



# Measuring Mental Health Costs

Insights that will blow your mind!



# Mental Health Insights

Costs and trends we see  
Hidden insights  
What we can do with data

Enriched data, enriched insights  
Applying an SDoH lens



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# Mental Health Analytics

Mental health is an important part of total wellbeing

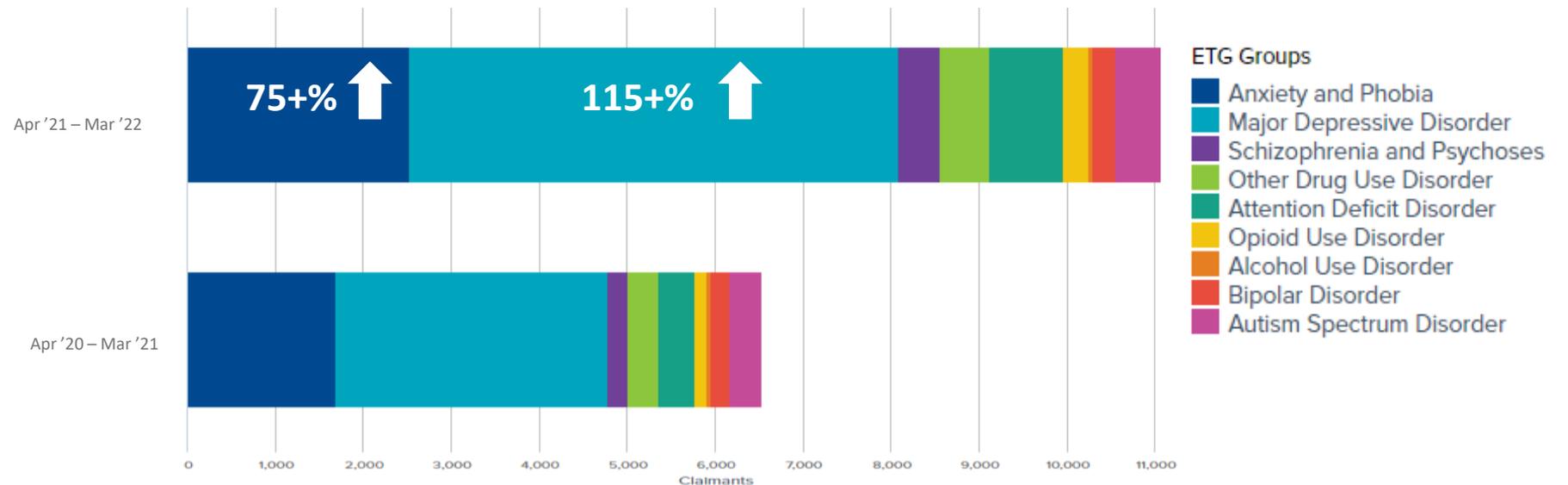
# We all know...

*We leverage data to measure utilization and visualize trends, identify leading indicators...*

Time Period	Jan '19-Dec '19	Jan '20-Dec '20	Jan '21-Dec '21
Member Count	192,589	235,318	230,784
MH/SUD Claimants	61,157	78,990	77,960
% of Claimants with MH/SUD	31.8%	33.6%	33.8%

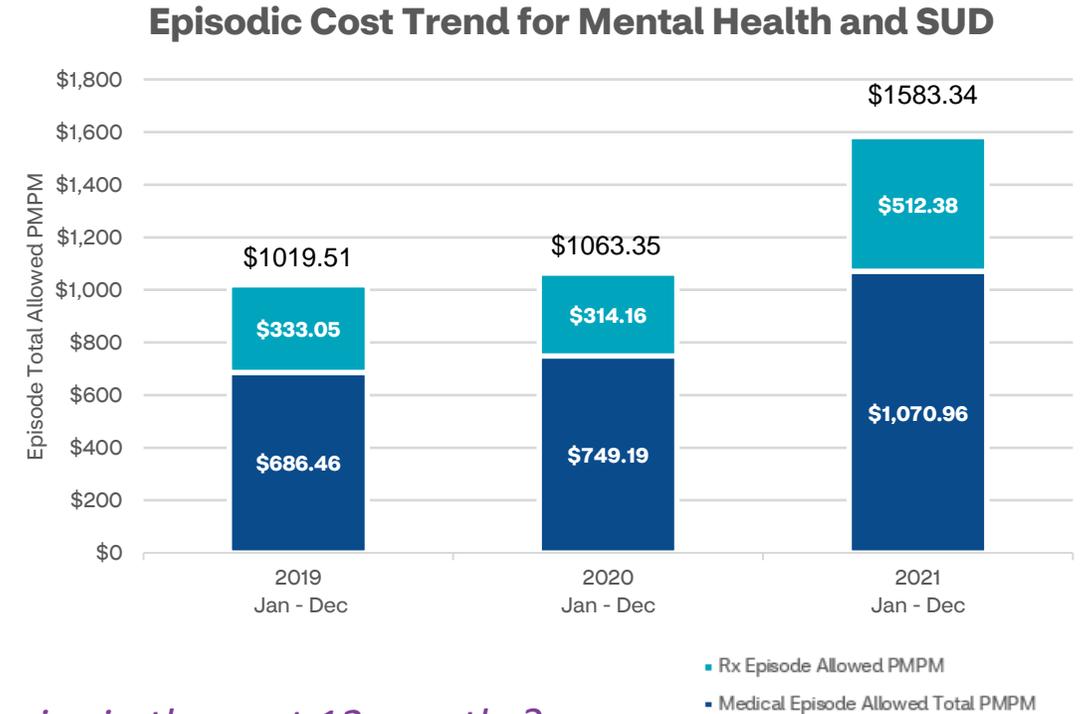
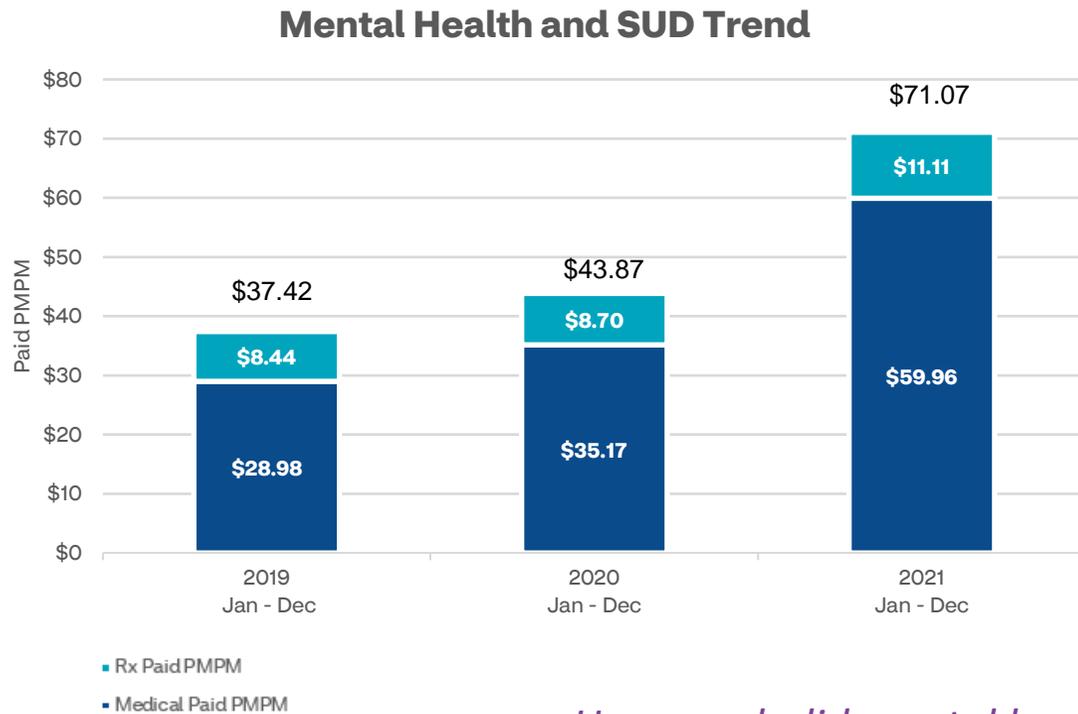
➔ **1/3**  
of the population utilize MH/SUD care

**Leading indicator:**  
*What are the trends in new (or 1<sup>st</sup> time) diagnoses?*



# UN-hidden costs of Mental Health

*We measure costs and cost trends of Mental Health care*



*How much did mental health costs rise in the past 12 months?*

**Medical + Rx costs rose 62%**

**Total Episode costs rose 49%**

# UN-hidden costs of Mental Health

We use insights to optimize our networks

MH/ SUD - Network Utilization (Recent Year) Rolling 12 Incurred 01/2017 - 12/2021 3 Months Run-out

Claim Service Category	Inpatient Facility	Outpatient Facility	Professional
Network Indicator	Medical Services %	Medical Services %	Medical Services %
In-Network	78.9%	96.7%	92.3%
Out-of-Network	21.1%	3.3%	7.7%

20+% out of network

Who are these OON providers?



# Hidden Costs

*Our mental health impacts our physical health*

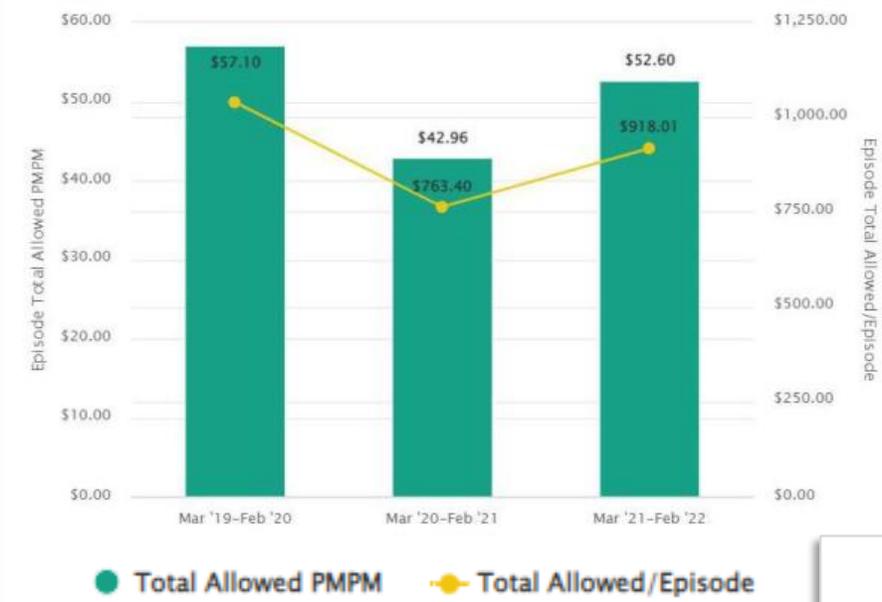
What's the annual cost to treat Hypertension?

Hypertensives WITHOUT a MH/SUD comorbidity: Cost Trends



What's the annual cost to treat Hypertension – ***when anxiety is a comorbidity?***

Hypertensives WITH Anxiety: Cost Trends



**+ \$6 PMPM in 2021**  
Hypertensives without vs. with anxiety

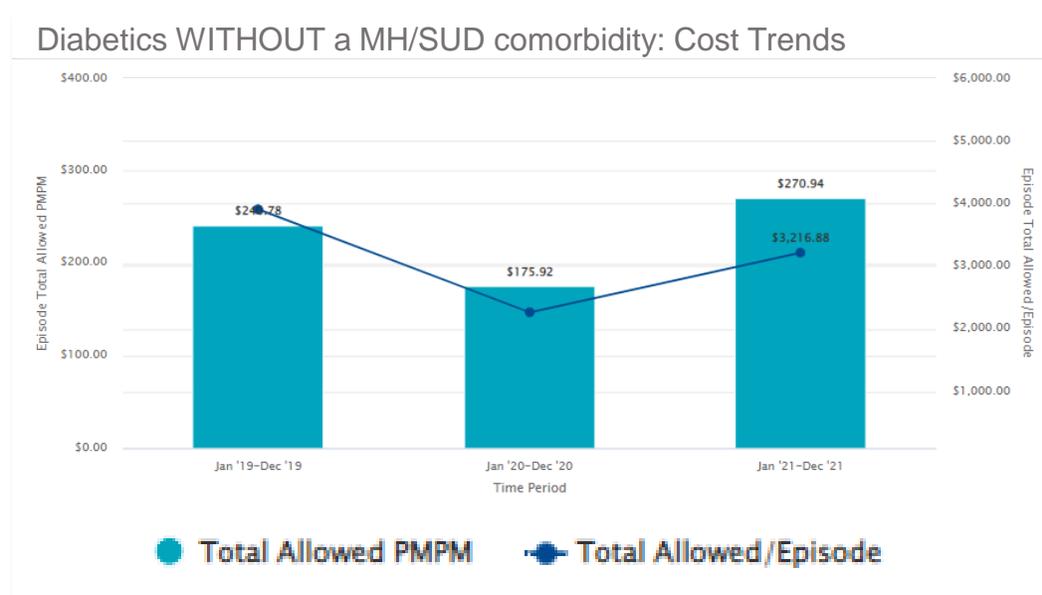
***For cost of Hypertension alone.***

**~30%**  
*members newly diagnosed w/ Anxiety were also diagnosed with HTN for the 1<sup>st</sup> time.*

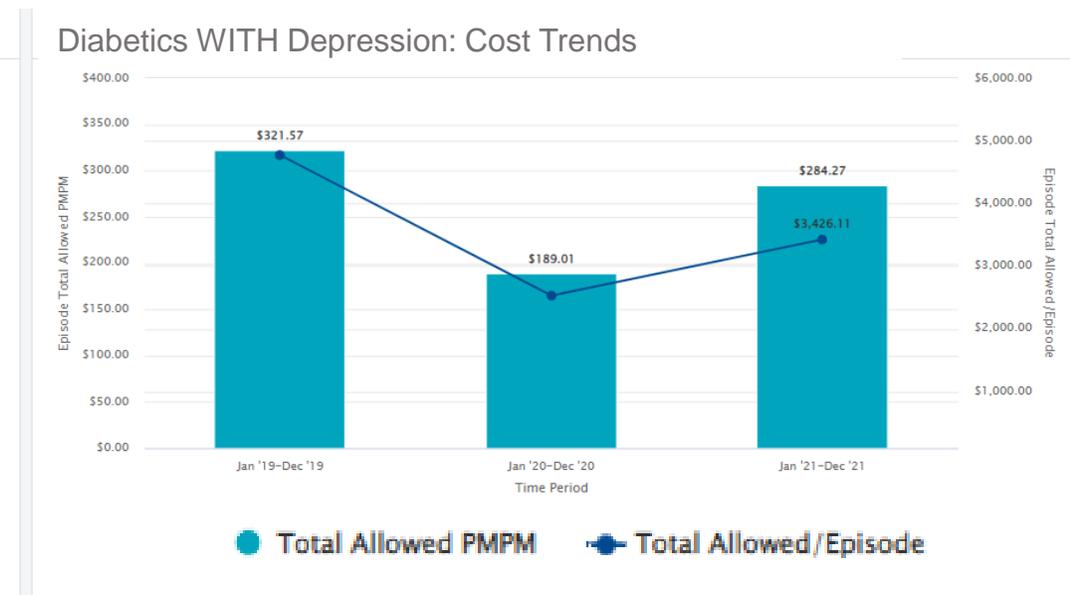
# Hidden Costs

*Our mental health impacts our physical health*

What's the annual cost to treat Diabetes?



What's the annual cost to treat Diabetes –  
**when depression is a comorbidity?**



**+ \$13 PMPM** in 2021

Diabetics without vs. with depression

***For cost of DIABETES alone.***

# Hidden Costs

*Our mental health impacts how we manage our wellbeing and our behaviors to care for ourselves*

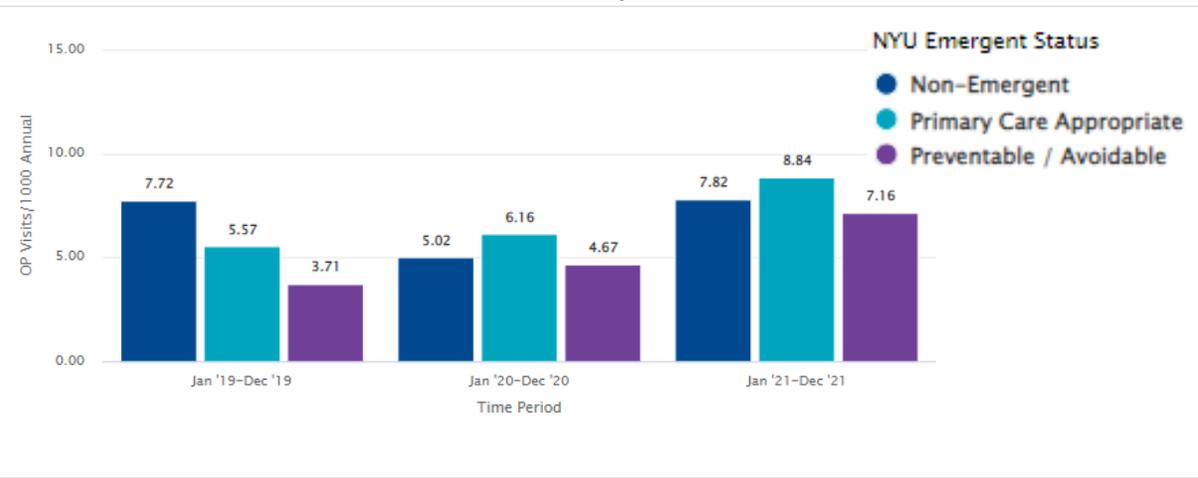
## 93 vs. 287

*Claimants/1000*

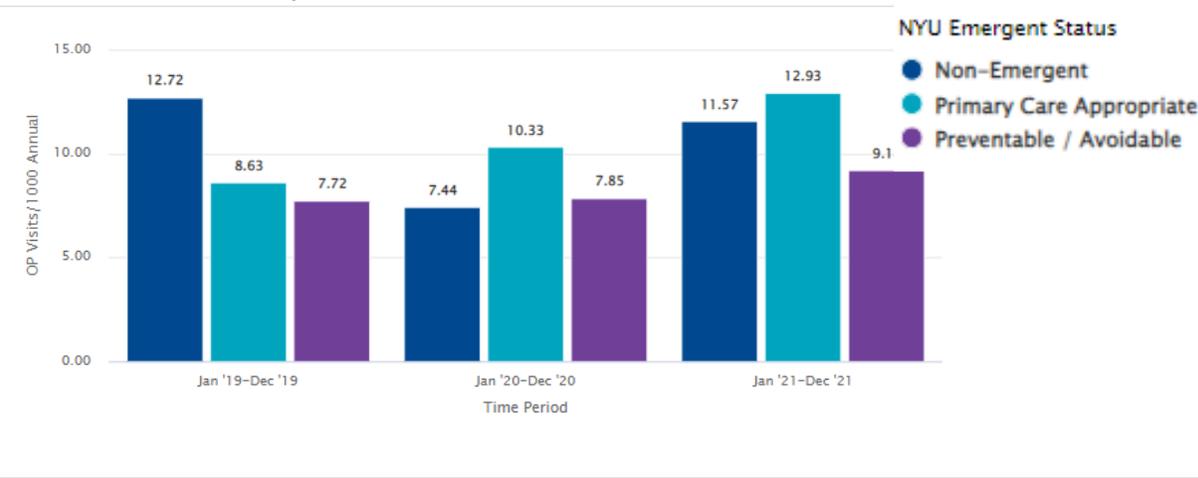
Diabetics NOT seen a PCP (or therapist) in 12+ months without vs. with depression

*Unsurprisingly, we see ER overuse*

Diabetics WITHOUT a MH/SUD comorbidity: Avoidable ER Visits for Diabetes



Diabetics WITH Depression: Avoidable ER Visits for Diabetes



**41% more (visits/1000), in 2021**  
**For unnecessary ER visits for DIABETES alone.**

# Hidden Costs

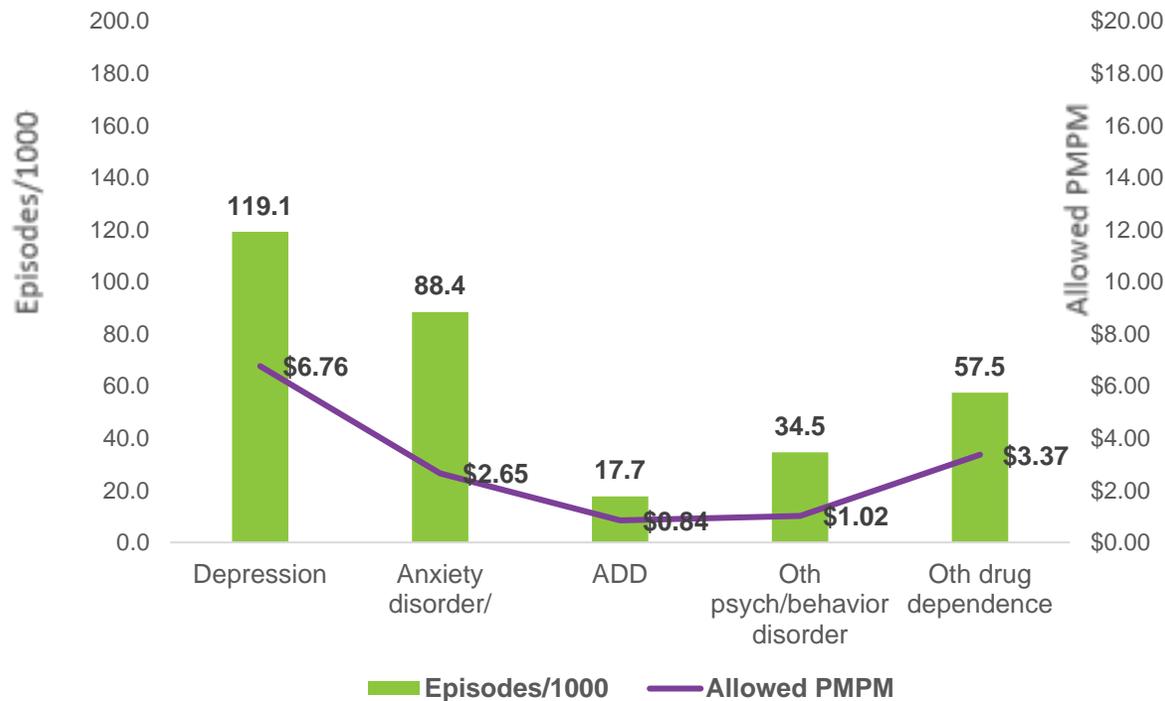
## Autism Spectrum Disorder – How are family members of individuals w/ ASD affected?

Analysis: What is the prevalence and cost of care for MH/SUD conditions\* for all members 25+ years old in the most recent year

\*other than ASD in study cohort

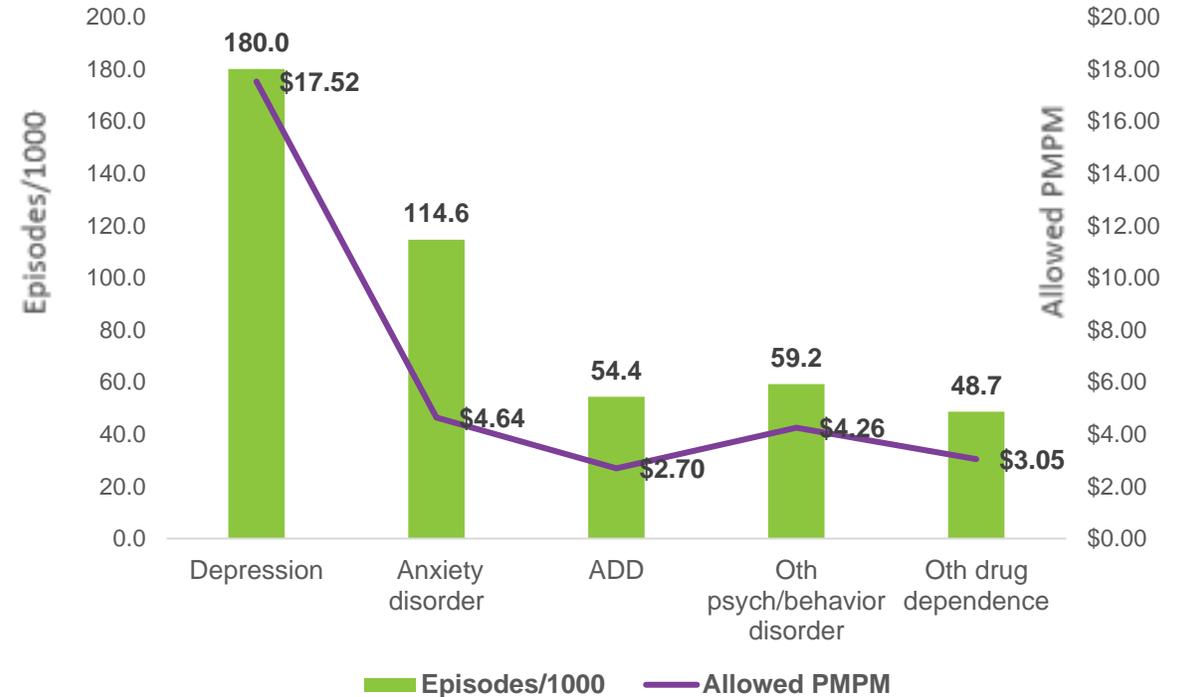
**PMPM is 1.6 – 2X higher**  
for Depression & Anxiety episodes

Contracts **without** ASD:  
MH/ SUD cost trends among family members



Control cohort: All contracts with NO members diagnosed with ASD

Contracts **with** ASD:  
MH/ SUD cost trends among family members



Study cohort: All contracts with at least 1 member diagnosed with ASD

# How did we get here?

## *Analytic Process*

### Uncover Hidden Impacts everywhere

#### Impact Area

Costs  
Engagement  
Behavior  
Outcomes

#### Physical health

Diabetes  
Hypertension  
Recovery from  
Surgery

#### Mental Health

As Principal Dx  
As a Comorbidity  
As a new Dx

#### Cohort Analysis

Compare  
cohorts with and  
without MH  
comorbidities  
Risk Adjustment

#### Metrics that matter

Actionable insights  
Opportunities for  
intervention

# Poll

## Insights

What would you measure?

1. I would look at more condition combinations – similar to these examples.
2. I would dig into engagement and behavior patterns.
3. I would quantify medical conditions where a mental health diagnosis precedes or follows.
4. I would dig into care management and mental health insights

# — Data driven insights

Opportunities to improve mental health care

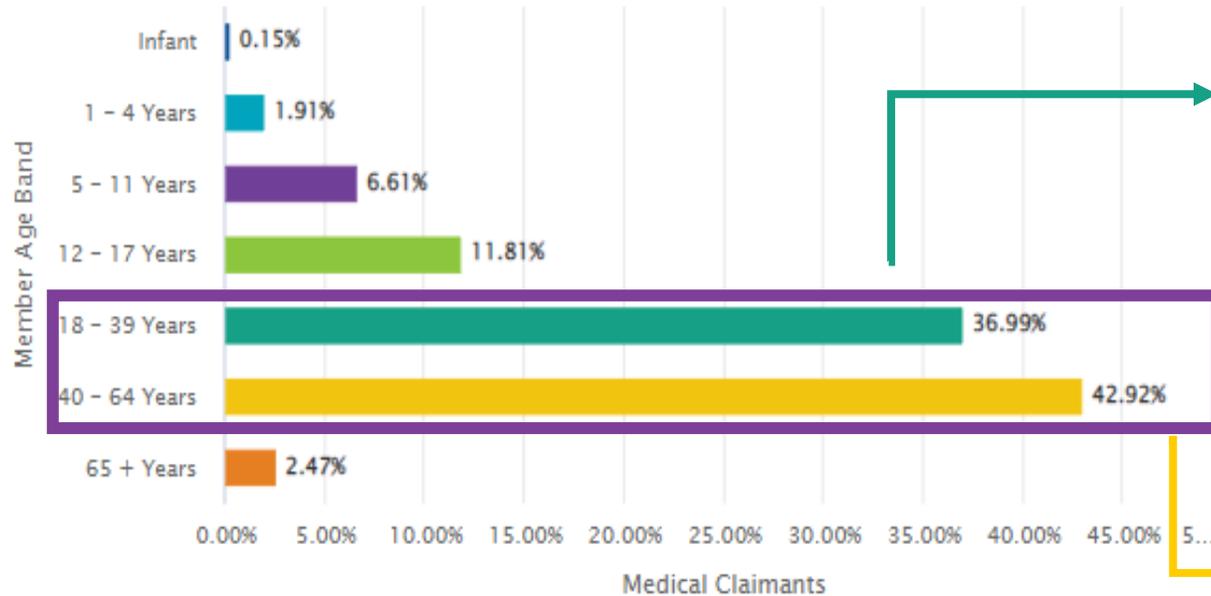


What do we know about those seeking care for mental health or substance use disorder?

# How does this vary

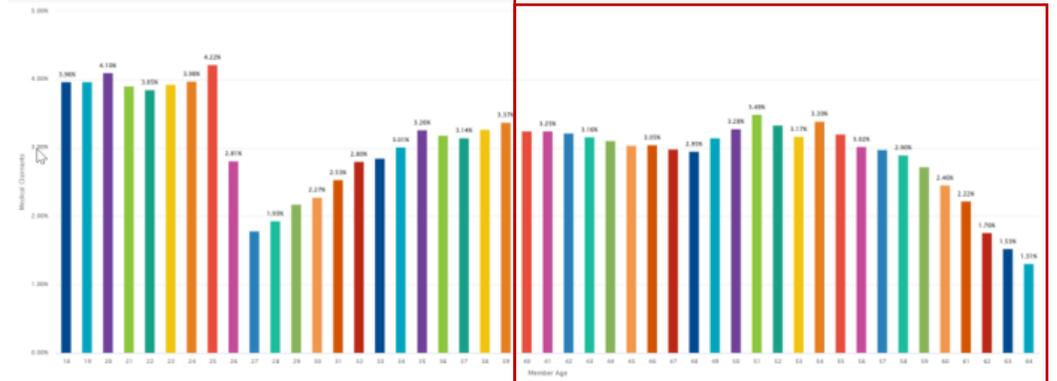
*What we know may also reveal hidden costs – costs of unmet needs*

Prevalence by Age band (Recent Year)



## Drill into 18-39

Prevalence by Age band (Recent Year) Rating 12 Incurred 01/2017 - 01/2022 3 Months Run-out



## Drill into 40-64

Very high 18-25  
Dips 26 - 34

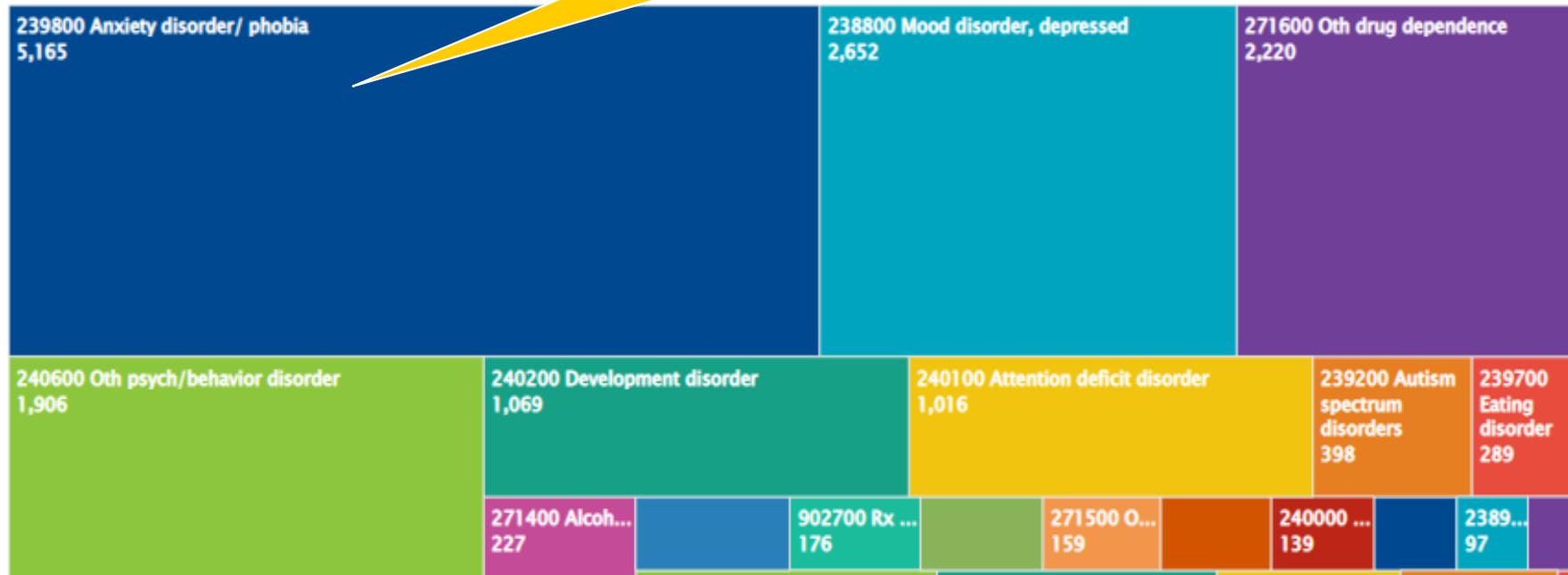
# Engagement patterns

*Condition prevalence, with a new twist*

*Members with a MH/SUD diagnosis, without a PCP or therapist visit in 12+ months*

This represents 10% of this population  
*(members with anxiety).*

These members have not had a PCP, or  
a therapist visit, in 12+ months.



*Expand*  
**PCP**  
**relationships**

Increase trust and convenience  
Diversify network  
Reduce barriers to ensure continuity of care

*Foster*  
**Collaborations**

Prioritize community partnerships  
Create Plan Sponsor-specific efforts  
Innovate with providers (PCPs & MH)

*Optimize*  
**Well-being**  
**design**

Health coaching and lifestyle management programs need to go beyond just one problem

*Whole-person*  
**Chronic Care**

Evolve standard of care mgt. programs to identify & aggressively manage behavior & socioeconomic factors that impact outcomes

**What do we  
do with these  
insights?**

# Poll

If your organization has or did have insights like these today, what would be tackled first?

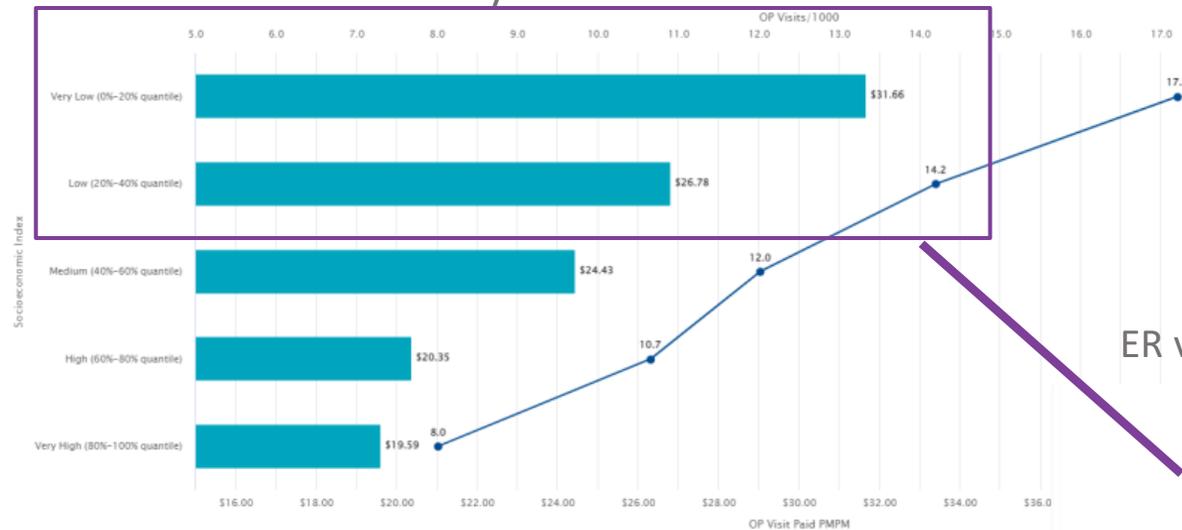
1. Drive change in plans, programs, networks
2. Focus and align on critical markets and collaborations
3. Deliver plan-sponsor-specific insights to our customers
4. Work with our brokers and consultants on new initiatives

— Enriching data enriches  
insights

# Emergency Room Use Patterns

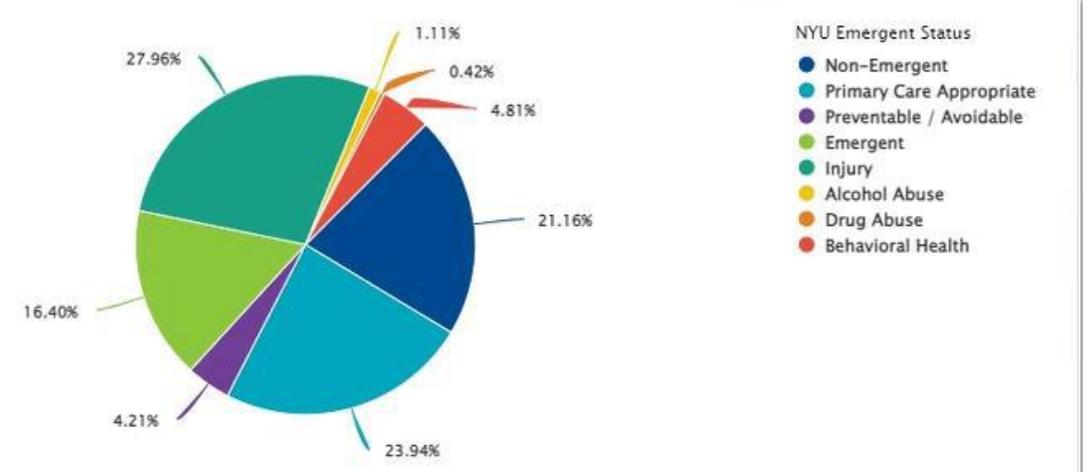
*ER visits that could have occurred in a less expensive setting – how does this vary?*

ER visit classification by socioeconomic index



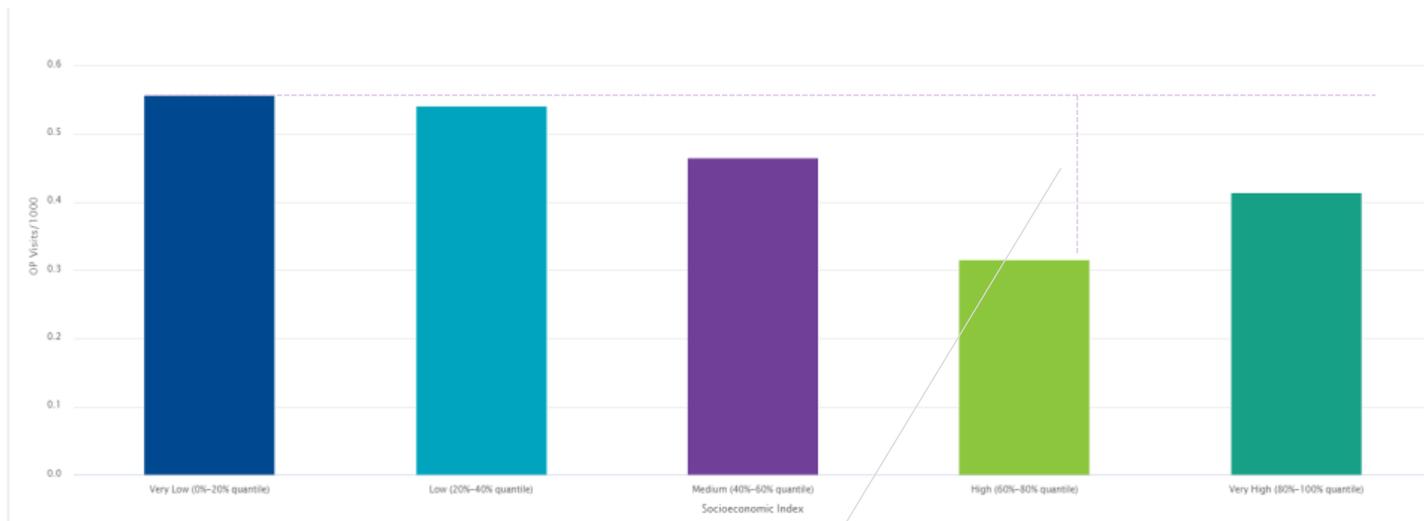
**50+%**  
*ER visits were non-emergent, PCP appropriate or preventable/avoidable*

ER visit classification for socially disadvantaged members



# Emergency Room Visits – Let's get more focused

*We can easily get additional ER utilization and SDoH insights with layered methodologies*



*ER visits for  
Behavioral Health and SUD (only)  
by Socioeconomic tier*

**77%**

*more visits/1000 for  
'Very Low' vs. 'High'*

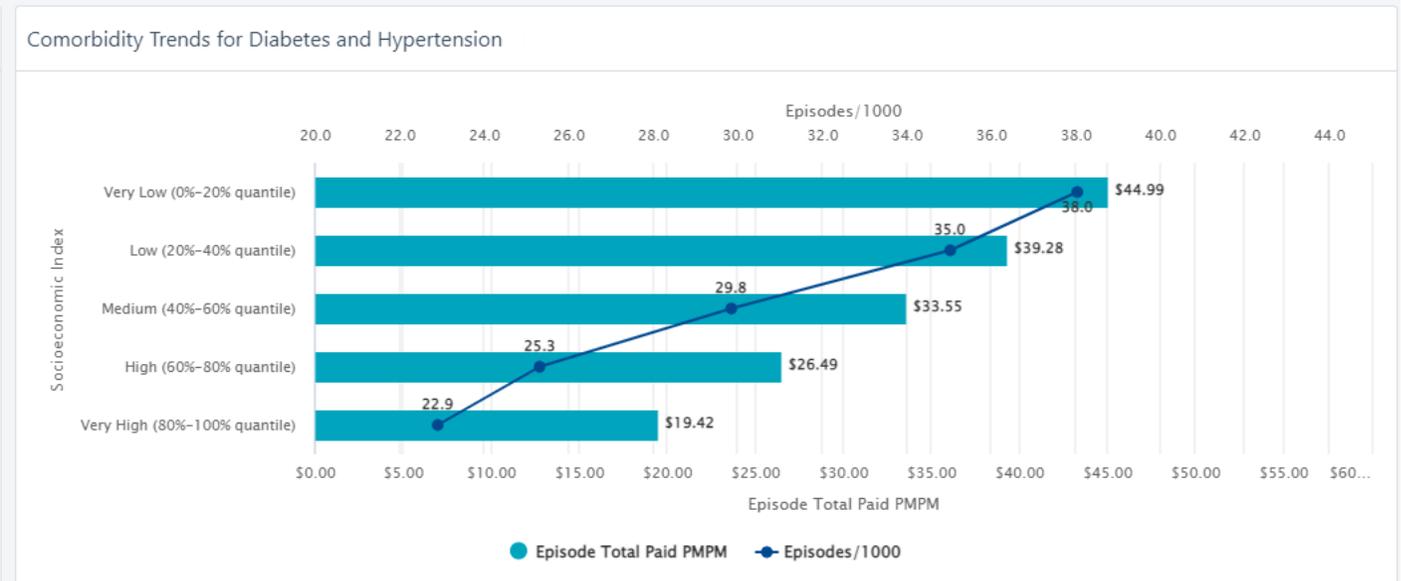
# Let's analyze Chronic conditions with Socioeconomic index

*Do certain chronic conditions disproportionately impact communities with disadvantageous socioeconomic indices?*

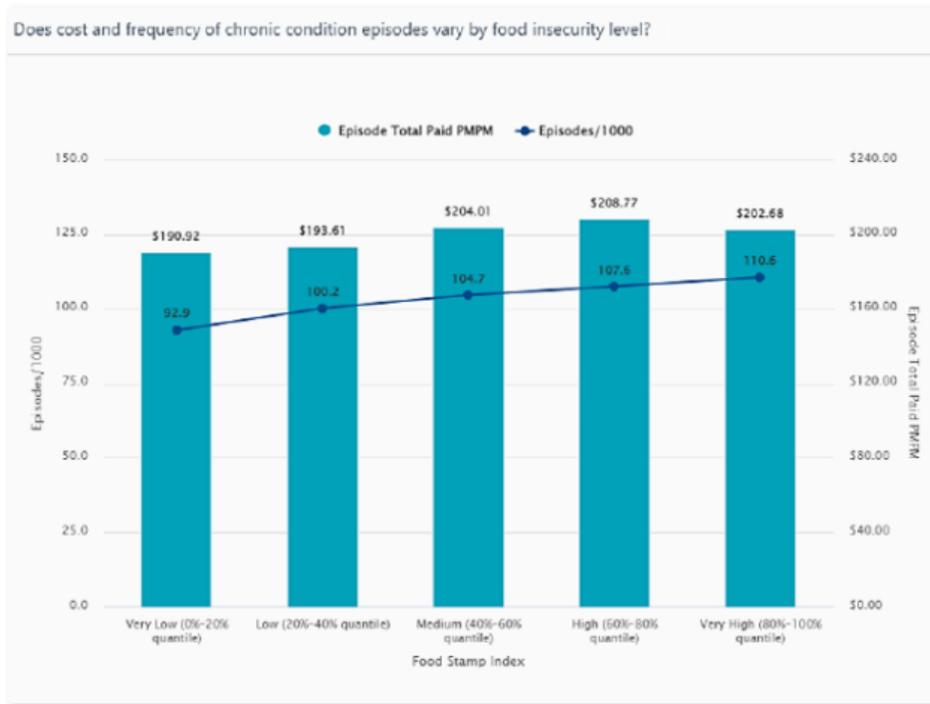
<p><b>Obesity Prevalence</b></p> <p>What is the prevalence of obesity episodes/1,000 members for the lowest two socioeconomic tiers? What is the YOY trend?</p> <p> 10.3       9.89%</p>	<p><b>Diabetes Prevalence</b></p> <p>What is the prevalence of diabetes episodes/1,000 members for the lowest two socioeconomic tiers? What is the YOY trend?</p> <p> 5.4       (5.10%)</p>	<p><b>Hypertension Prevalence</b></p> <p>What is the prevalence of hypertension episodes/1,000 members for the lowest two socioeconomic tiers? What is the YOY trend?</p> <p> 13.6       (4.15%)</p>	<p><b>Actionable Insights</b></p> <p>Three conditions that are often prevalent in communities with lower socioeconomic indices are obesity, diabetes, and hypertension. It is important to understand the root cause driving those trends.</p> <p>Employers may consider providing access to healthy food options or incentivizing healthy food choices to improve overall member wellbeing and engagement.</p>
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**Savings Opportunities**

ETG Base	Episodes	Episode Total Paid/Episode	5% Savings Opportunity
163000 Diabetes	1,197	\$4,698.98	\$281,234
164700 Hyperlipidemia, other	1,454	\$145.92	\$10,608
164800 Obesity	2,283	\$738.34	\$84,281
388100 Hypertension	3,009	\$508.06	\$76,438
Summary	7,943	\$1,139.52	★ \$452,561



# Chronic disease prevalence with food insecurities



**19%**  
*more episodes/1000 for 'Very High' vs. 'Very Low'*

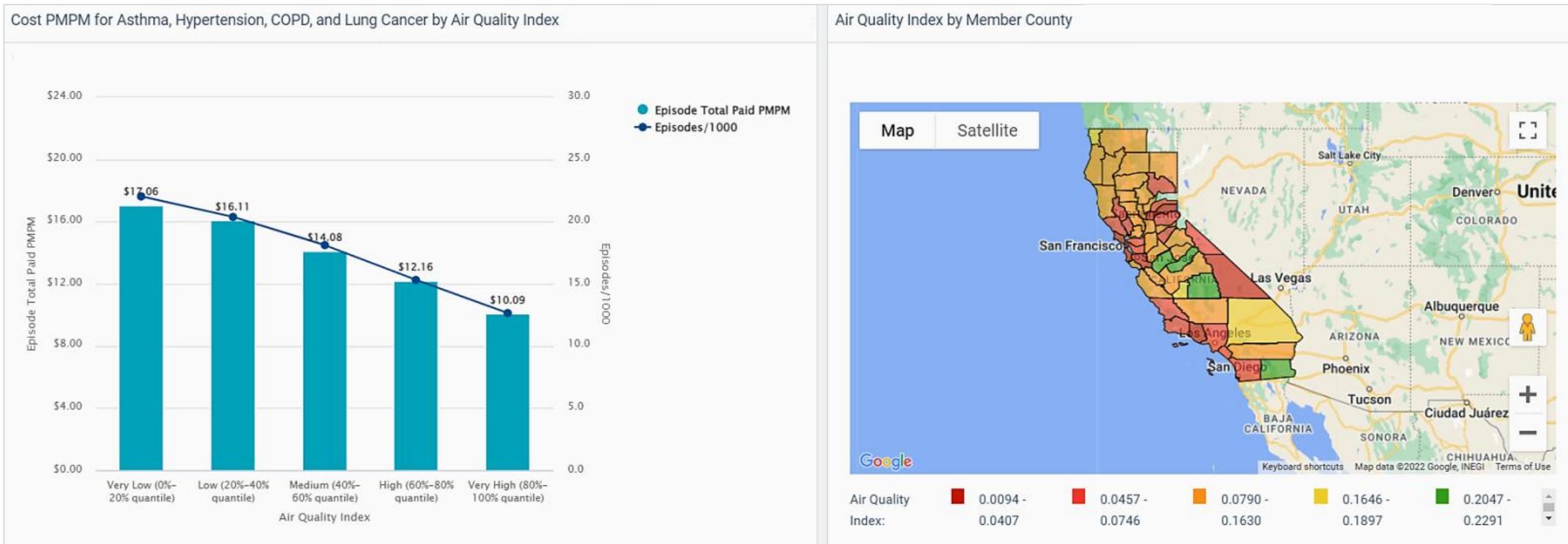


Unexpected insight:  
 Mood and Anxiety disorders

# Impact of air quality on health outcomes

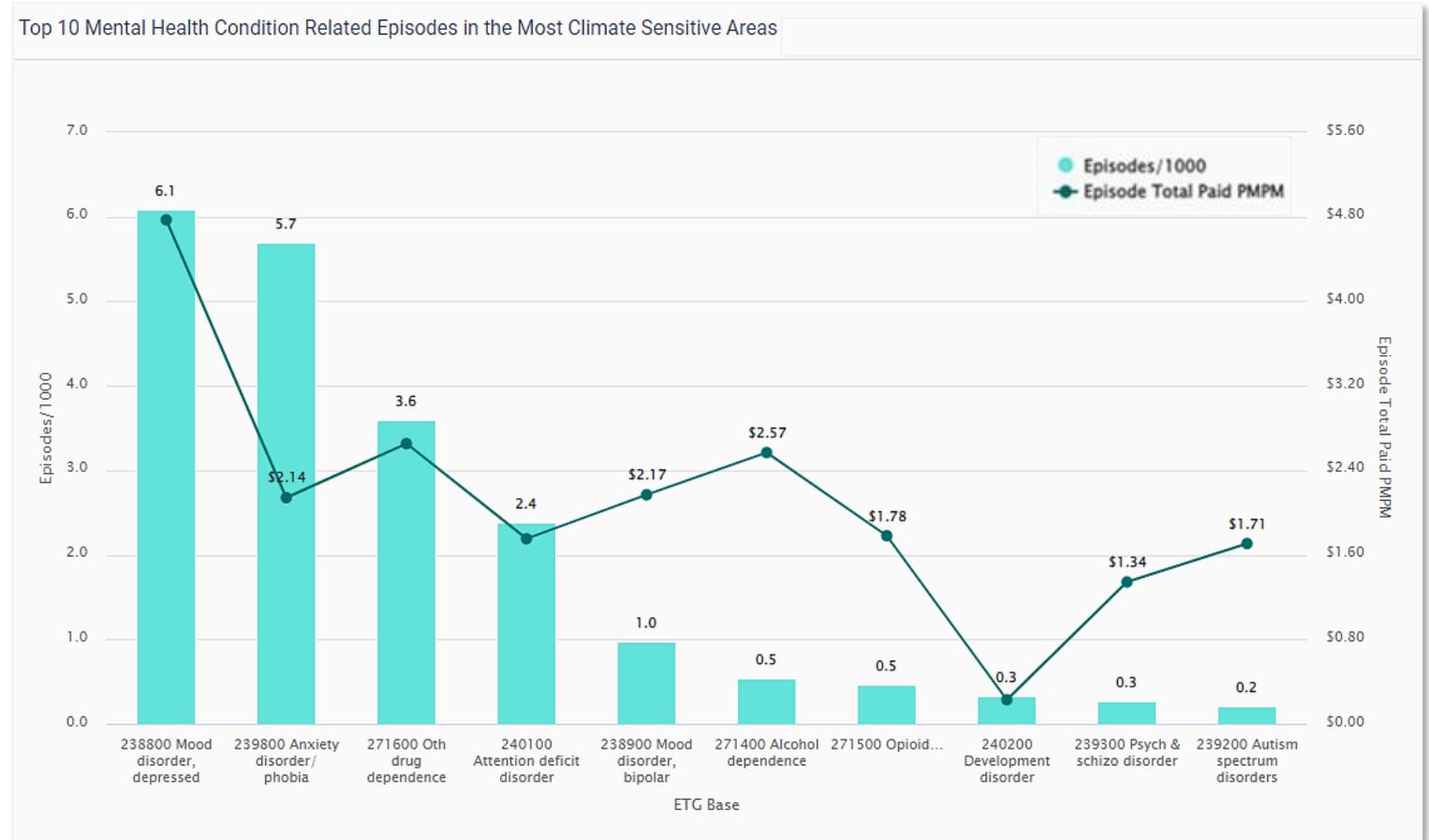
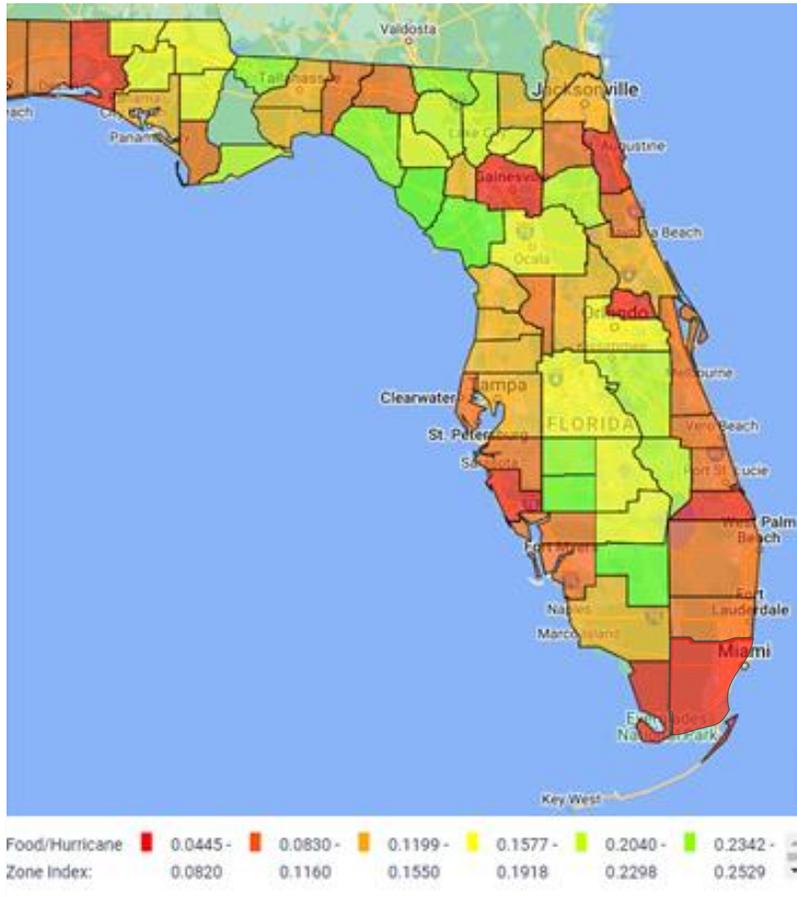


# Deep insights help us improve health equity efforts



*Where's the greatest need for emergency medication kits during wildfire season?*

# SDoH → Environments in which we live, work, play



## Preparing for hurricane season: Targeted and prioritized communications

- Ensure medications are ordered
- Emergency plans and checklists
- Maps with closest evacuation centers and medical facilities

Amazing DQ around key fields:

- | ETG's
- | Rx classification
- | Member Address

**Build trust**  
in analytic results

NYU Methodology for ER use

**Quick wins**  
for cost savings

Social determinants of health:

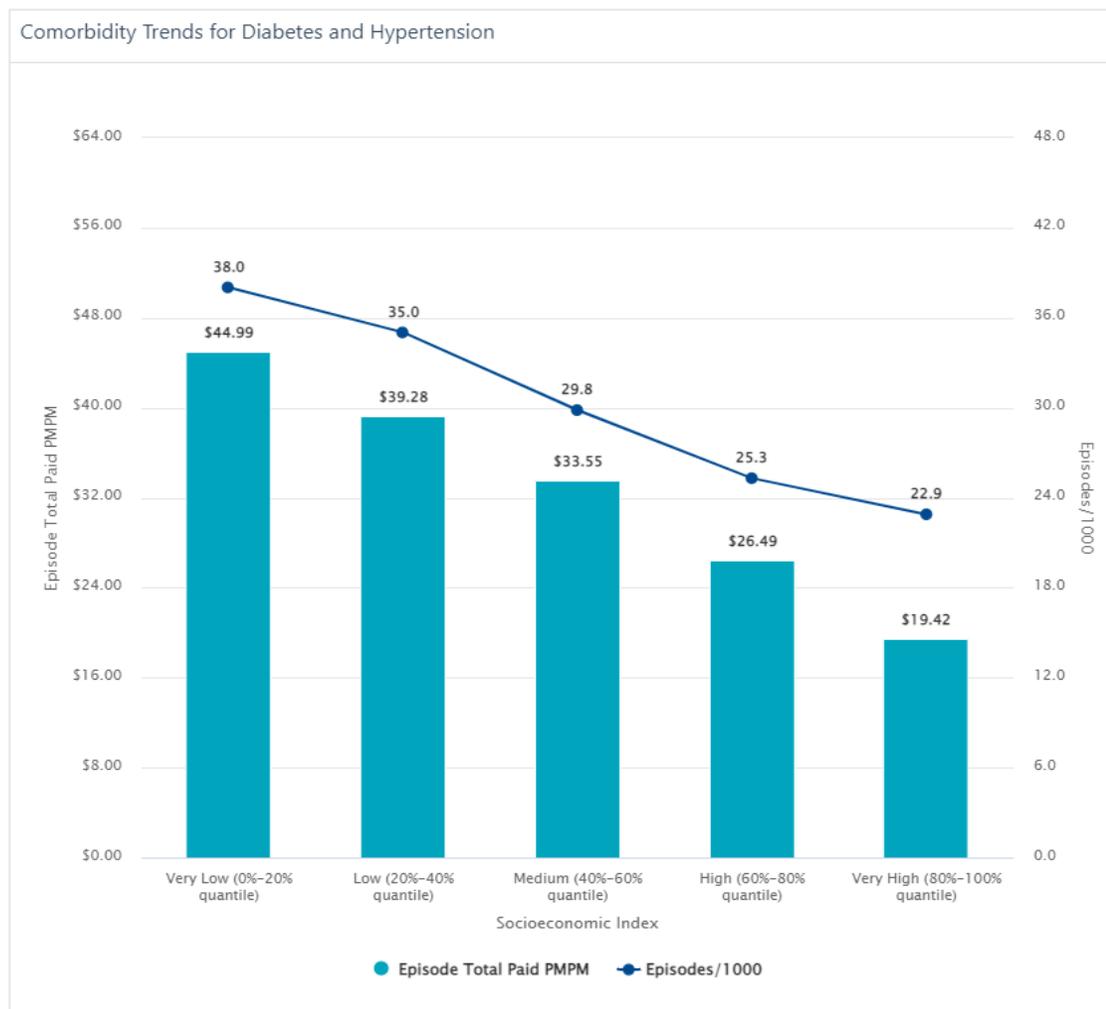
- | Socioeconomic Index
- | Food stamp Index
- | Transportation Index

**Reduce barriers**  
Apply existing programs

**Enrichment**  
*Recommendations*

*Three data priorities and  
why*

# What happens next?



- Strategic organization innovation
  - Identify areas for new plans, programs, partners
  - Measure impact for business investment or ROI
  
- Market- and Community-development
  - Identify and prioritize key geographies, targeted needs
  - Shape focus for community outreach, corporate social responsibility, and charitable donations
  - Evolve partnerships to respond to adverse situations
  
- Plan Sponsor relationships
  - Share insights for Plan sponsor collaborations
  - Work with Plan sponsors on solutions that address the needs of their member communities

Thank you

Questions?

*[contactus@hdms.com](mailto:contactus@hdms.com)*

