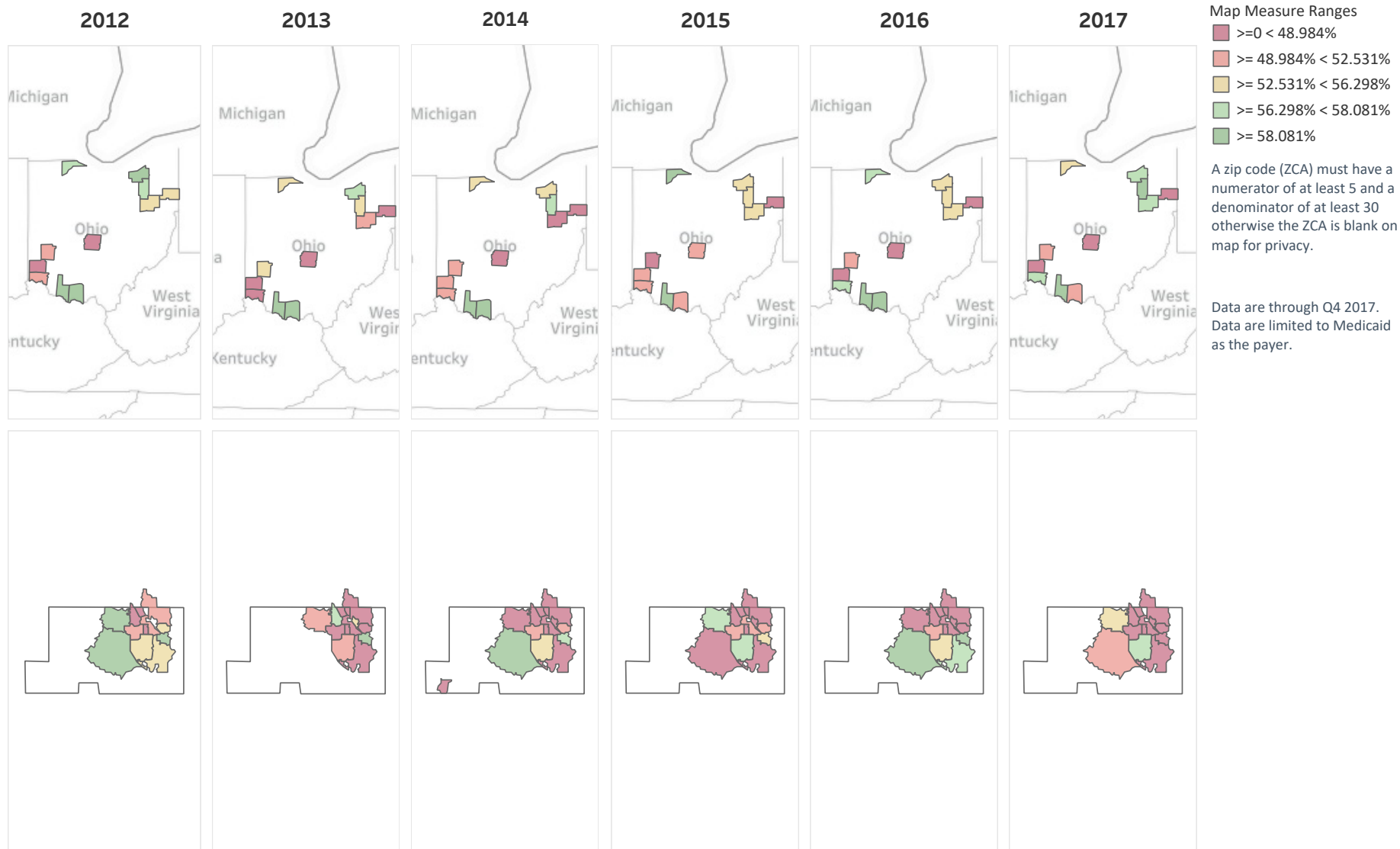
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



## Mahoning County - Postpartum Visits (%)

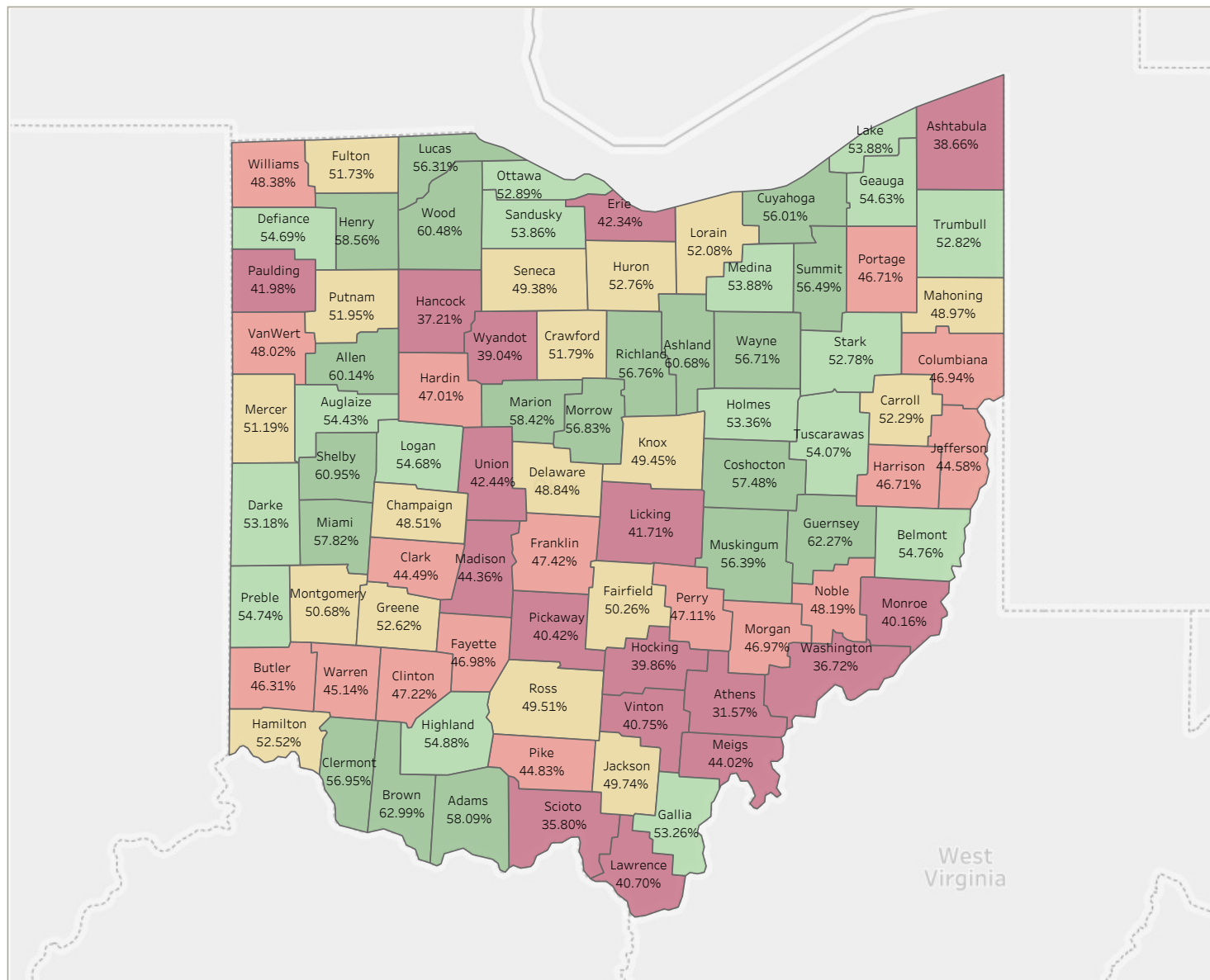
### OEI Quintiles | CY 2012-2017 Yearly Comparison





## Statewide - Postpartum Visits (%)

### Overall Quintiles by County | CY 2012 - 2017



#### Map Measure Ranges

- >=0 < 44.424%
- >= 44.424% < 48.444%
- >= 48.444% < 52.767%
- >= 52.767% < 55.443%
- >= 55.443%

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



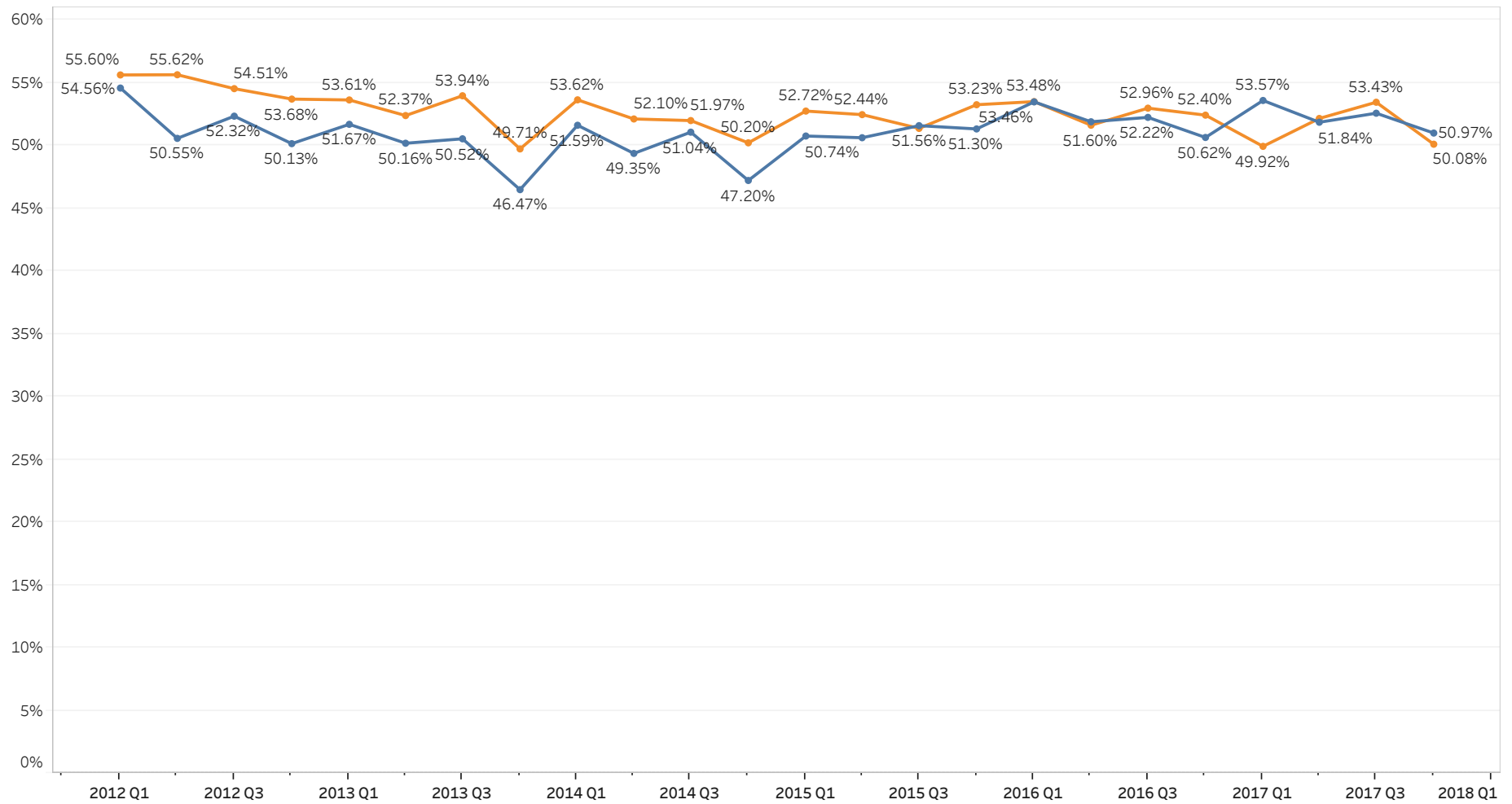
### Quarterly Trends by Race - Postpartum Visits (%)

All OEI Counties | CY 2012-2017

Race

African American

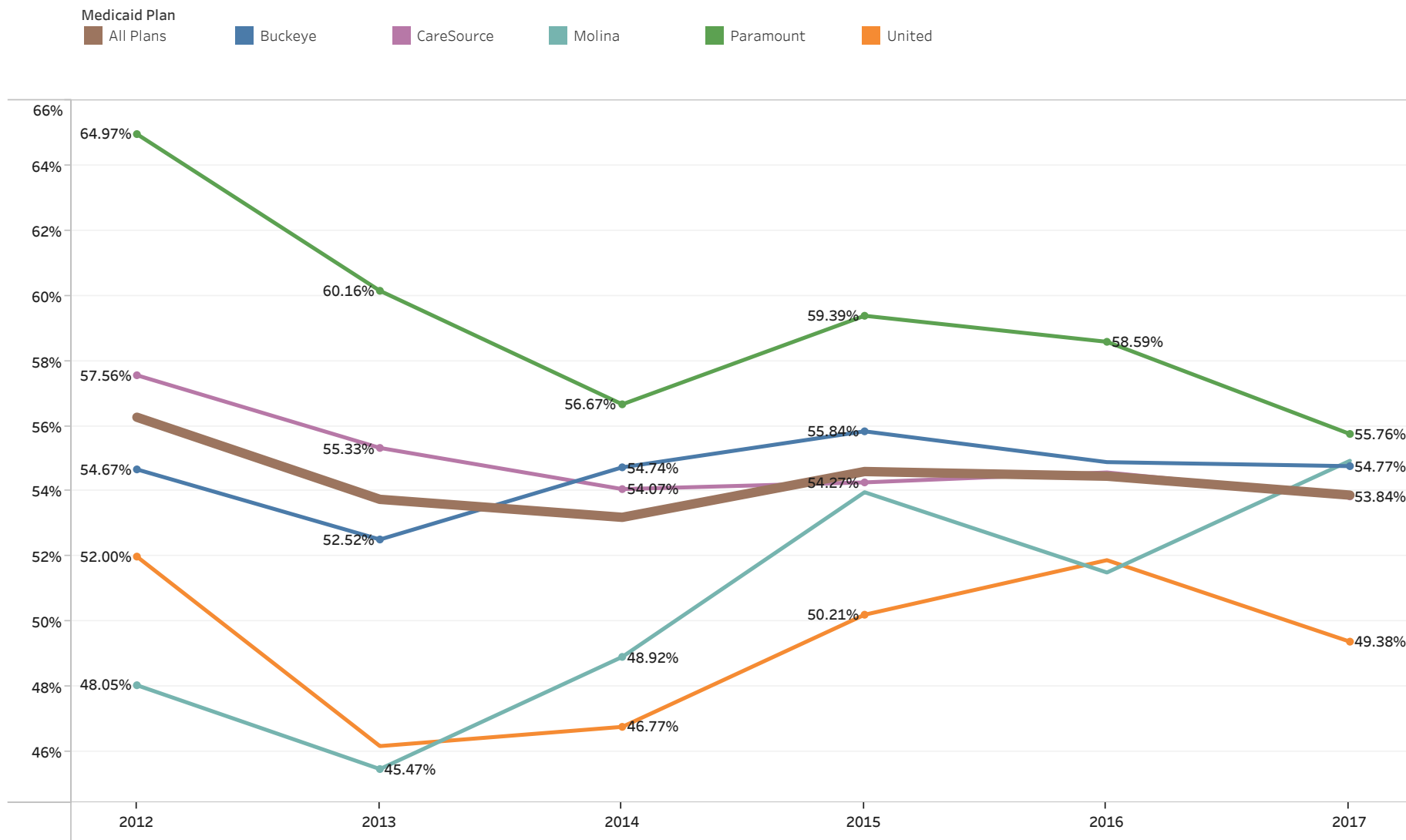
Caucasian



Data are limited to Medicaid as the payer.



### Yearly Trends by MCP - Postpartum Visits (%) All OEI Counties | CY 2012-2017



Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



## Progesterone Use in High Risk Women (%)

## Mahoning, Butler, Stark Counties - Progesterone Use in High Risk Women (%)

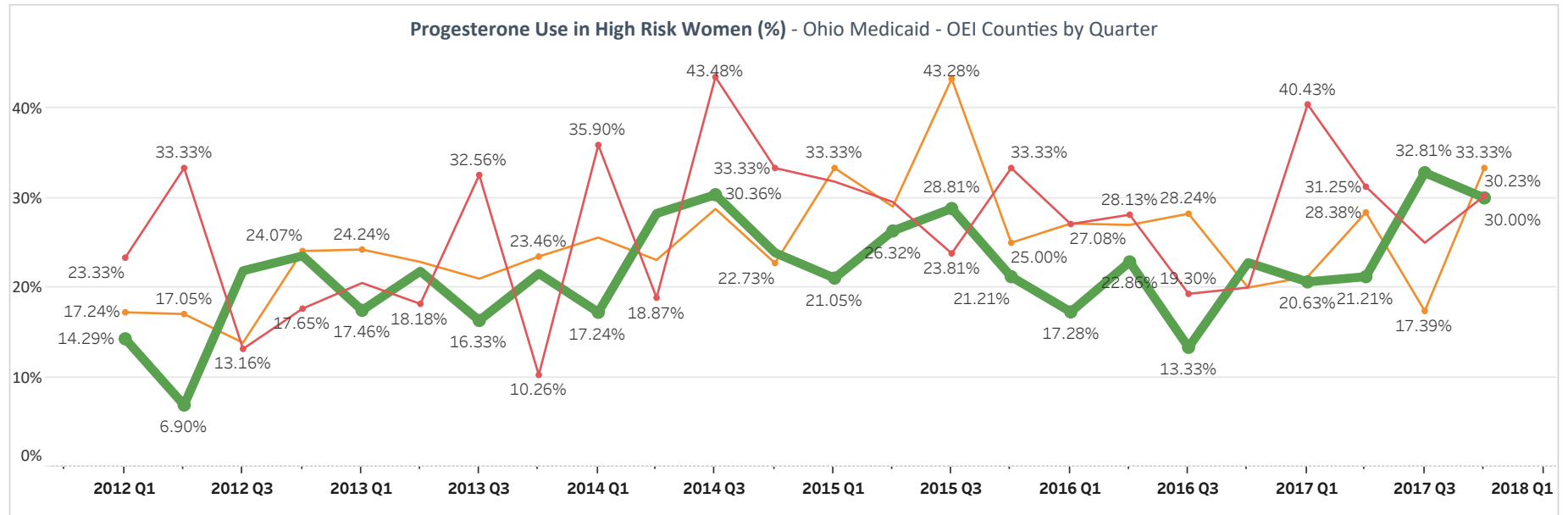
### Trends by Quarter | CY 2012-2017

Counties

Butler

Mahoning

Stark

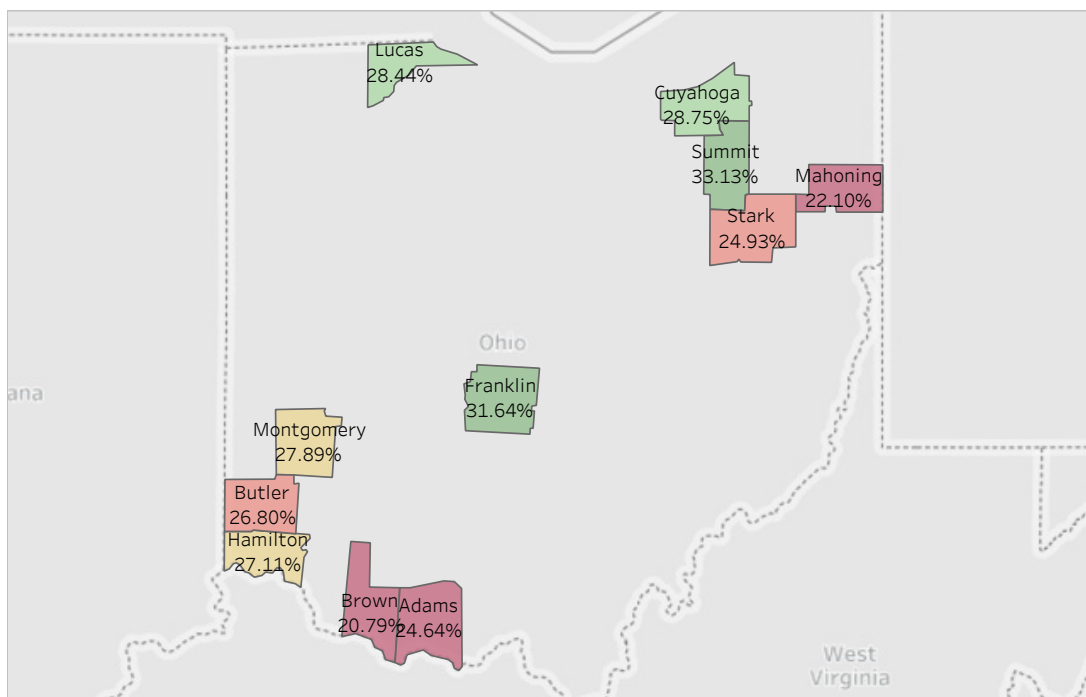


County	Progesterone Aggregate Rate Q1 2012 - Q4 2017	Progesterone Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	26.80%	31.87%	From 48 to 57 Women
<b>Mahoning</b>	22.10%	26.37%	From 53 to 64 Women
Stark	24.93%	25.68%	From 70 to 82 Women

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2012 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2012 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.

## Mahoning, Butler, Stark Counties - Progesterone Use in High Risk Women (%)

### OEI County Quintiles | CY 2012-2017



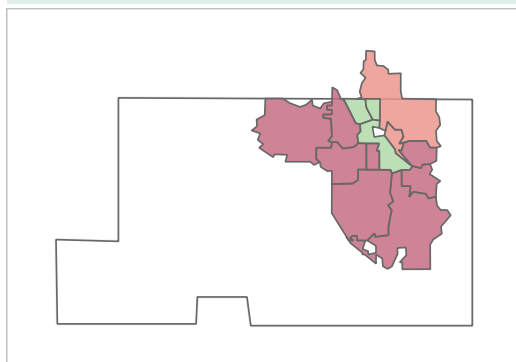
#### Map Measure Ranges

- $\geq 0 < 24.648\%$
- $\geq 24.648\% < 26.814\%$
- $\geq 26.814\% < 28.435\%$
- $\geq 28.435\% < 31.629\%$
- $\geq 31.629\%$

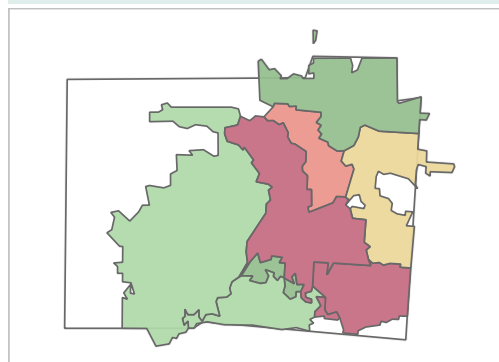
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

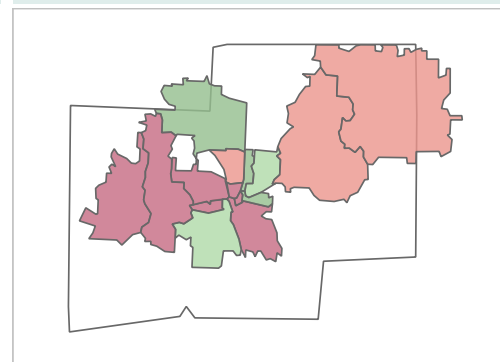
#### Mahoning



#### Butler

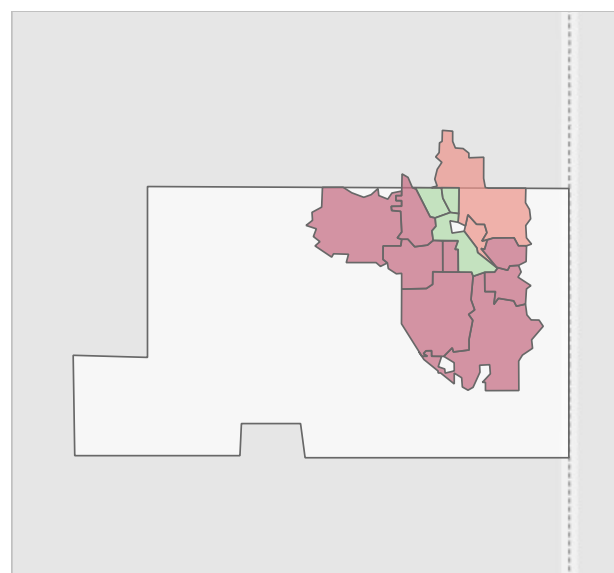
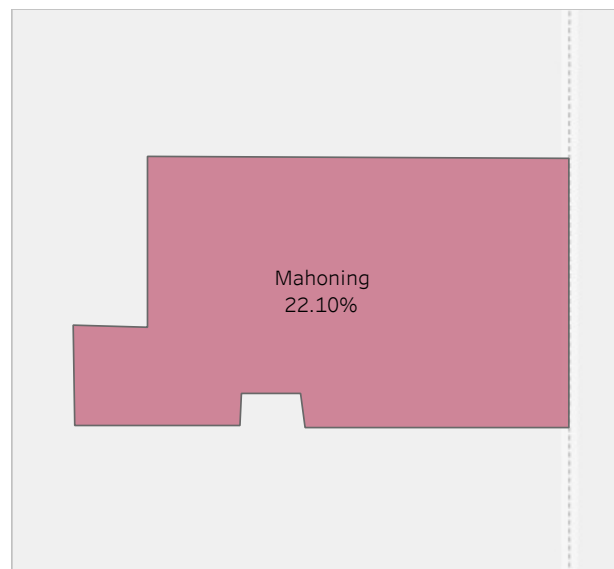
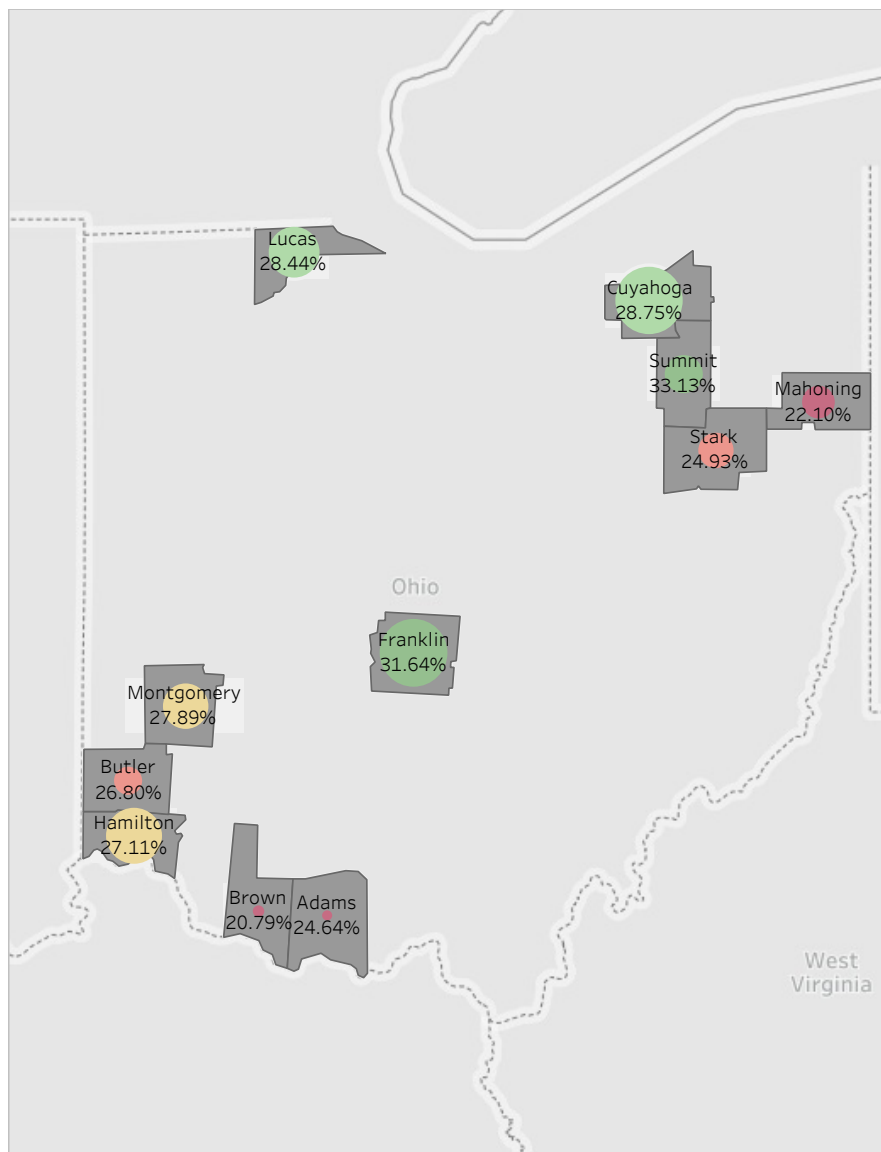


#### Stark



## Mahoning County - Progesterone Use in High Risk Women (%)

### OEI Quintiles | CY 2012-2017



#### Map Measure Ranges

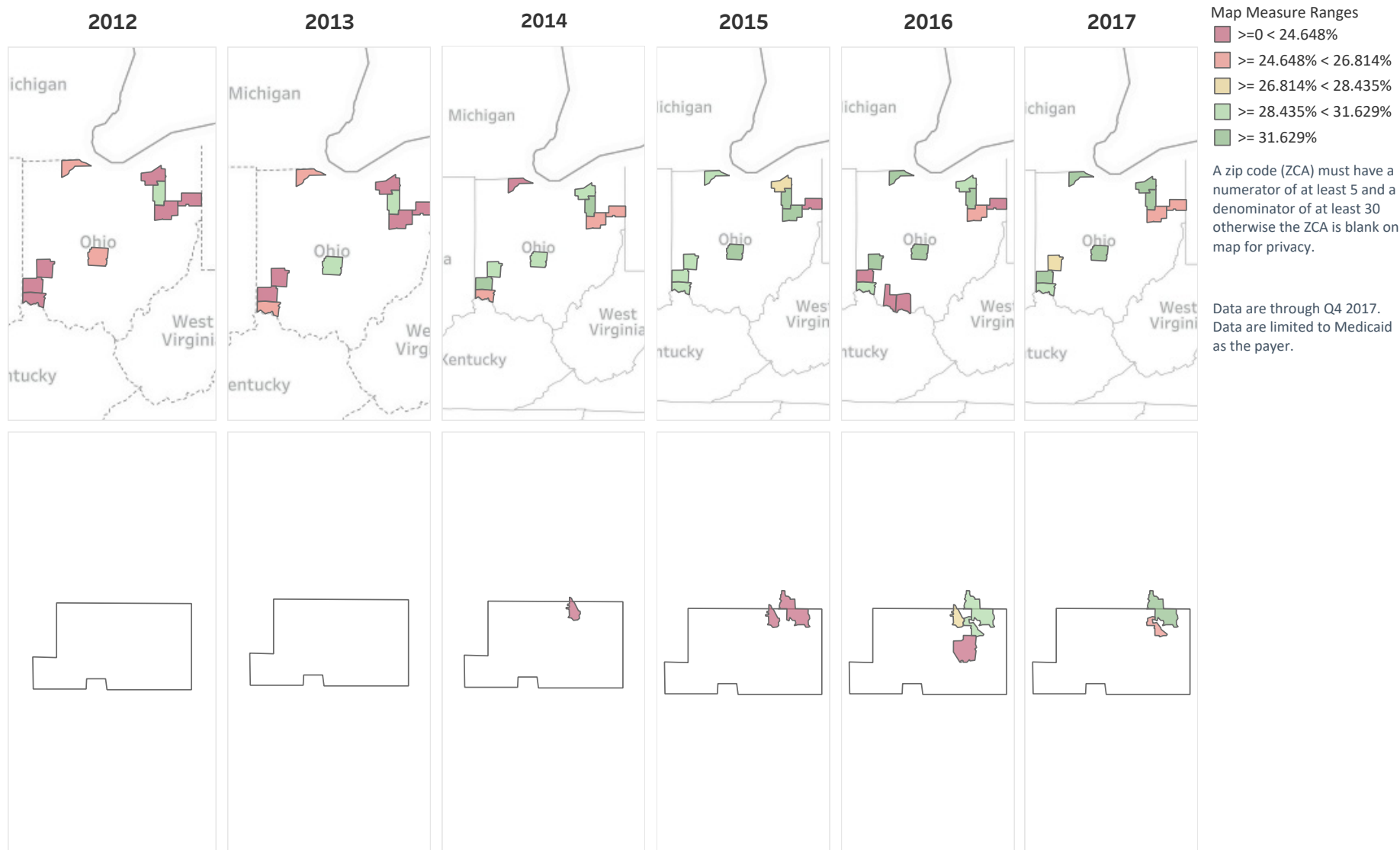
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A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

## Mahoning County - Progesterone Use in High Risk Women (%)

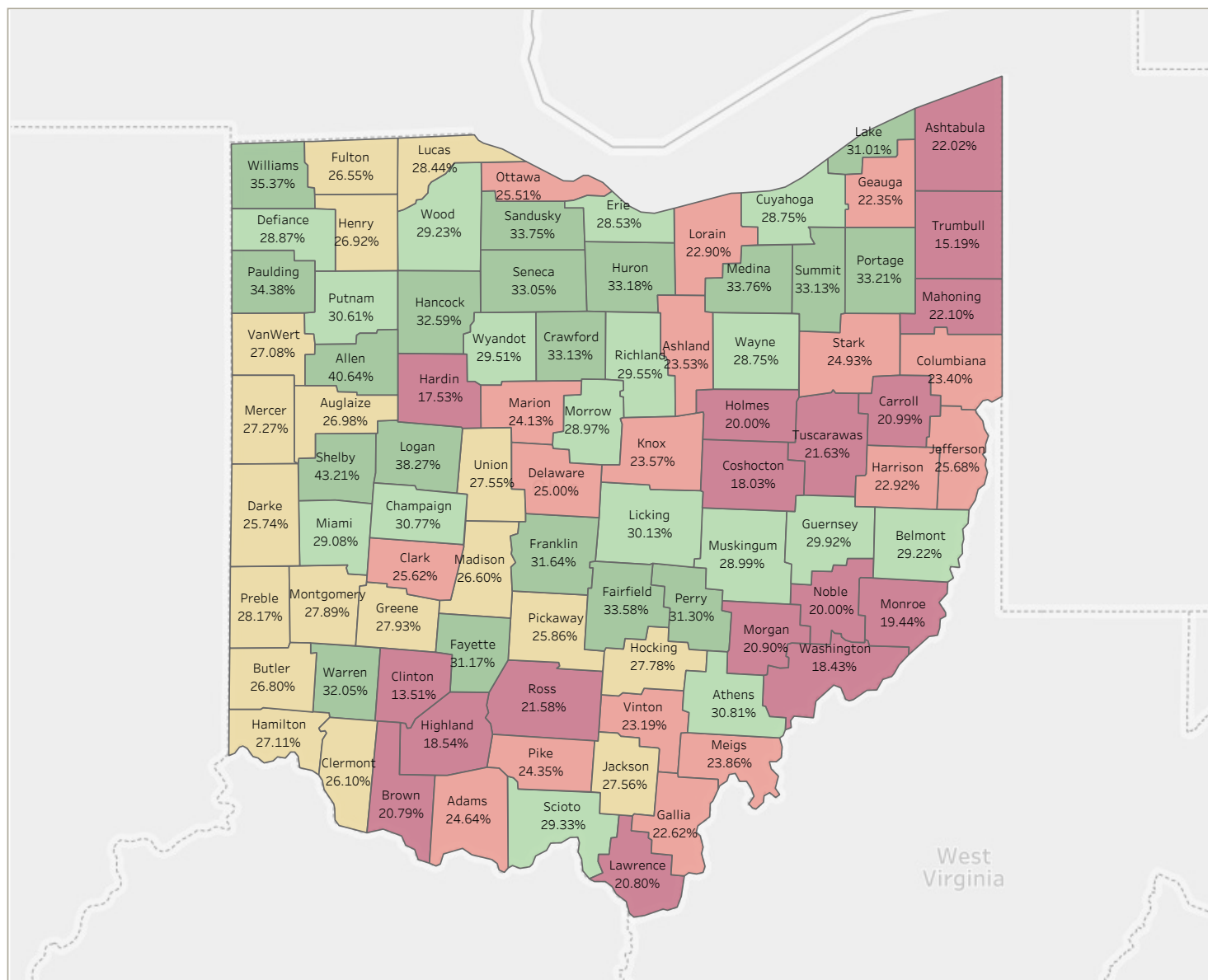
### OEI Quintiles | CY 2012-2017 Yearly Comparison





## Statewide - Progesterone Use in High Risk Women (%)

### Overall Quintiles by County | CY 2012 - 2017



#### Map Measure Ranges

- $\geq 0 < 22.226\%$
- $\geq 22.226\% < 25.705\%$
- $\geq 25.705\% < 28.486\%$
- $\geq 28.486\% < 30.909\%$
- $\geq 30.909\%$

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



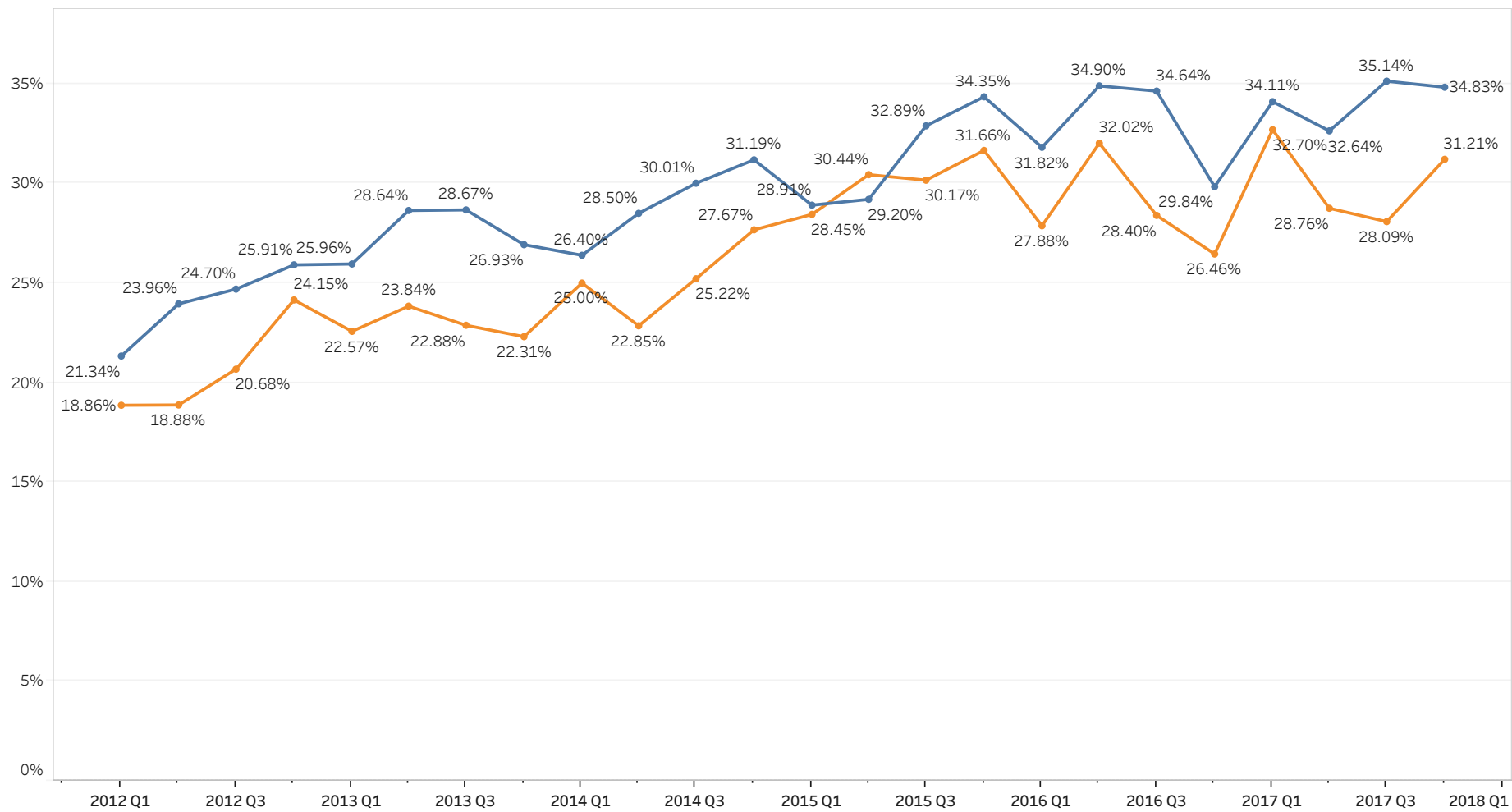
## Quarterly Trends by Race - Progesterone Use in High Risk Women (%)

All OEI Counties | CY 2012-2017

Race

African American

Caucasian



Data are limited to Medicaid as the payer.



### Yearly Trends by MCP - Progesterone Use in High Risk Women (%) All OEI Counties | CY 2012-2017

Medicaid Plan  
All Plans

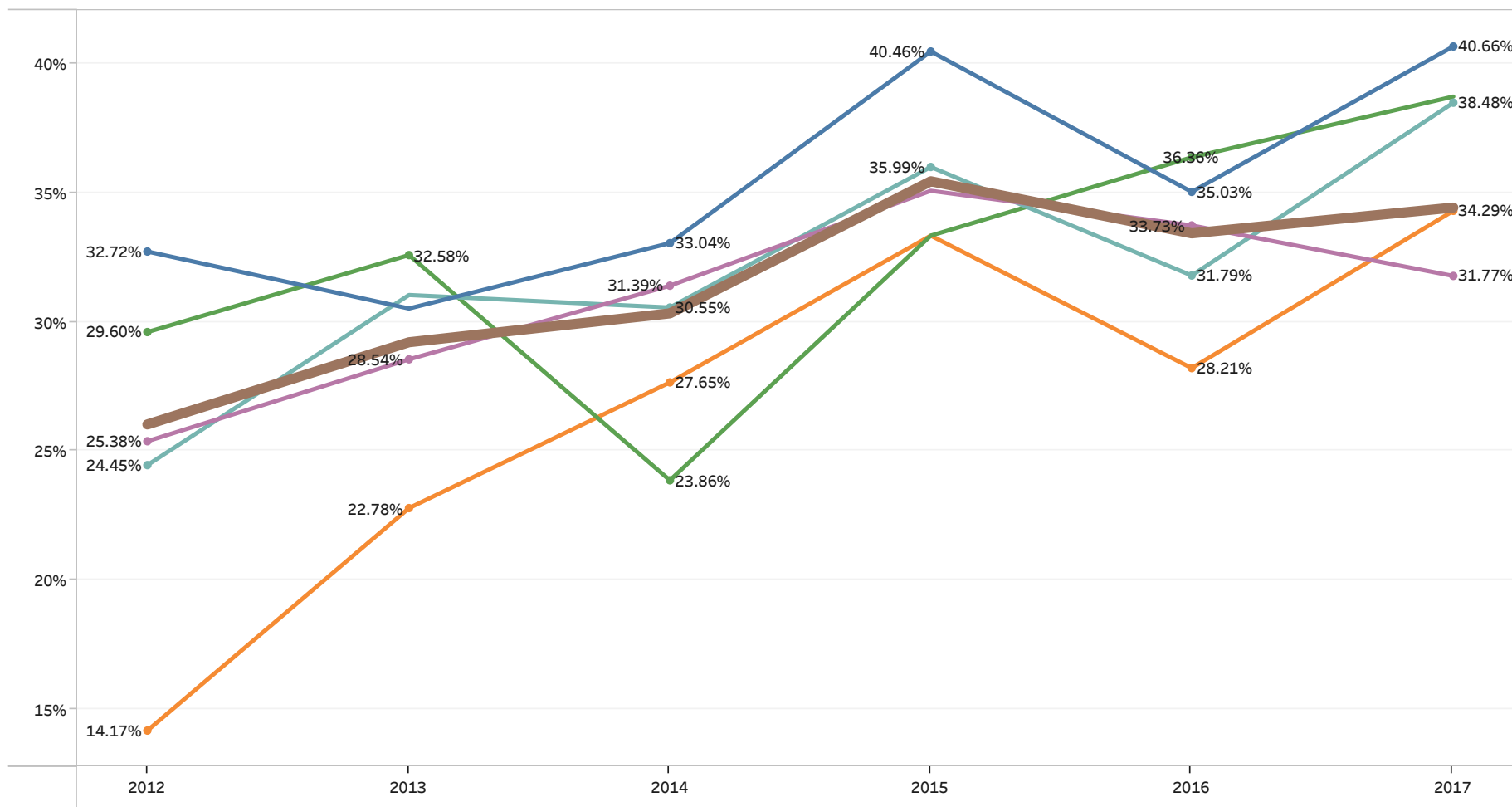
Buckeye

CareSource

Molina

Paramount

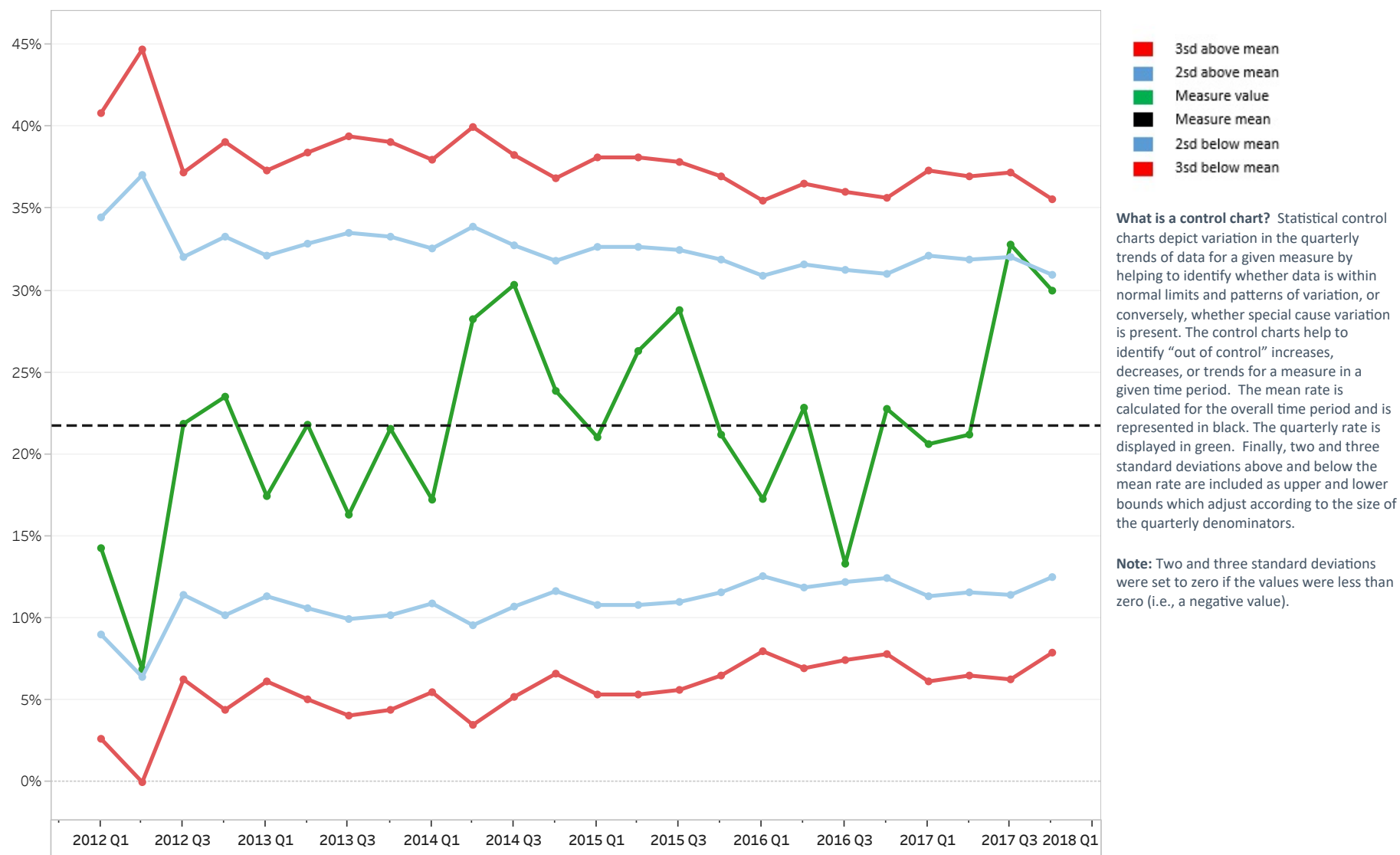
United



Data are through Q4 2017.

Data are limited to Medicaid as the payer.

## Mahoning County Quarterly Control Chart - Progesterone Use in High Risk Women (%) CY 2012-2017



Data are limited to Medicaid as the payer.



Department of  
Medicaid

## Tobacco Screening & Cessation Counseling (%)



## Mahoning, Butler, Stark Counties - Tobacco Screening & Cessation Counseling (%)

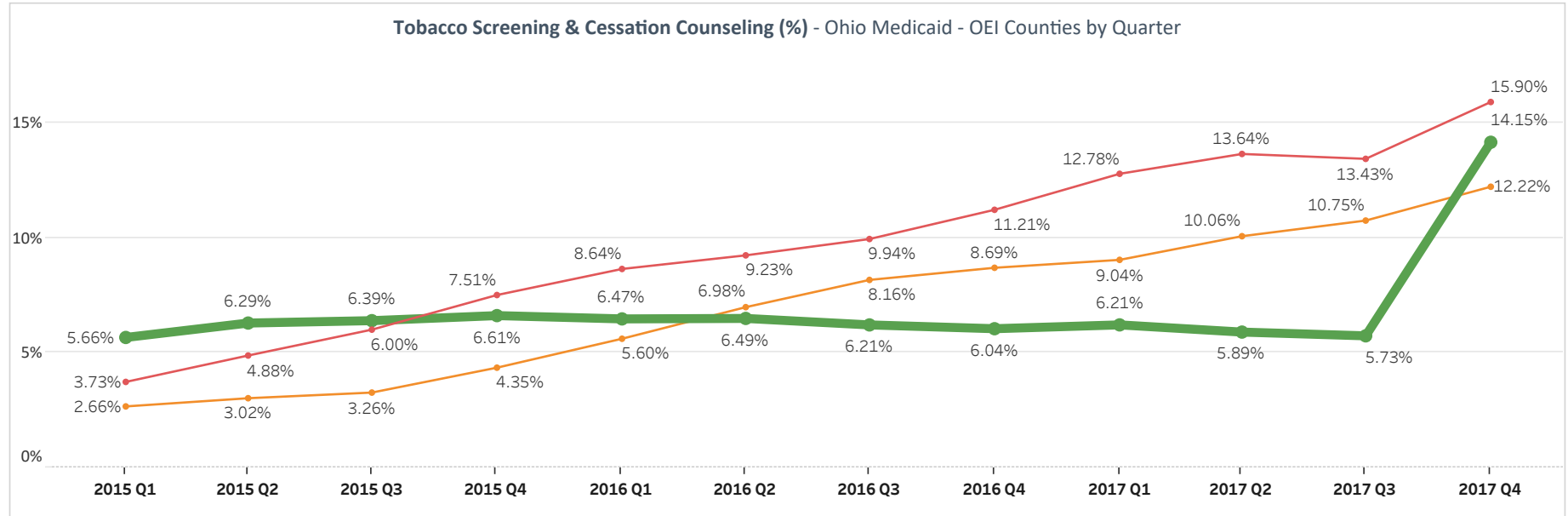
### Trends by Quarter | CY 2015-2017

#### Counties

Butler

Mahoning

Stark



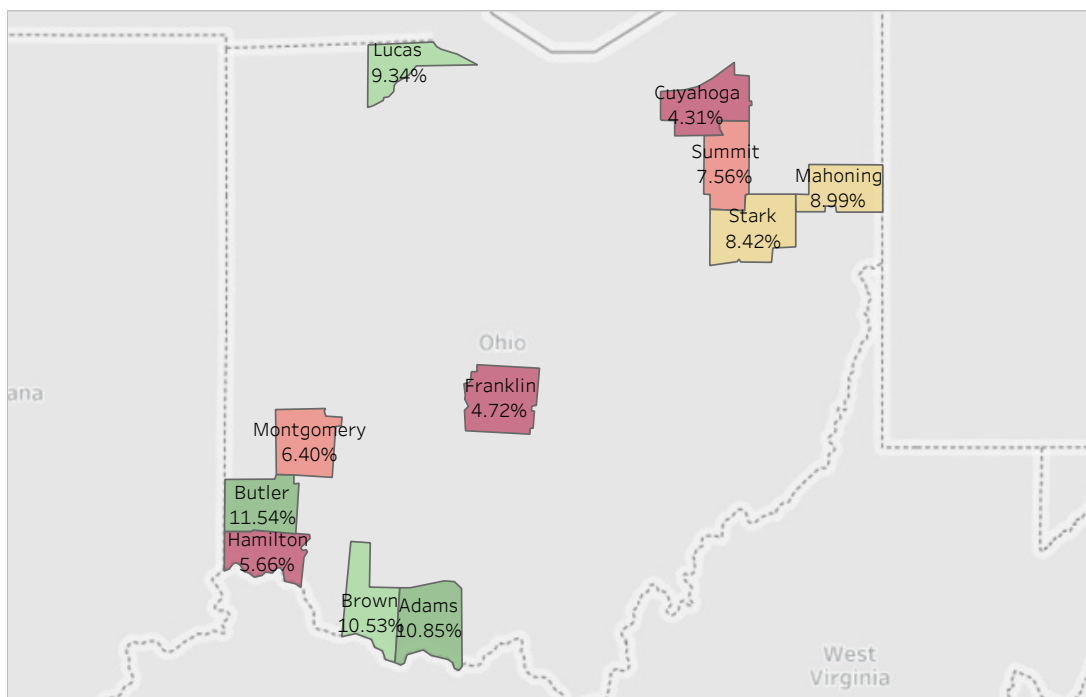
County	Tobacco Screening & Cessation Counseling Aggregate Rate Q1 2015 - Q4 2017	Tobacco Screening & Cessation Counseling Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	11.54%	15.90%	From 1814 to 1880 Women
Mahoning	8.99%	14.15%	From 1238 to 1294 Women
Stark	8.42%	12.22%	From 1408 to 1467 Women

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2015 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2015 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.



## Mahoning, Butler, Stark Counties - Tobacco Screening & Cessation Counseling (%)

### OEI County Quintiles | CY 2015-2017



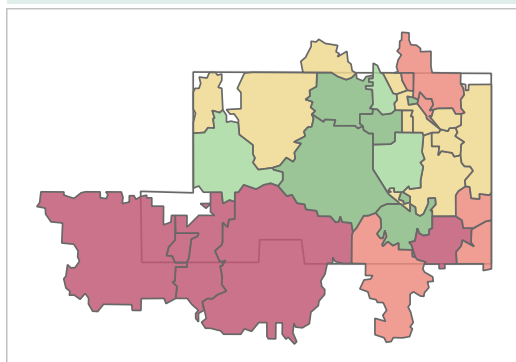
#### Map Measure Ranges

- $\geq 0 < 5.665\%$
- $\geq 5.665\% < 7.570\%$
- $\geq 7.570\% < 9.325\%$
- $\geq 9.325\% < 10.839\%$
- $\geq 10.839\%$

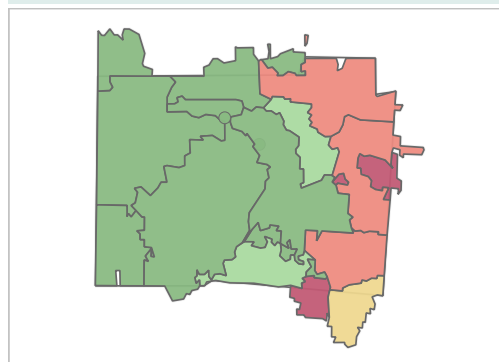
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

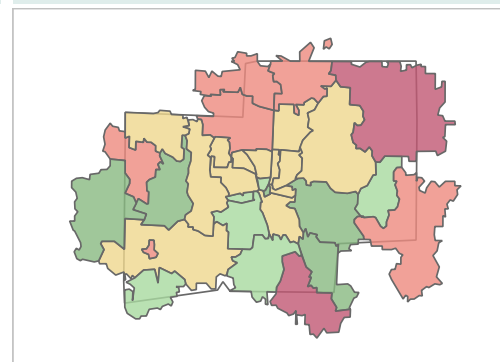
Mahoning



Butler

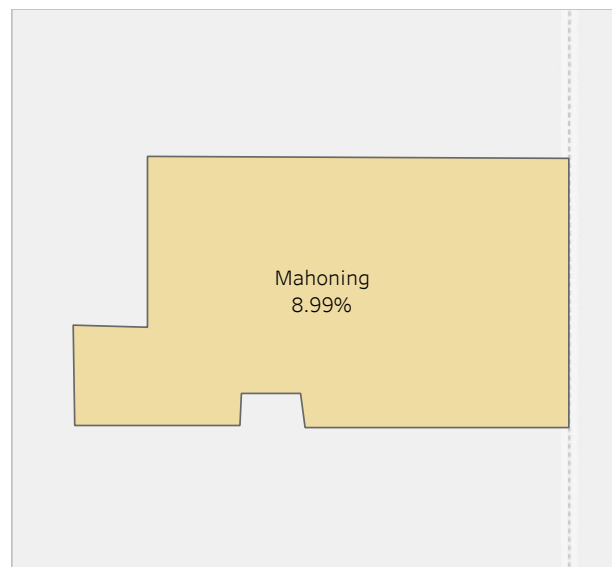
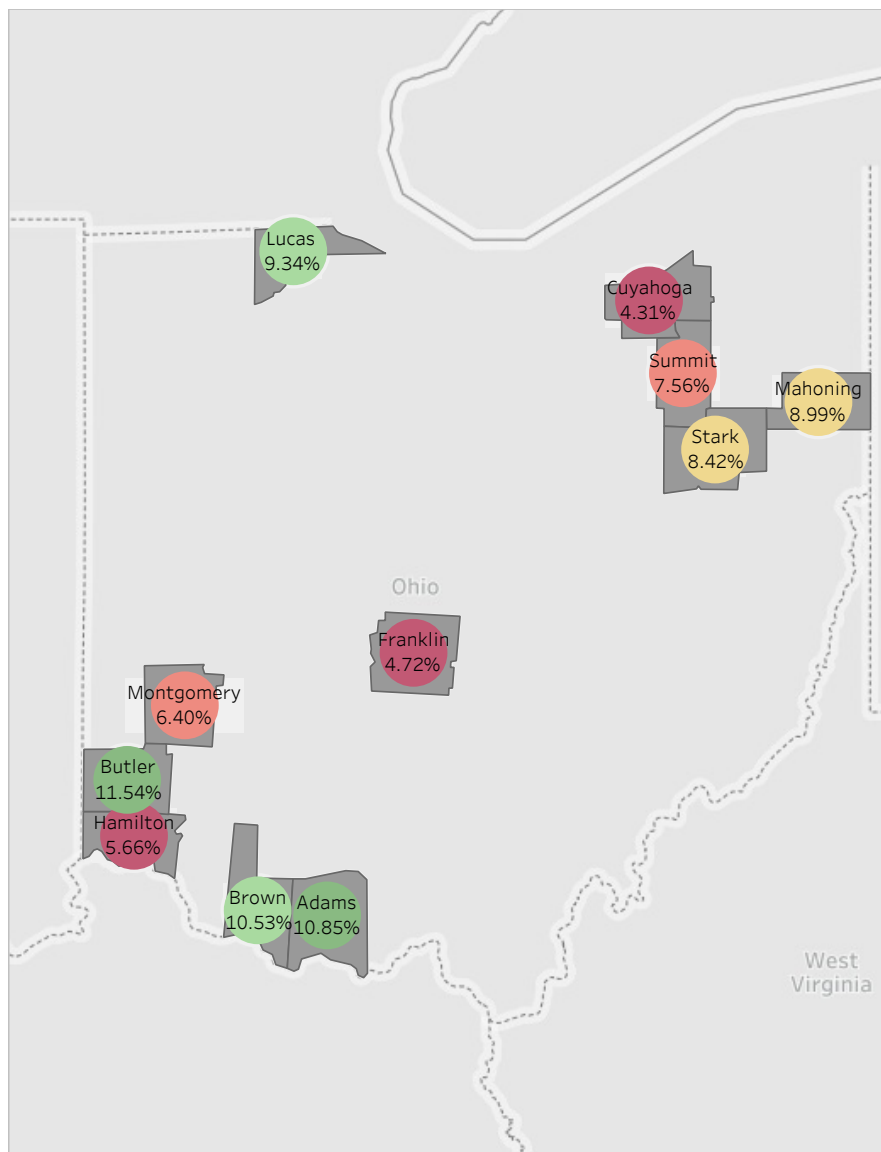


Stark



## Mahoning County - Tobacco Screening & Cessation Counseling (%)

### OEI Quintiles | CY 2015-2017

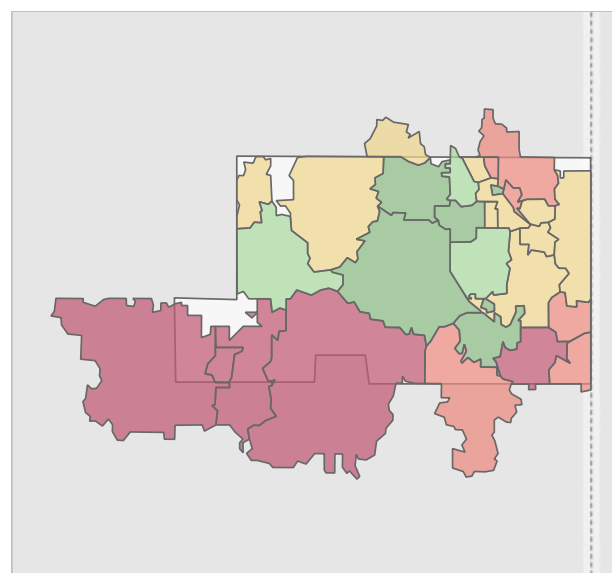


#### Map Measure Ranges

- >=0 < 5.665%
- >= 5.665% < 7.570%
- >= 7.570% < 9.325%
- >= 9.325% < 10.839%
- >= 10.839%

A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

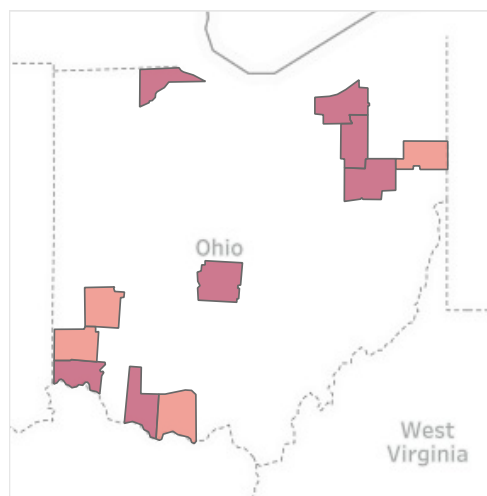




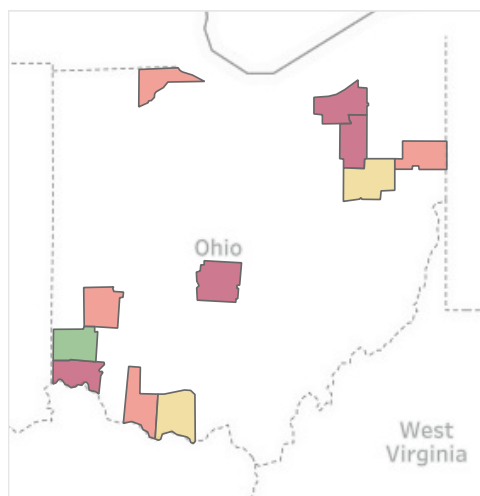
## Mahoning County - Tobacco Screening & Cessation Counseling (%)

### OEI Quintiles | CY 2015-2017 Yearly Comparison

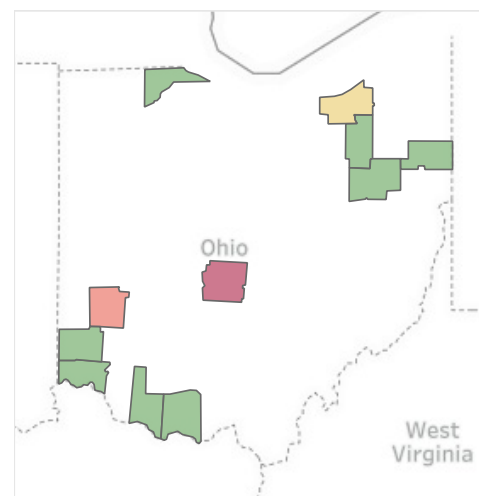
CY 2015



CY 2016



CY 2017

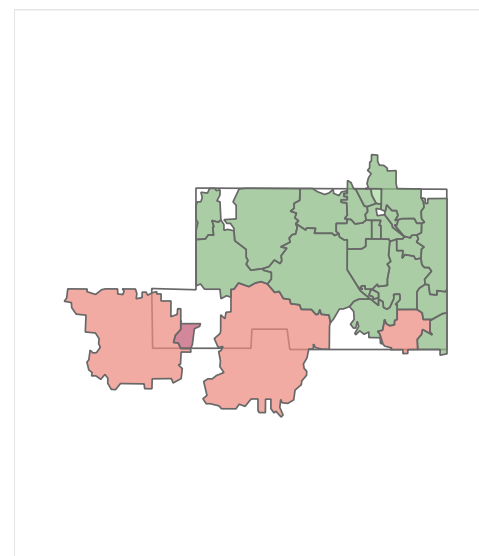
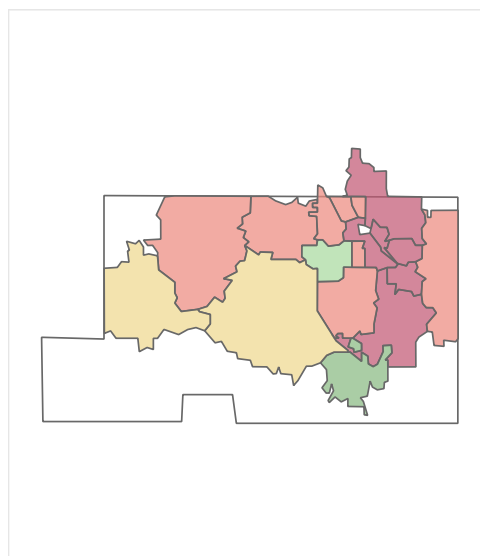
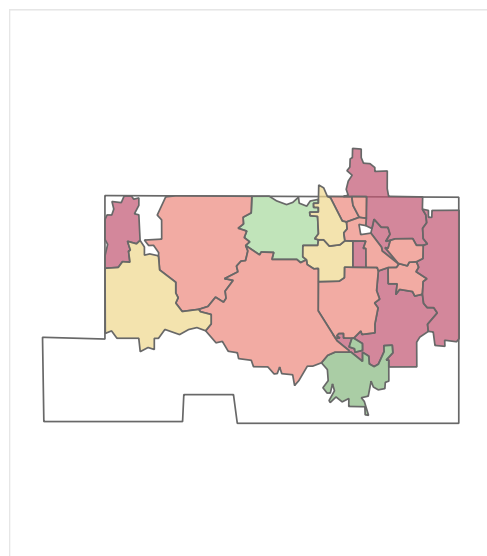


#### Map Measure Ranges

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- $\geq 9.325\% < 10.839\%$
- $\geq 10.839\%$

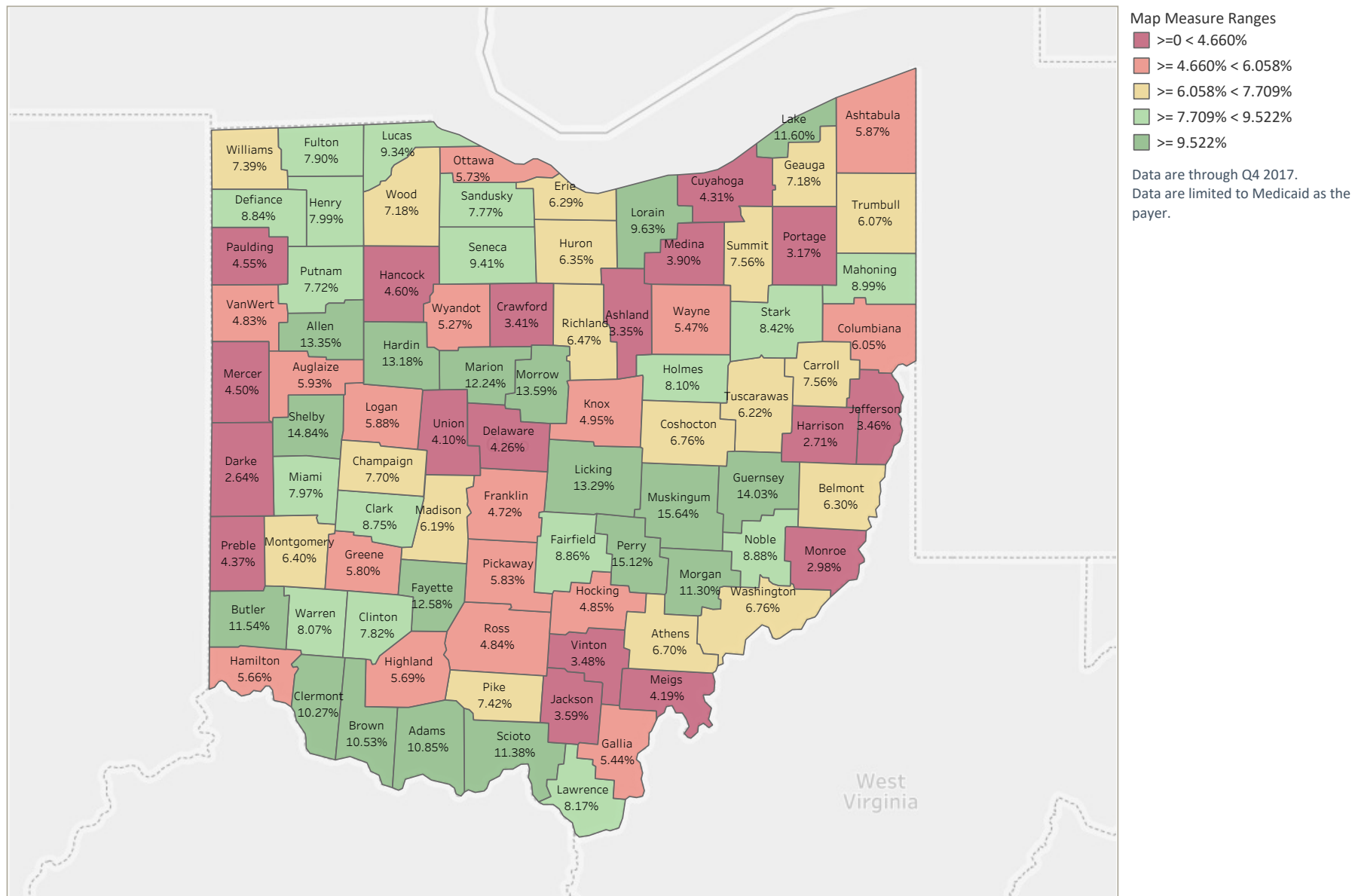
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



## Statewide - Tobacco Screening & Cessation Counseling (%)

### Overall Quintiles by County | CY 2015 - 2017





## Yearly Trends by MCP - Tobacco Screening & Cessation Counseling (%) All OEI Counties | CY 2015-2017

Medicaid Plan  
All Plans

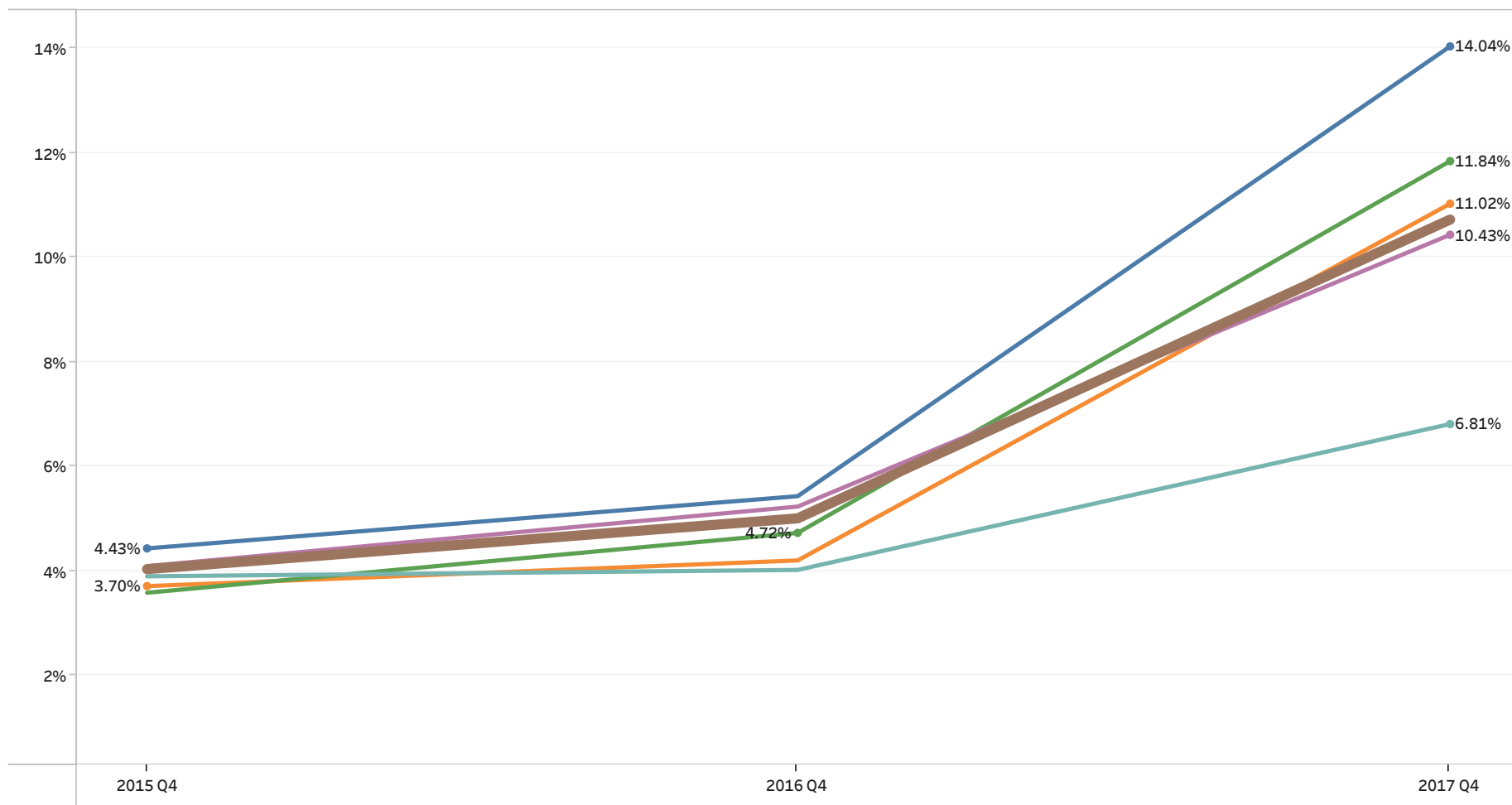
Buckeye

CareSource

Molina

Paramount

United



Data are through Q4 2017.

Data are limited to Medicaid as the payer.



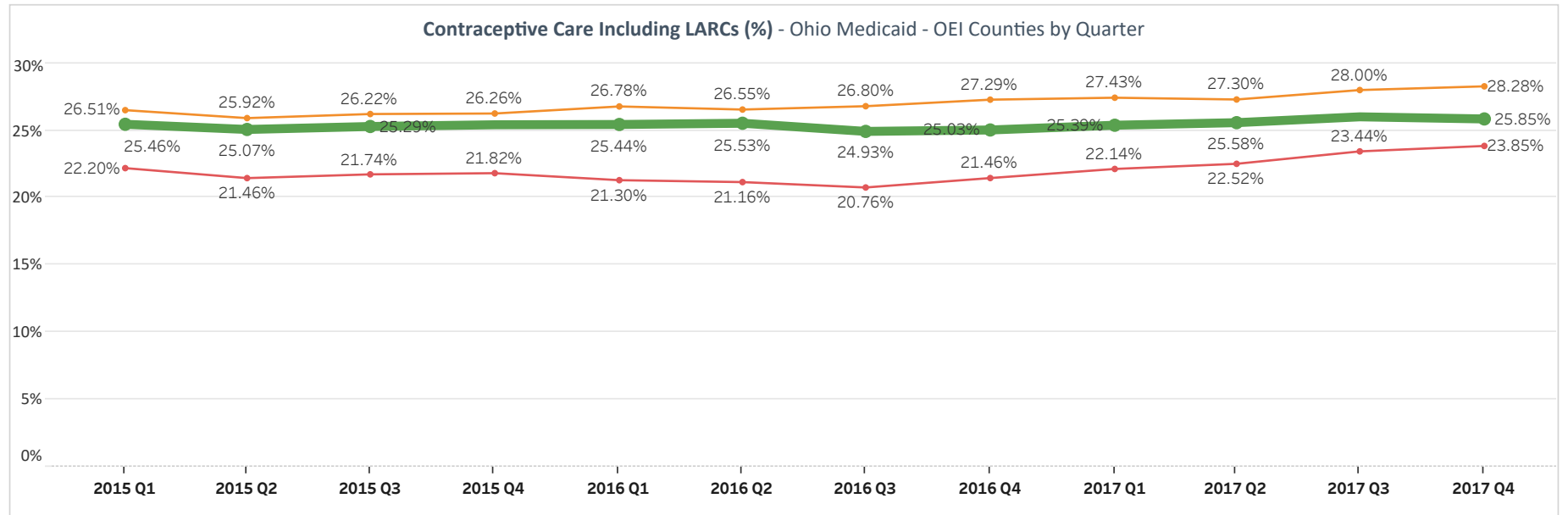
## Contraceptive Care Including LARCs (%)

## Mahoning, Butler, Stark Counties - Contraceptive Care Including LARCs (%)

### Trends by Quarter | CY 2015-2017

Counties

Butler Mahoning Stark



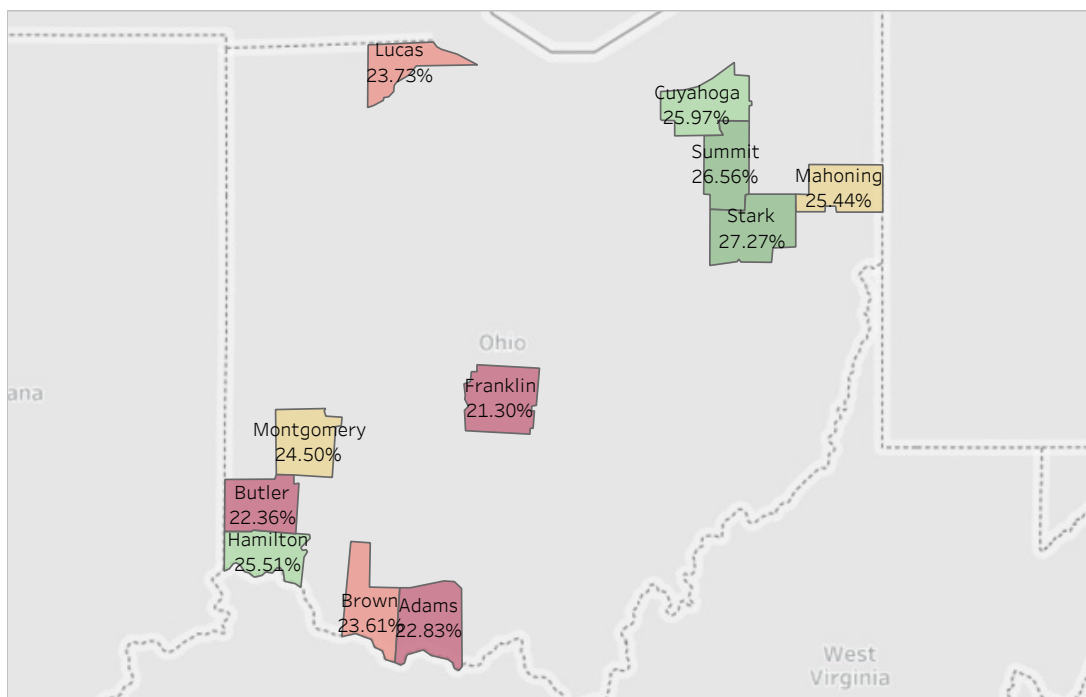
County	Contraceptive Care Including LARCs Aggregate Rate Q1 2015 - Q4 2017	Contraceptive Care Including LARCs Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	22.36%	23.85%	From 3715 to 3804 Women
<b>Mahoning</b>	25.44%	25.85%	From 3658 to 3744 Women
Stark	27.27%	28.28%	From 4745 to 4841 Women

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2015 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p- value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2015 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data. This measure includes moderate to most effective forms of contraception, including Long-Acting Reversible Contraceptives (LARCs).



## Mahoning, Butler, Stark Counties - Contraceptive Care Including LARCs (%)

### OEI County Quintiles | CY 2015-2017



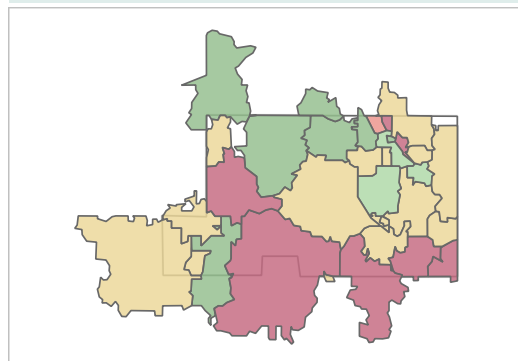
#### Map Measure Ranges

- $\geq 0 < 22.839\%$
- $\geq 22.839\% < 23.744\%$
- $\geq 23.744\% < 25.505\%$
- $\geq 25.505\% < 26.550\%$
- $\geq 26.550\%$

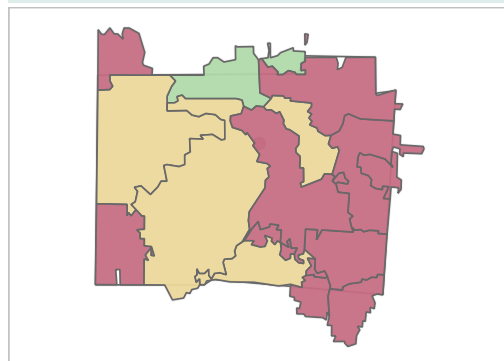
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

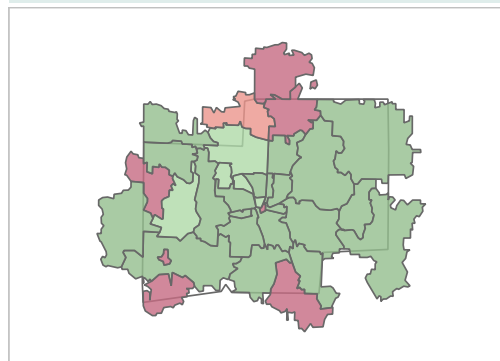
**Mahoning**



**Butler**

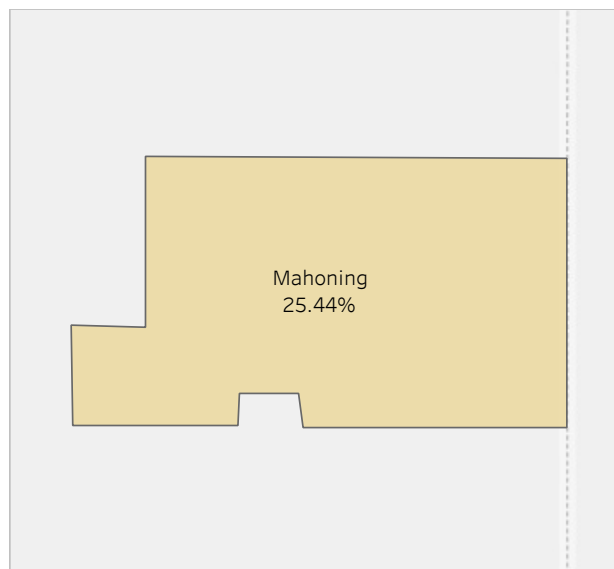
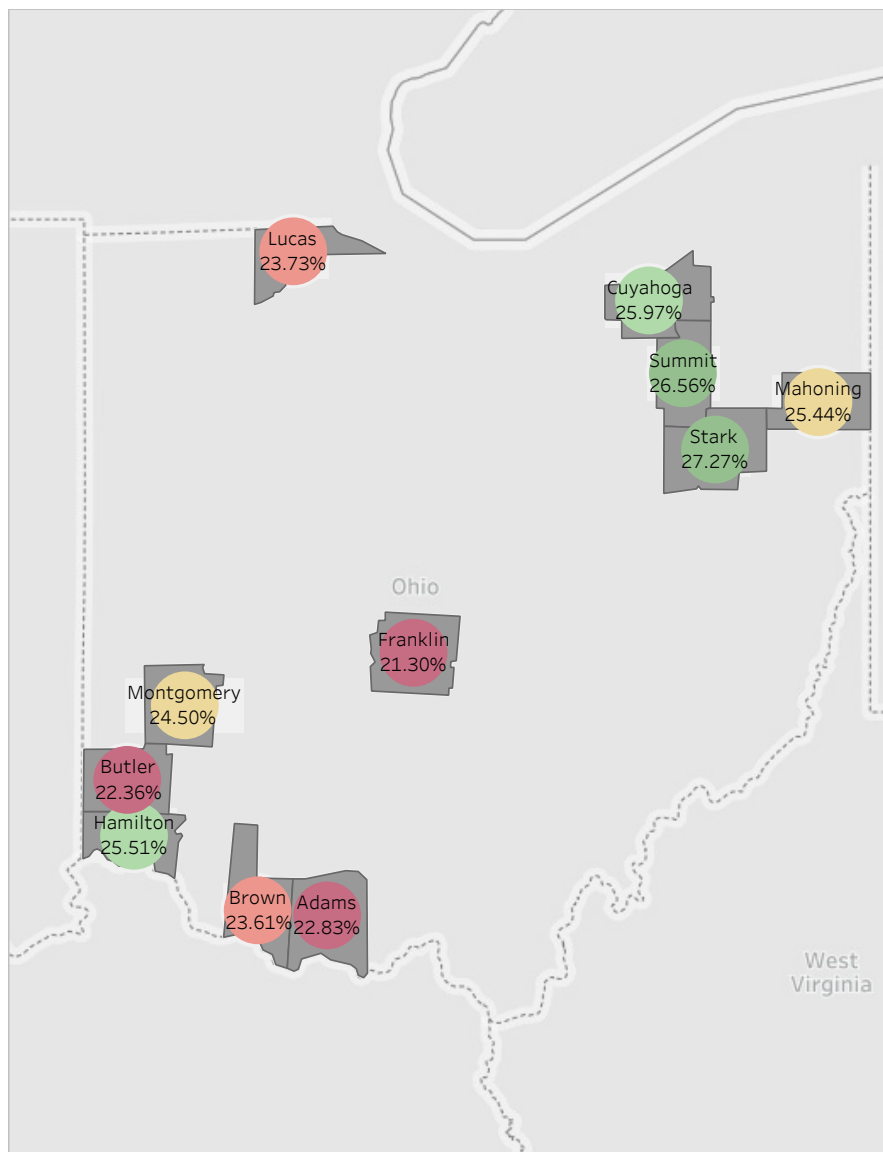


**Stark**



## Mahoning County - Contraceptive Care Including LARCs (%)

### OEI Quintiles | CY 2015-2017

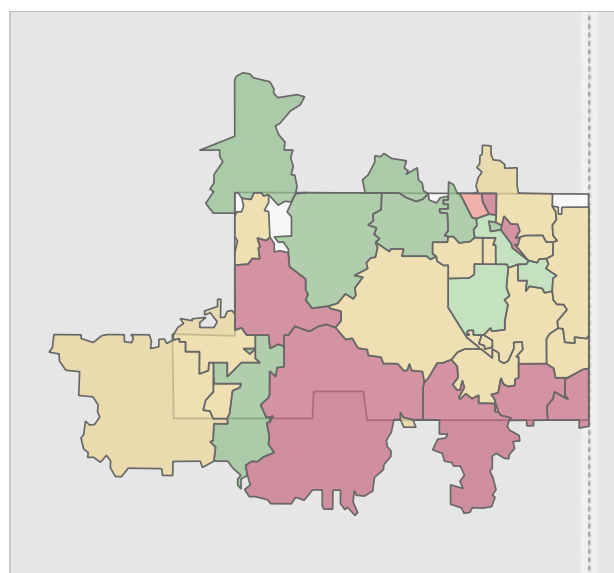


#### Map Measure Ranges

- >= 0 < 22.839%
- >= 22.839% < 23.744%
- >= 23.744% < 25.505%
- >= 25.505% < 26.550%
- >= 26.550%

A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

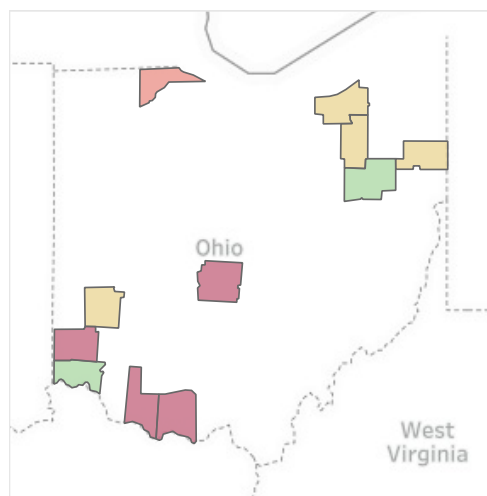
Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



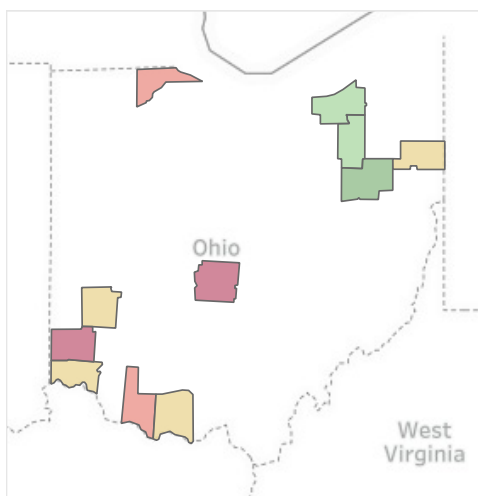
## Mahoning County - Contraceptive Care Including LARCs (%)

### OEI Quintiles | CY 2015-2017 Yearly Comparison

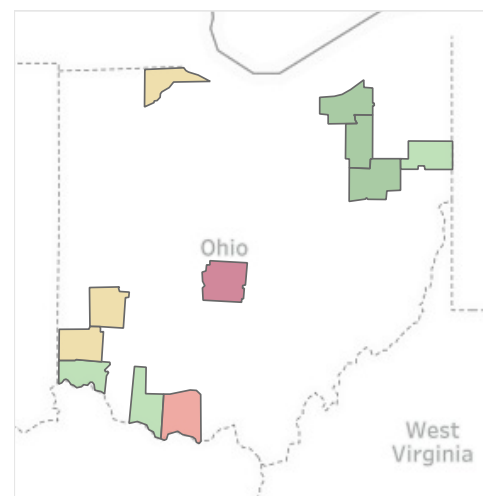
CY 2015



CY 2016



CY 2017

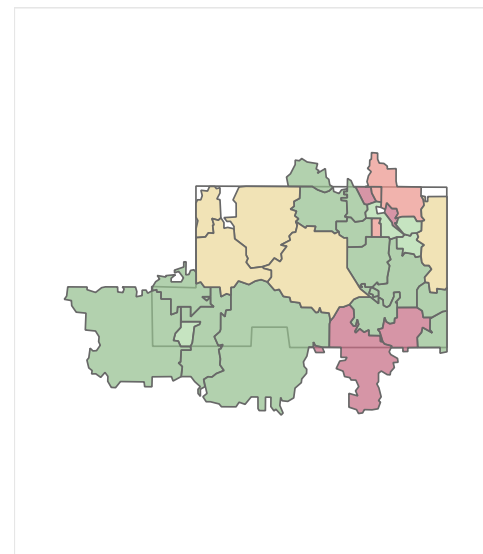
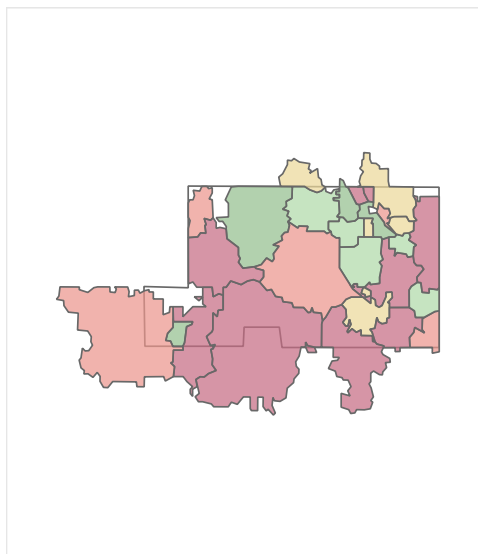
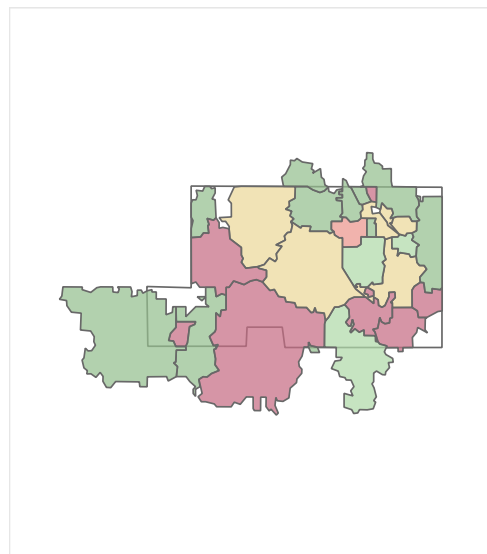


#### Map Measure Ranges

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- $\geq 22.839\% < 23.744\%$
- $\geq 23.744\% < 25.505\%$
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A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

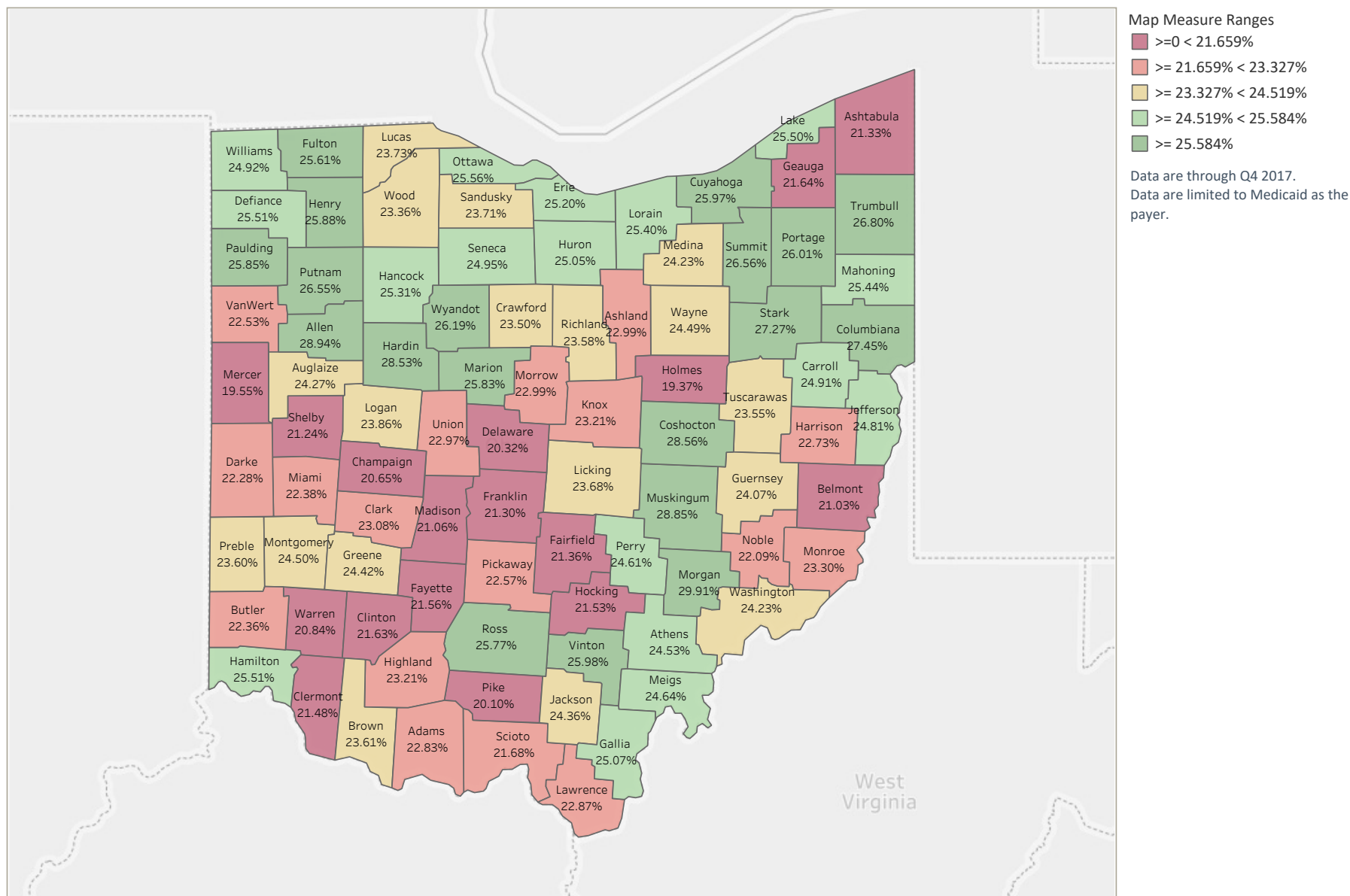
Data are through Q4 2017.  
Data are limited to Medicaid as the payer.





## Statewide - Contraceptive Care Including LARCs (%)

### Overall Quintiles by County | CY 2015 - 2017

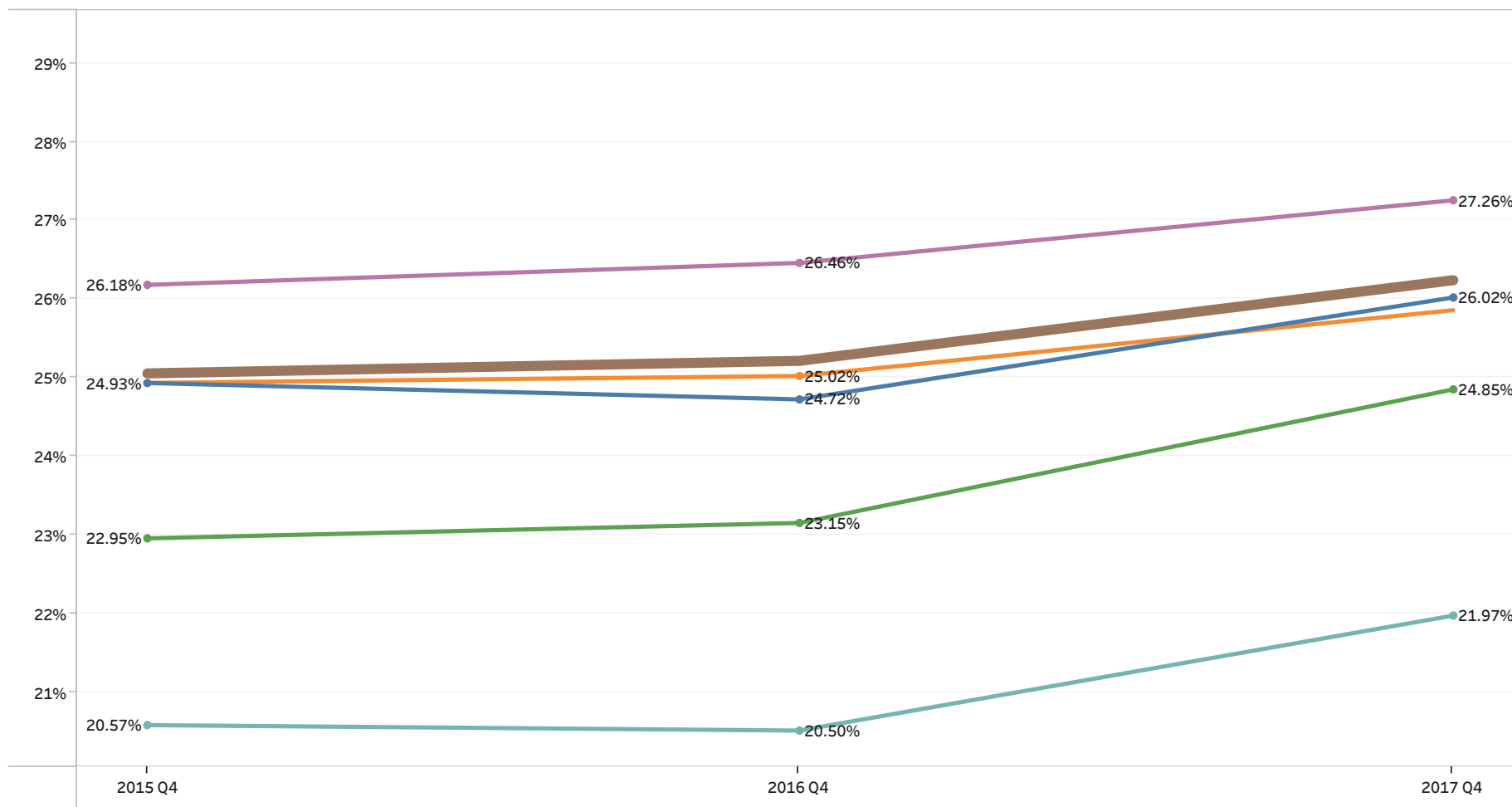




### Yearly Trends by MCP - Contraceptive Care Including LARCs (%) All OEI Counties | CY 2015-2017

Medicaid Plan

All Plans Buckeye CareSource Molina Paramount United



Data are through Q4 2017.

Data are limited to Medicaid as the payer.



## Adolescent Wellcare Visits (%)

## Mahoning, Butler, Stark Counties - Adolescent Wellcare Visits (%)

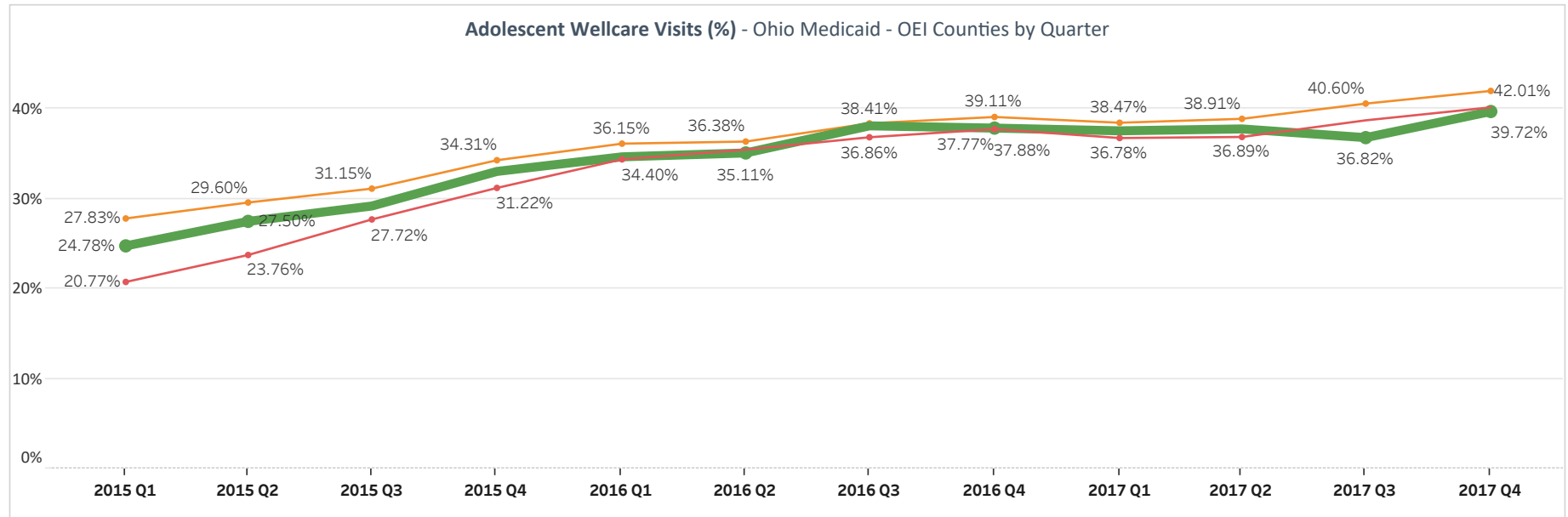
### Trends by Quarter | CY 2015-2017

Counties

Butler

Mahoning

Stark



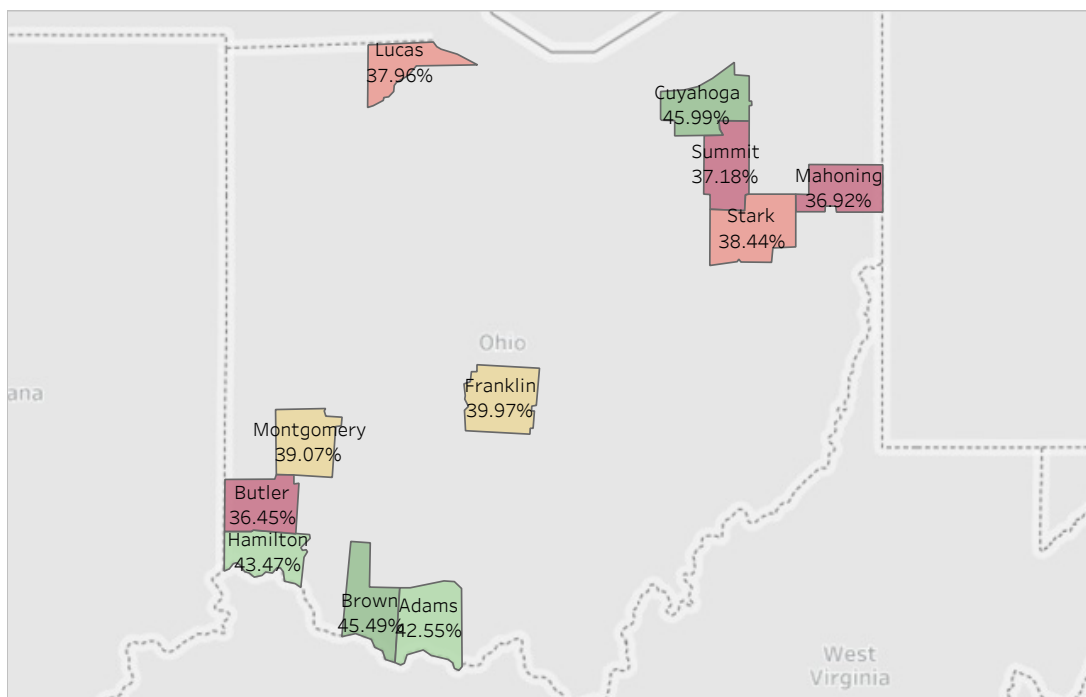
County	Adolescent Wellcare Visits Aggregate Rate Q1 2015 - Q4 2017	Adolescent Wellcare Visits Current Rate Q1 2017 - Q4 2017	Annual Target for Real Impact*
Butler	36.45%	40.19%	From 2709 to 2777 Women
<b>Mahoning</b>	36.92%	39.72%	From 2282 to 2345 Women
Stark	38.44%	42.01%	From 2907 to 2976 Women

Note: Statistical significance test is based off of a 95% confidence level using the binomial test of proportions. The baseline rate (a rate for the entire time period from Q1 2015 – Q4 2017) is compared to the annual target numerator, denominator, and rate for future data to determine a change that would result in p-value less than 0.05, resulting in statistical significance at a 95% confidence level. In order to normalize and account for any quarterly variation, the size of the denominator for the target measure is based off of an average quarterly calculation of the denominators from Q1 2015 through Q4 2017. The calculation to determine the annual target therefore assumes an average size in the denominator for upcoming four quarters of data.



## Mahoning, Butler, Stark Counties - Adolescent Wellcare Visits (%)

### OEI County Quintiles | CY 2015-2017



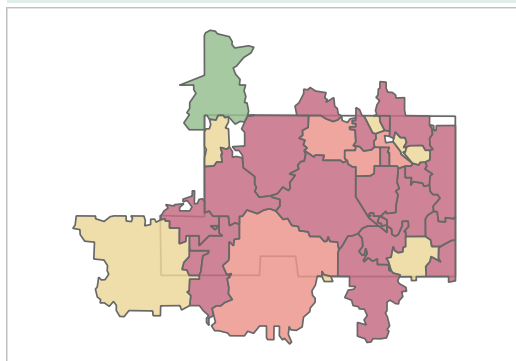
#### Map Measure Ranges

- >=0 < 37.188%
- >= 37.188% < 38.455%
- >= 38.455% < 42.543%
- >= 42.543% < 45.478%
- >= 45.478%

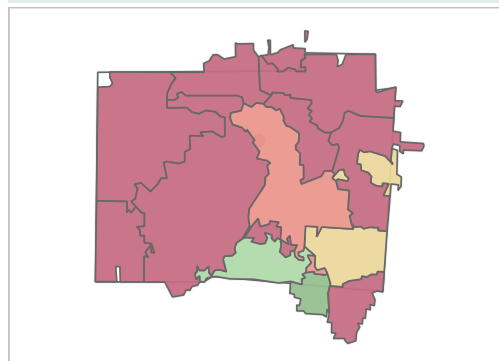
A zip code (ZCA) must have a numerator of at least 5 and a denominator of at least 30 otherwise the ZCA is blank on map for privacy.

Data are through Q4 2017.  
Data are limited to Medicaid as the payer.

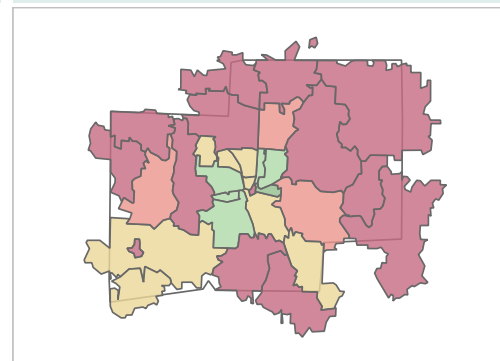
Mahoning



Butler

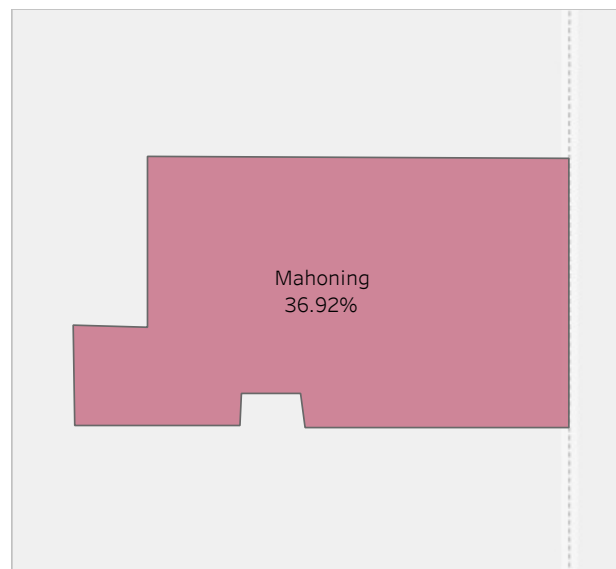
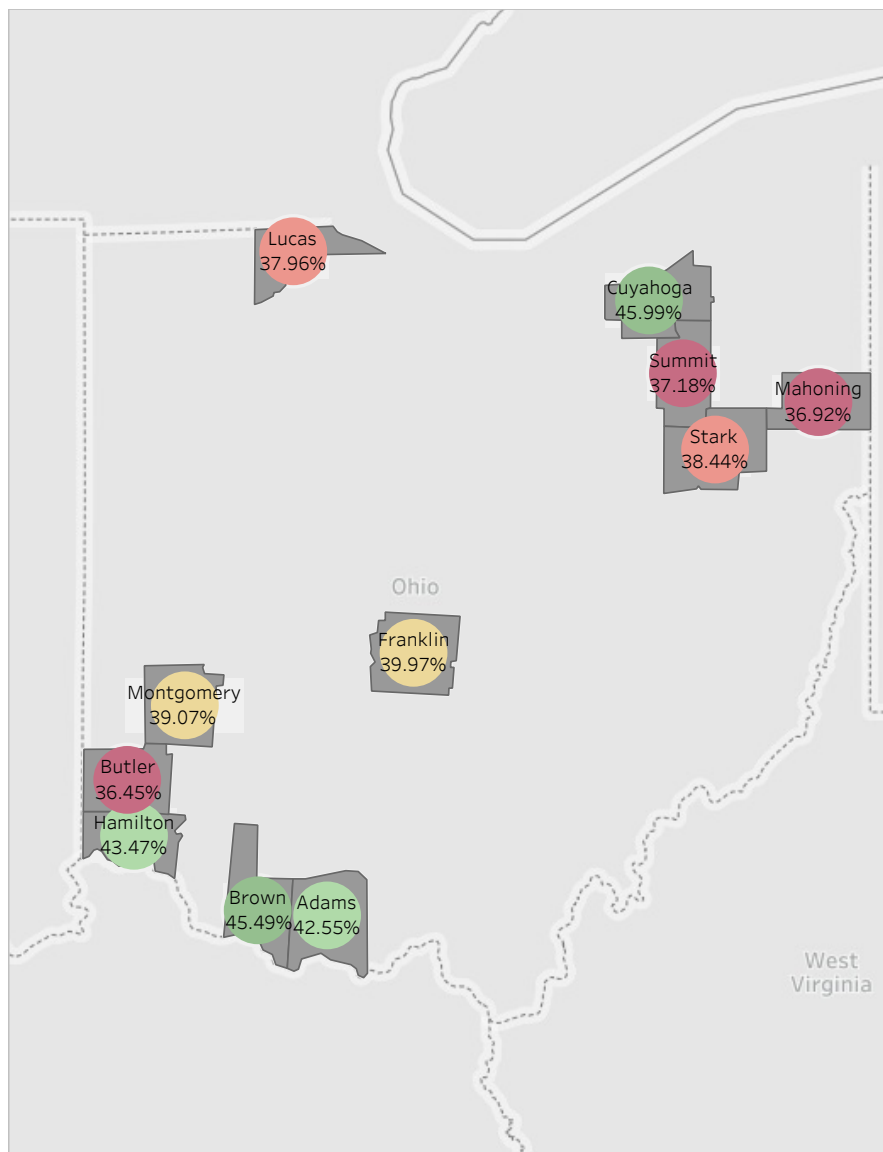


Stark



## Mahoning County - Adolescent Wellcare Visits (%)

### OEI Quintiles | CY 2015-2017

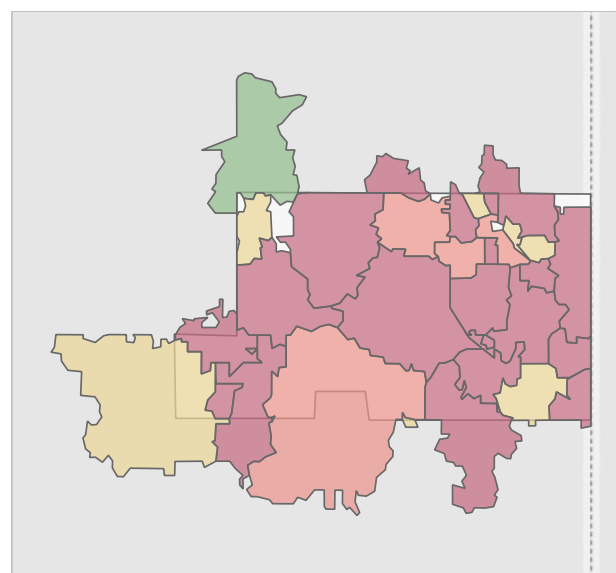


#### Map Measure Ranges

- >= 0 < 37.188%
- >= 37.188% < 38.455%
- >= 38.455% < 42.543%
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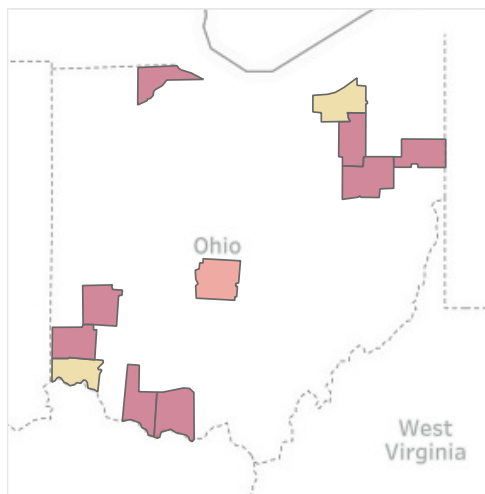
Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



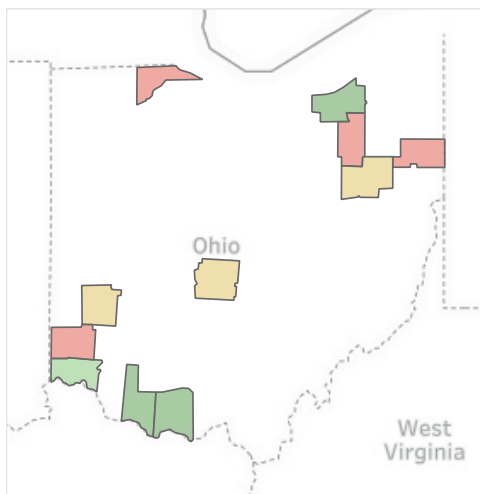
## Mahoning County - Adolescent Wellcare Visits (%)

### OEI Quintiles | CY 2015-2017 Yearly Comparison

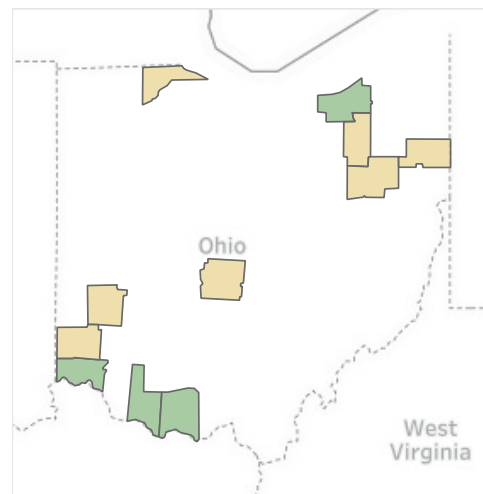
CY 2015



CY 2016



CY 2017

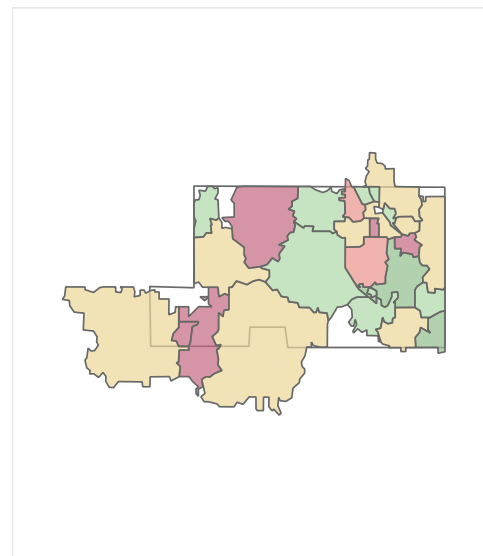
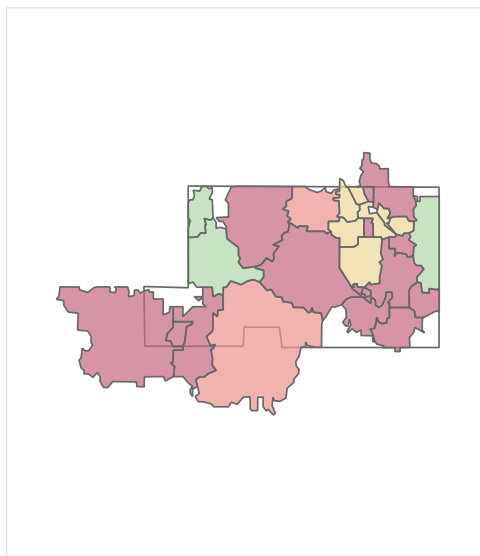
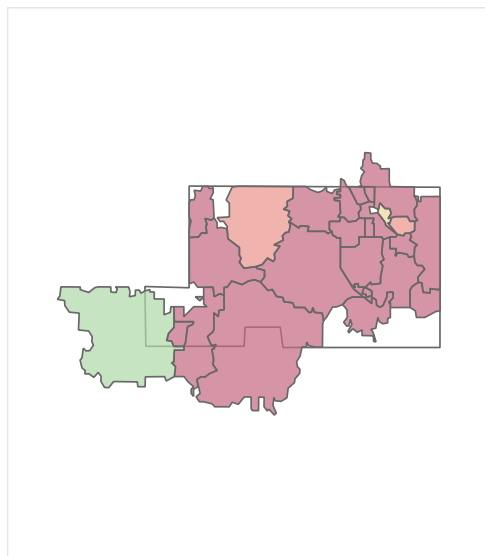


#### Map Measure Ranges

- $\geq 0 < 37.188\%$
- $\geq 37.188\% < 38.455\%$
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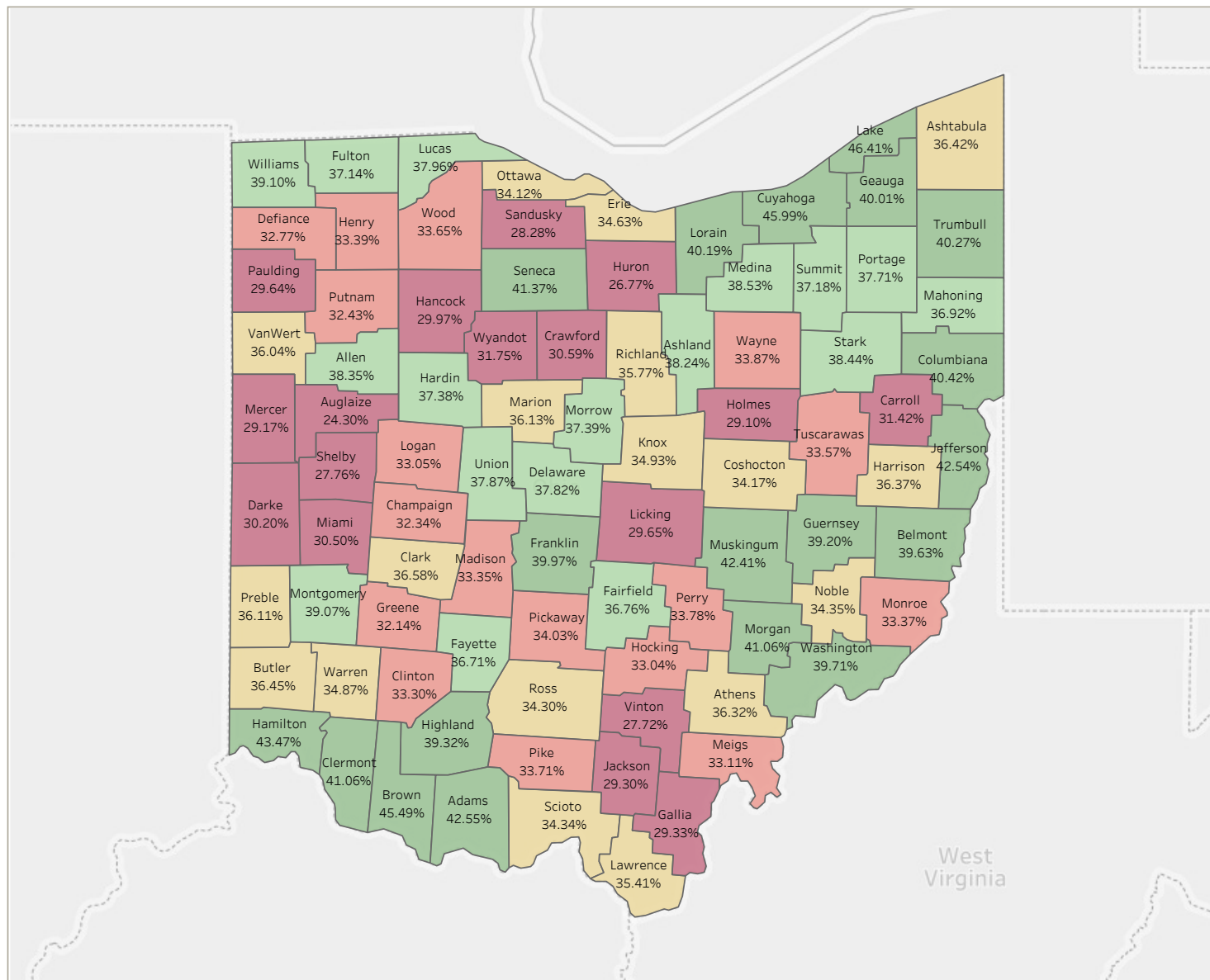
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Data are through Q4 2017.  
Data are limited to Medicaid as the payer.



## Statewide - Adolescent Wellcare Visits (%)

### Overall Quintiles by County | CY 2015 - 2017



#### Map Measure Ranges

- >=0 < 31.945%
- >= 31.945% < 34.078%
- >= 34.078% < 36.642%
- >= 36.642% < 39.146%
- >= 39.146%

Data are through Q4 2017.

Data are limited to Medicaid as the payer.





### Yearly Trends by MCP - Adolescent Wellcare Visits (%) All OEI Counties | CY 2015-2017

Medicaid Plan  
All Plans

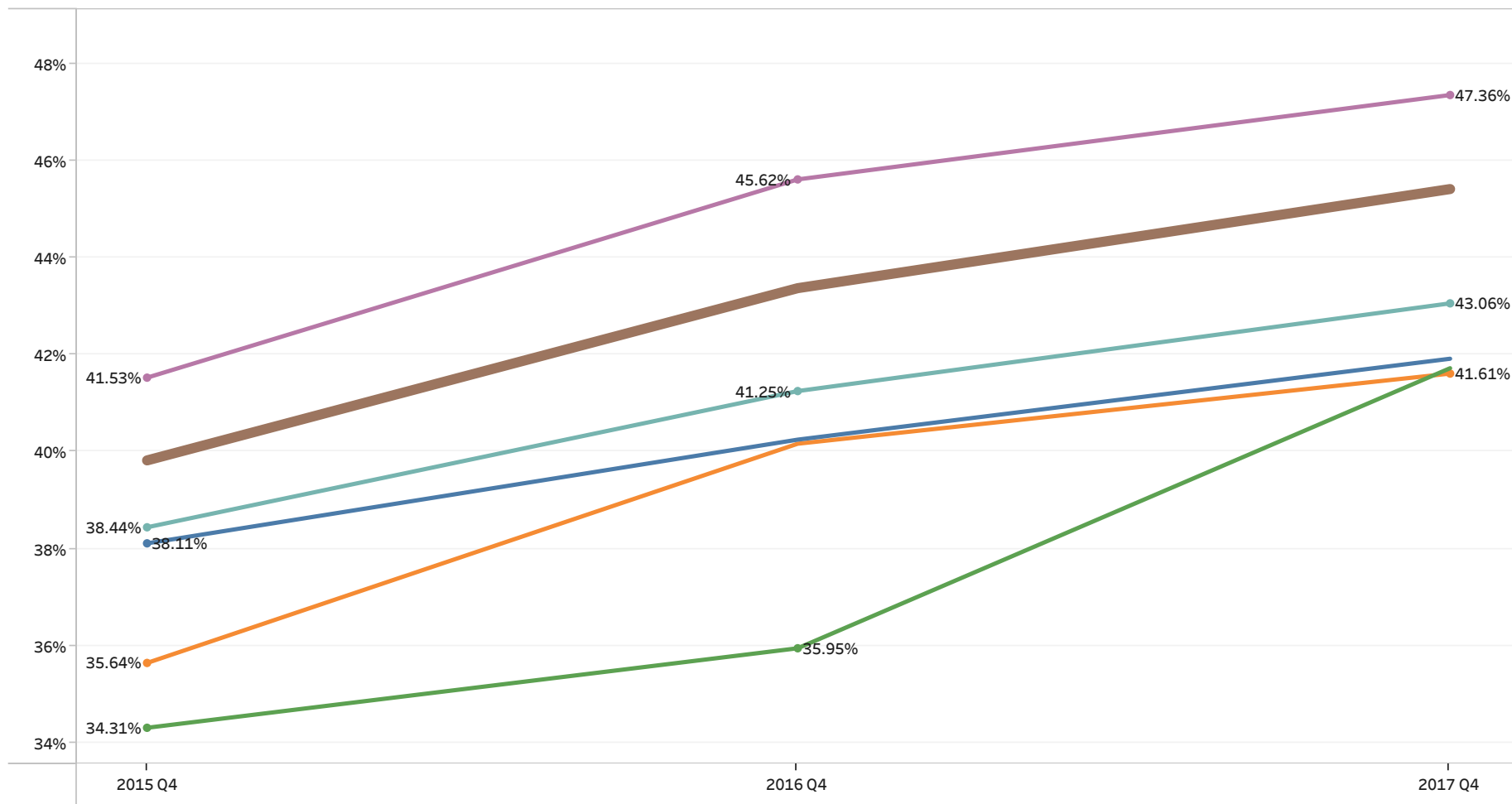
Buckeye

CareSource

Molina

Paramount

United



Data are through Q4 2017.

Data are limited to Medicaid as the payer.