

Analyze patient data  
To  
Identify patterns in the  
utilization of healthcare  
services for chronic pain



- Overview
- Analysis
- Conclusion

# Overview

# Overview

The data is run on all Medicaid recipients during a 12 month period.

Chronic conditions are identified through use of services and pharmacy.

If a Medicaid enrollee had a chronic health condition outside of the service period, it would not be reflected in the data.

Any condition where the number of unique beneficiaries was 20 or less were suppressed from the data file.



# Analysis

# Dataset Summary

AHIPPS Medicaid Chronic Admissions and ER

Time Period : Beginning 2012

Granularity Hospital

Data Frequency Annually

Number of records:17074

Number of columns:10



**Data Dictionary for Medicaid Chronic Conditions, Inpatient Admissions and Emergency Room Visits by County: Beginning 2012**

DE #	Data Element Name	Type (Character or	Additional Comments
1	Year	Numeric	
2	Primary County	Character	The county where the majority of the zip code resides, if the zip code crosses more than one county.
3	Dual Eligible	Character	The classification of either dually eligible for Medicaid and Medicare ("Dual") or not dually eligible ("Non-Dual")
4	Major Diagnostic Category	Character	The 3M Clinical Risk Group chronic health Major Diagnostic Category (MDC) Description. See table below for the MDC included within the data file.
5	Episode Disease Category	Character	The 3M Clinical Risk Group chronic health Episode Disease Category (EDC) Description. See table below for the EDC included within the data file.
6	Beneficiaries with Condition	Numeric	The number of Medicaid beneficiaries that meet the MDC and EDC classification criteria. All condition categories 20 or less recipients have been suppressed from reporting.
7	Beneficiaries with Admissions	Numeric	The unique number of Medicaid beneficiaries that meet the County, Dual Status, MDC and EDC classification that had one or more inpatient admissions (for any reason, including newborn and maternity).
8	Total Inpatient Admissions	Numeric	The total number of inpatient admissions for beneficiaries meeting the County, Dual Status, MDC and EDC classification.
9	Beneficiaries with ER Visits	Numeric	The unique number of Medicaid beneficiaries that meet the County, Dual Status, MDC and EDC classification that had one or more Emergency Room (ER) visits (for any reason).
10	Total ER Visits	Numeric	The total number of ER visits for beneficiaries meeting the County, Dual Status, MDC and EDC classification.

**Data Dictionary  
for  
each  
column**

# columns we will use

Year: 2012-2013-2014

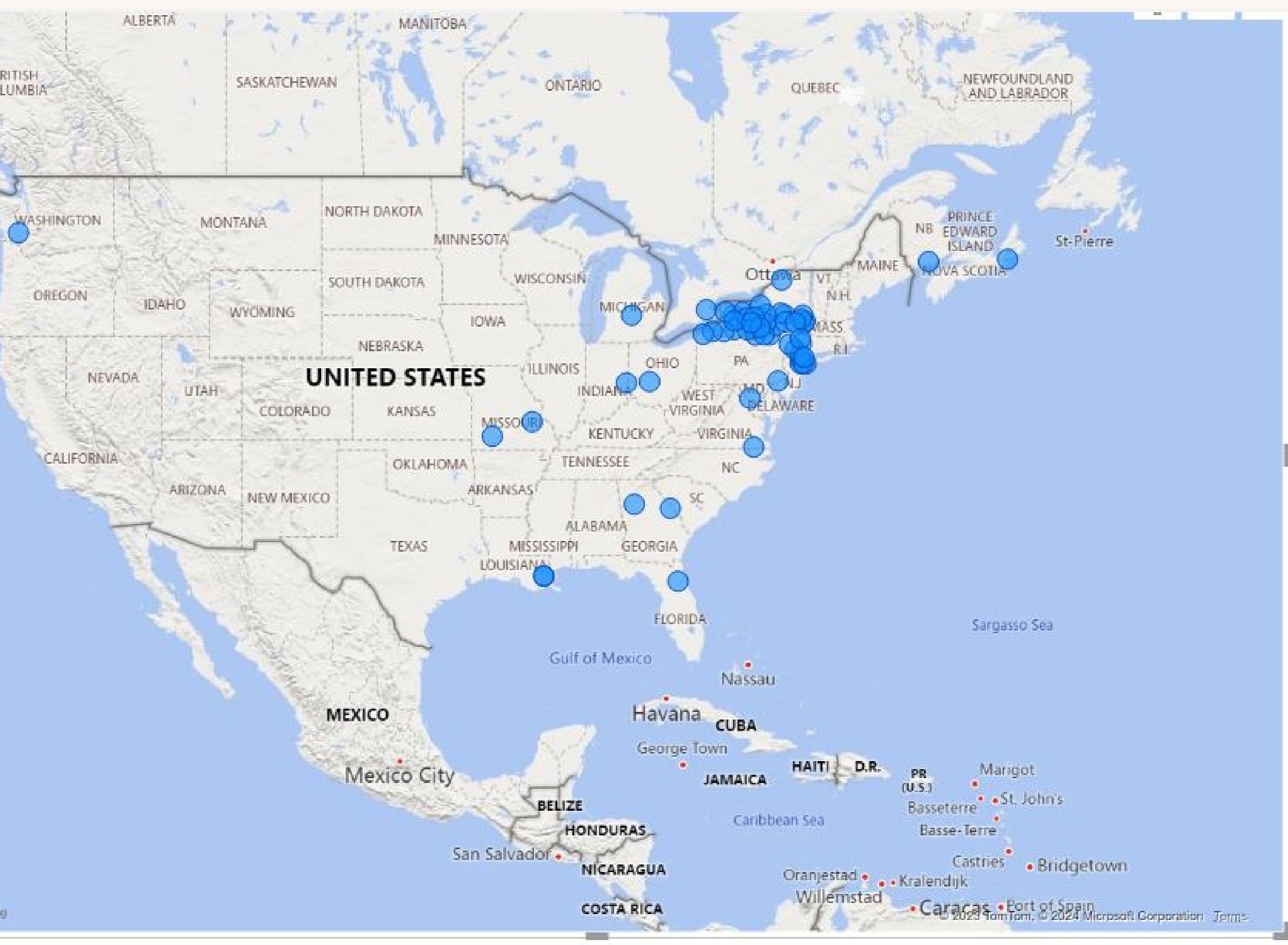
Primary County: different counties

Major Diagnostic Category: Categories for chronic diseases

Beneficiaries with ER visits: members who attended ER

Dual Eligibility: “Dual” means Medicare and Medicaid

“Non-Dual” means Medicaid only

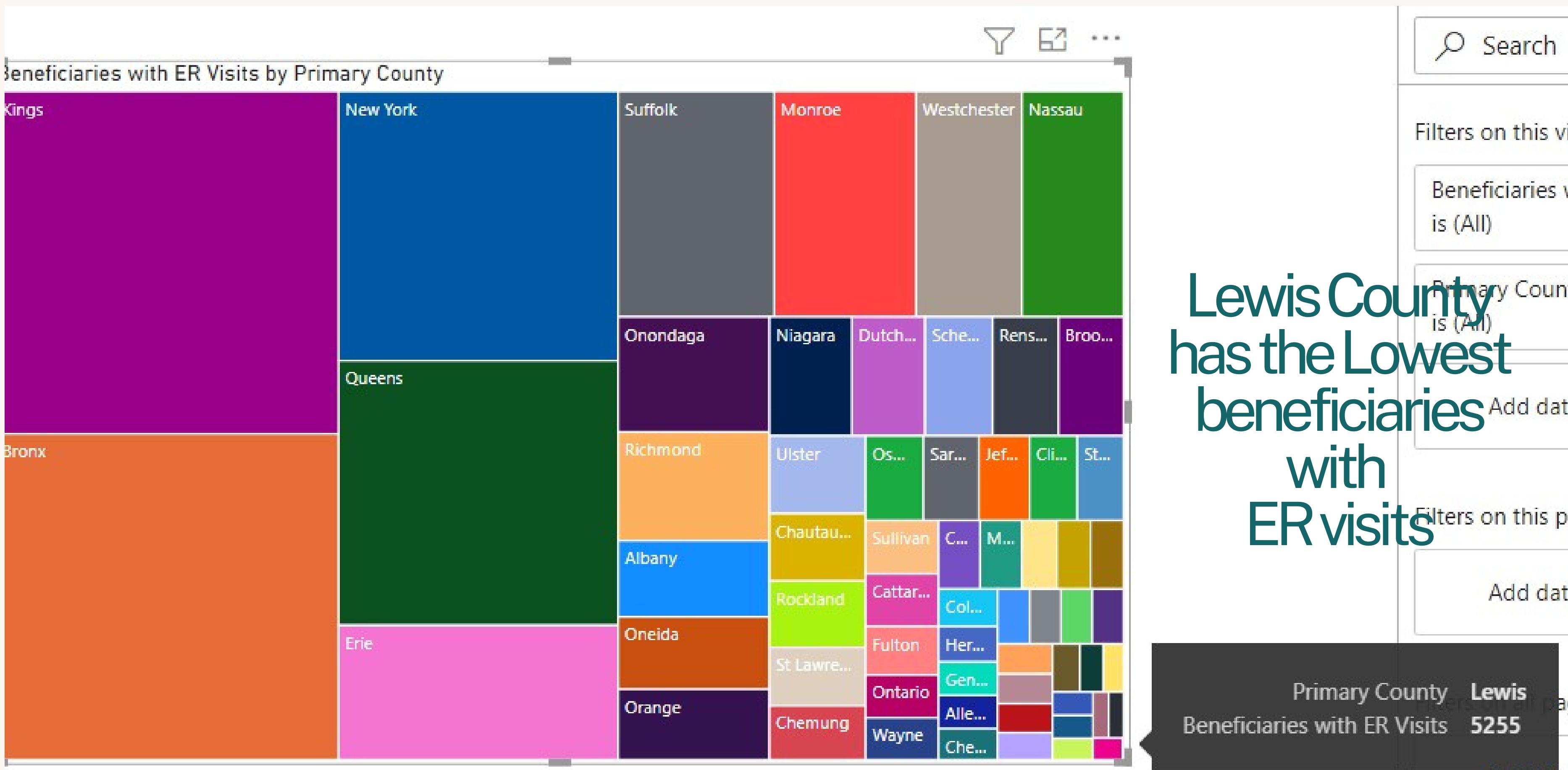


# Different Counties Locations on Map that The Dataset covers

## with ER Visits by Primary County



Kings County  
has the  
largest  
beneficiaries  
with  
ER visits

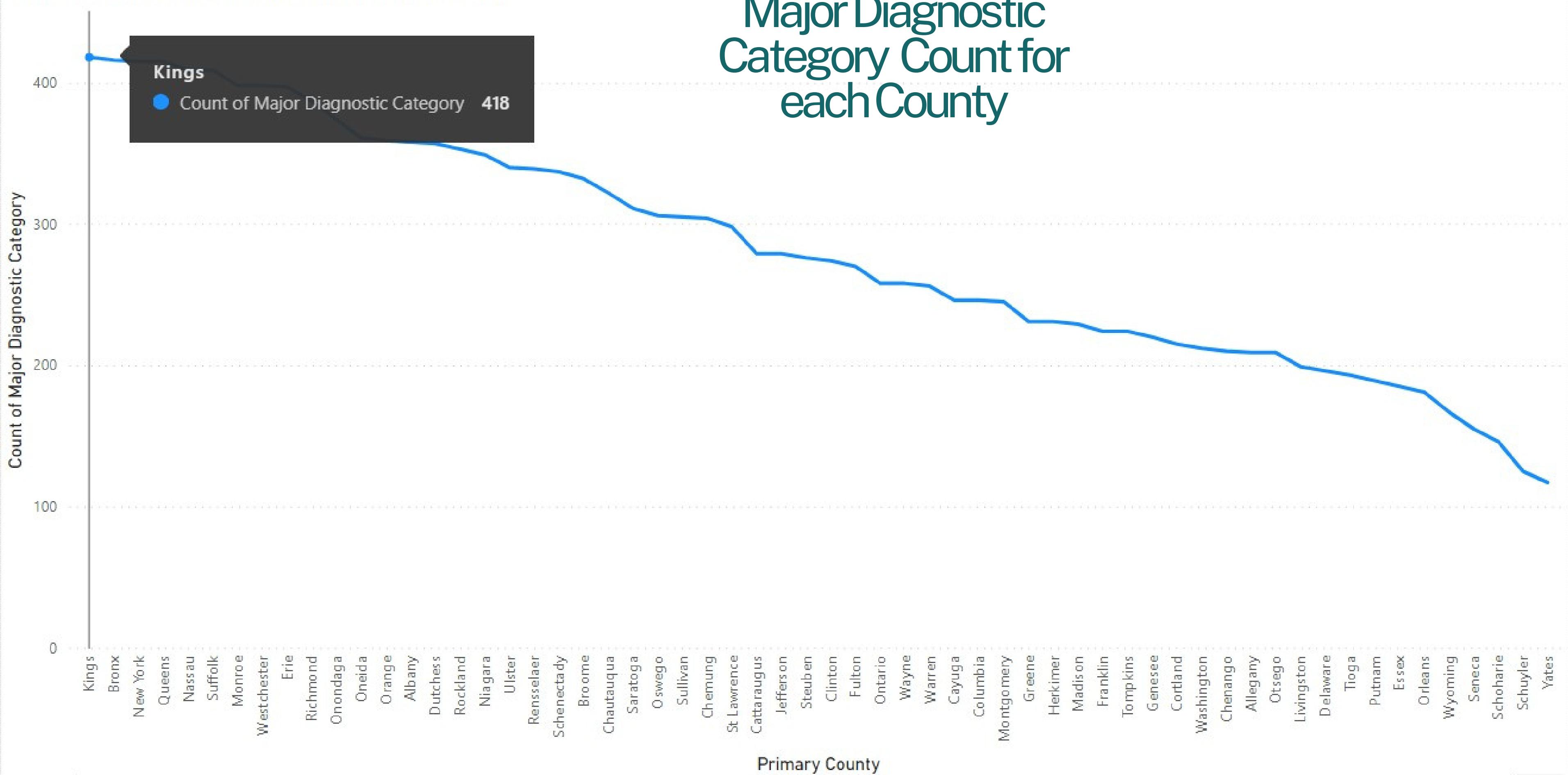


# Major Diagnostic Categories

The table below shows the Major Diagnostic and Episode Disease Categories contained within this data [file](#).

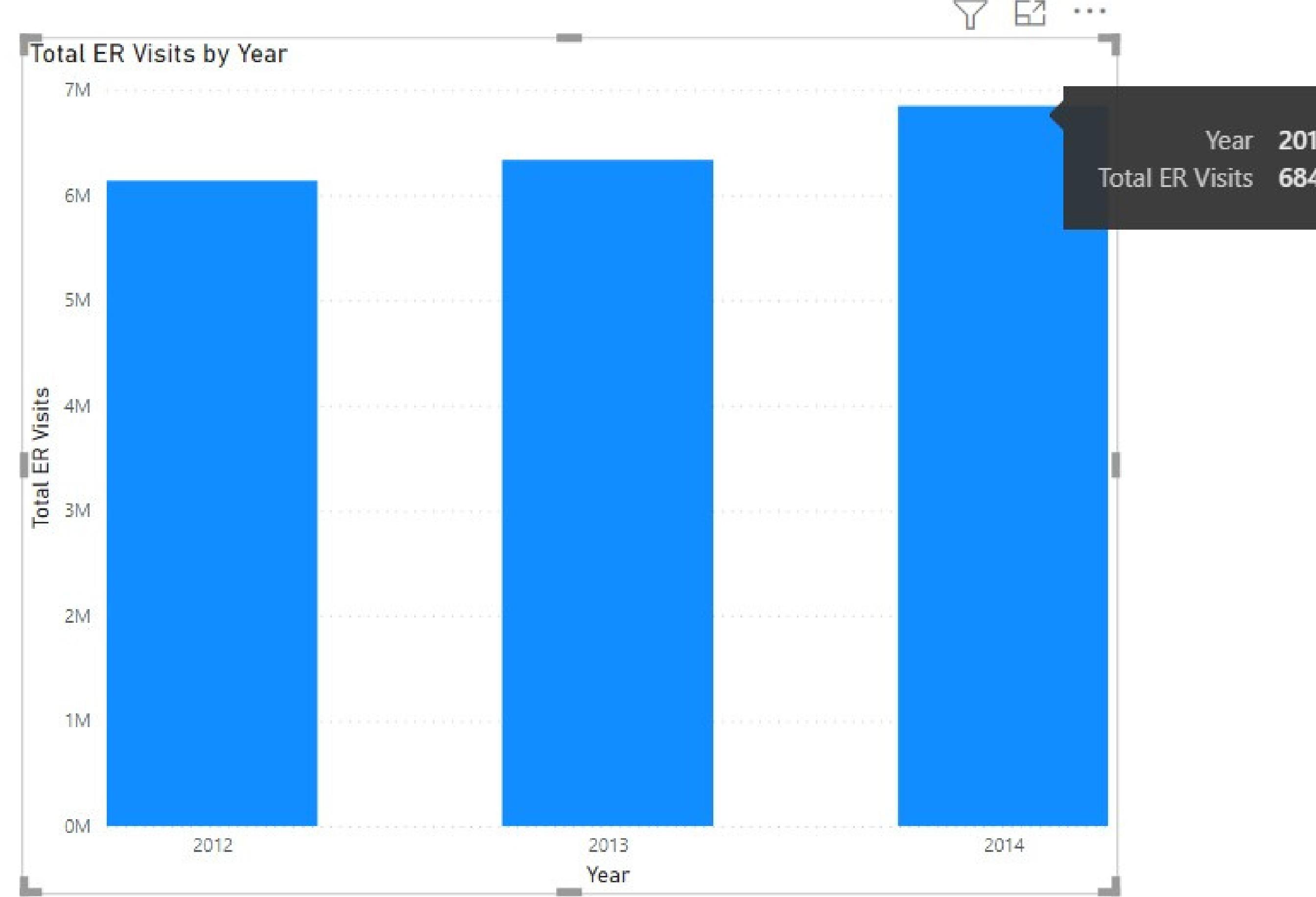
MDC Description	EDC Description
Diabetes Mellitus	Diabetes
Diabetes Mellitus	Diabetes - Juvenile Onset
Diabetes Mellitus	Diabetes with Circulatory Complication
Diabetes Mellitus	Diabetic Coma
Diabetes Mellitus	Diabetic Ketoacidosis
Diabetes Mellitus	Diabetic Nephropathy
Diabetes Mellitus	Diabetic Neuropathy
Diabetes Mellitus	Diabetic Retinopathy
Diabetes Mellitus	Other Diabetic Complications
Diseases And Disorders Of The Cardiovascular System	Angina and Ischemic Heart Disease
Diseases And Disorders Of The Cardiovascular System	Atrial Fibrillation

Count of Major Diagnostic Category by Primary County

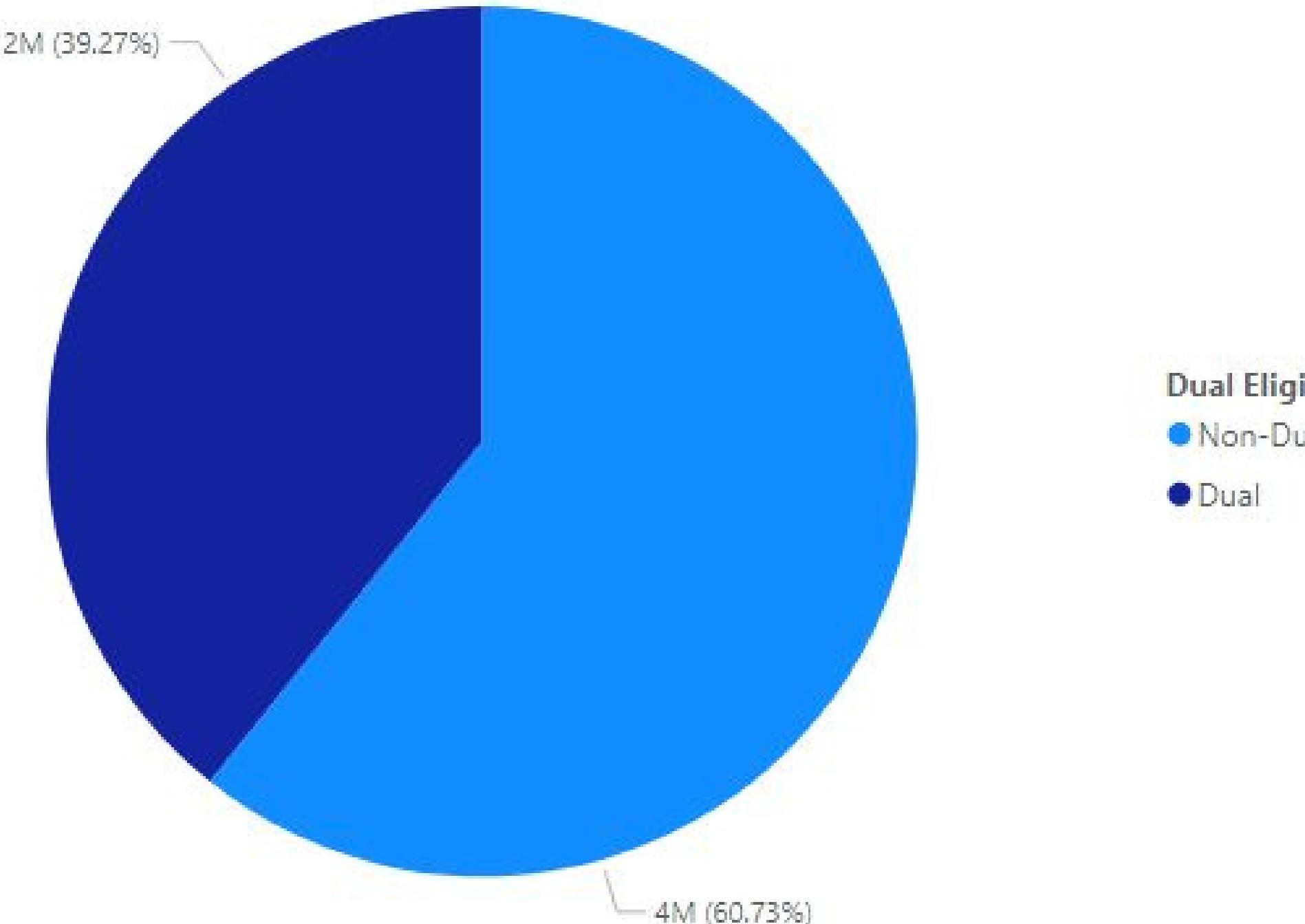


# Major Diagnostic Category Count for each County

# Total visits to ER per year for chronic disease



## Beneficiaries with Admissions by Dual Eligible



# Dual/Non-Dual Beneficiaries with Admission

# Basic chronic diseases category

## Major Diagnostic Category

Diabetes Mellitus

Diseases And Disorders Of The Cardiovascular System

Diseases And Disorders Of The Respiratory System

HIV Infection

Mental Diseases And Disorders

Newborns And Other Neonates

Substance Abuse

# Basic chronic diseases category by size



Major Diagnostic Category ● Diabetes ... ● Disease... ● Disease... ● HIV Infe... ● Mental ... ● Newbor... ● Substan...

10K

8K

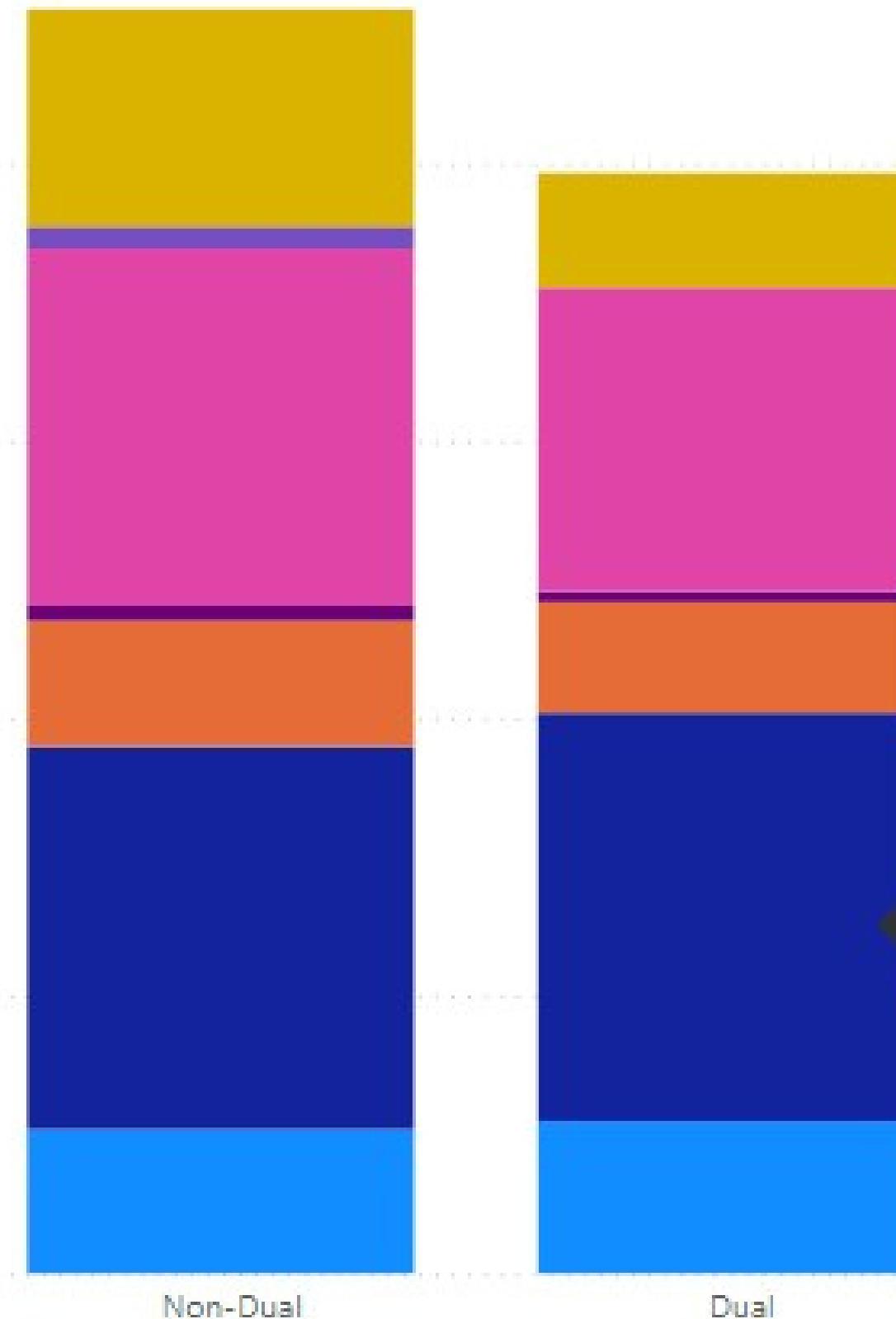
6K

4K

2K

0K

Count of Major Diagnostic Category



Count of major Diagnostic Category within two groups dual(Medicare and Medicare) and Non-dual eligible beneficiaries

Dual Eligible  
Major Diagnostic Category

Count of Major Diagnostic Category 2946

Dual  
Diseases And Disorders Of The System



Filters

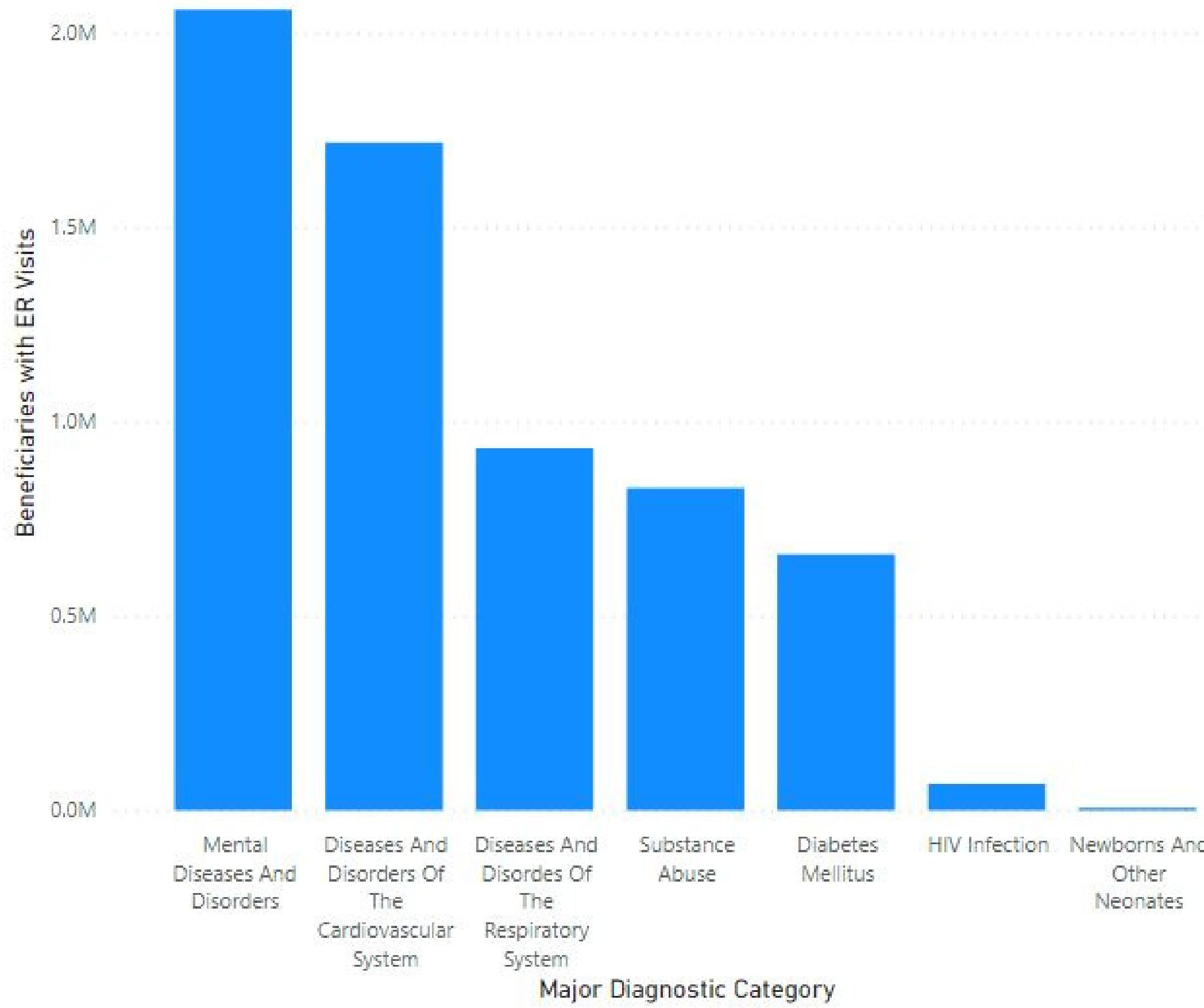
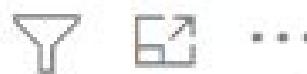
Count  
is (All)

Dual  
is (All)

Major  
is (All)

Filters

## Beneficiaries with ER Visits by Major Diagnostic Category



Major Diagnostic Category
Diabetes Mellitus
Diseases And Disorders Of The Cardiovascular System
Diseases And Disorders Of The Respiratory System
HIV Infection
Mental Diseases And Disorders
Newborns And Other Neonates
Substance Abuse

# Conclusion

**01.**

**Major Chronic Diseases that visited ER:**

1. Diabetes Mellitus
2. Diseases and disorders of the cardiovascular system
3. Diseases and disorders of the Respiratory system
4. HIV infection
5. Mental Disease disorder
6. Newborn and other neonates
7. Substance abuse

**02.**

The highest count of disease visited ER is mental diseases and least is Newborn and other neonates

**03.**

Among all counties covered in the dataset Lewis County has the Lowest beneficiaries with ER visits and Kings is the largest

**04.**

Beneficiaries with admission to ER by Dual Eligibility is about 60% while non dual is about 40%

**05.**

Total visits to ER per year for chronic disease on 2014 is the largest among 2012 and 2013

**Thank You**

# References

[https://health.data.ny.gov/Health/AHI-PPS-Medicaid-Chronic-Admissions-and-ER/3c47-tvid/about\\_data](https://health.data.ny.gov/Health/AHI-PPS-Medicaid-Chronic-Admissions-and-ER/3c47-tvid/about_data)