



New Hampshire Department of  
HEALTH & HUMAN SERVICES



**Institute for Health  
Policy and Practice**

# Health Care Claims and Mental Health ED Utilization

July 12, 2021

# Purpose of the Review

**The purpose of this initial review is to enhance the understanding of patients seeking emergency care for mental health conditions by describing:**

- Emergency Department (ED) visits for mental health (MH) conditions in claims data and the connection to ED boarding/waiting episodes
- Data sources available to help clarifying our understanding of ED boarding/waiting in the state
- Limitations on availability of data

# Background on Analytic Methods

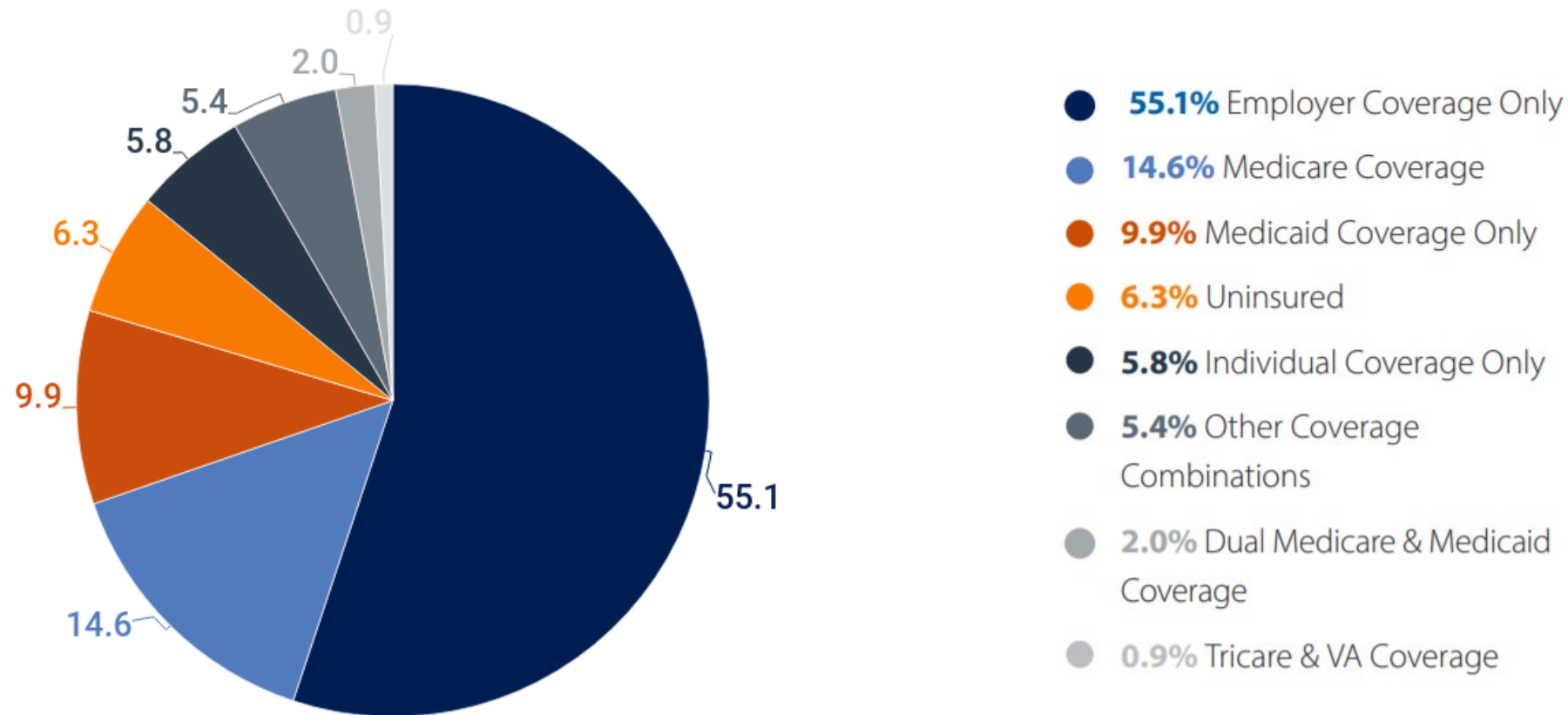
- Analyzed NH Medicaid and commercial\* claims in the 12 months prior to COVID-19 (April 2019 to March 2020) for population under 65
- Identified all ED visits for MH conditions in paid claims
- Focused on mental health (MH) conditions with higher rates of ED boarding

*\*Commercial data is limited to fully insured plans and some self-insured plans thus does not represent the entire NH commercial population.*

# Claims Data Limitations

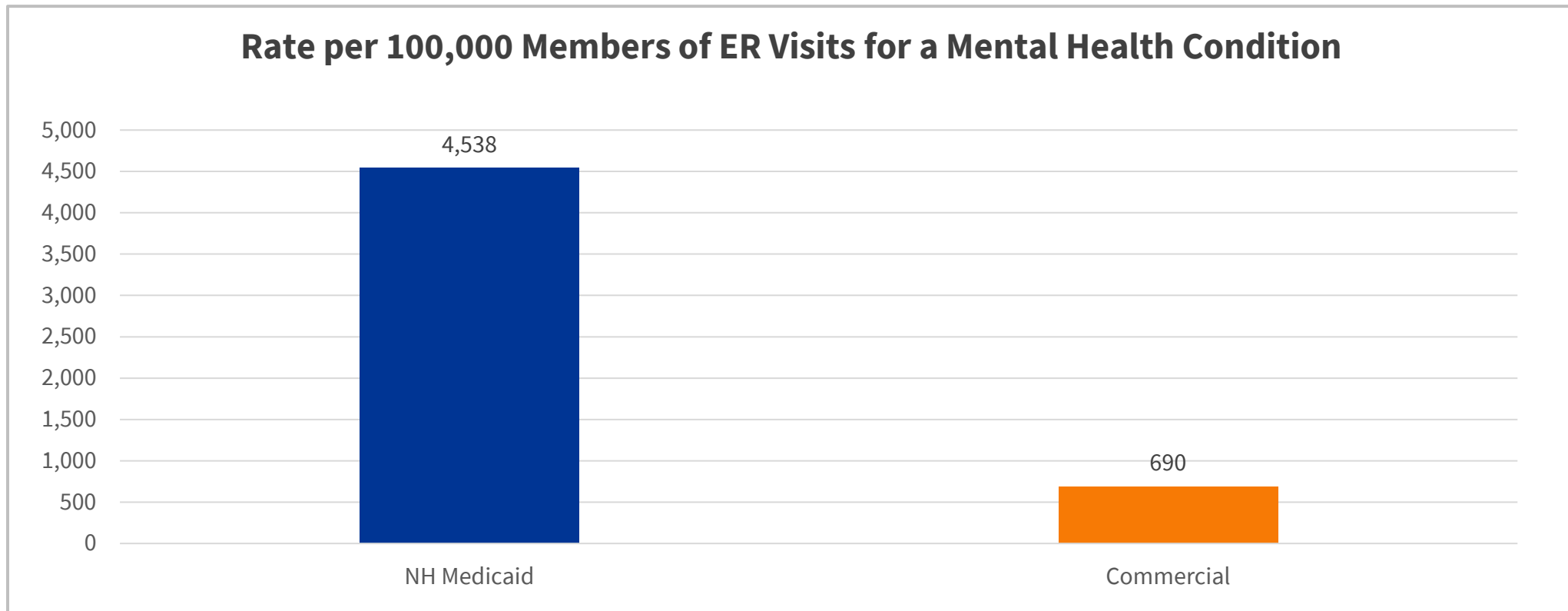
- **Limited indication in the claims about whether the patient is “waiting” or “boarding” and for how long**
  - Claims must be linked to other data sources to obtain ED boarding/waiting information.
- **No information in claims about:**
  - Patient clinical severity
  - Family situation
  - Bed capacity

# New Hampshire Insurance Coverage, 2019



# Rate of ED Visits for Mental Health Conditions

From April 2019 to March 2020, NH Medicaid members had **over 7,000** visits to the ED for a mental health condition.



Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020.  
Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

# Principal Diagnoses on Medicaid ED Claims With Higher Likelihood of ED Boarding/Waiting

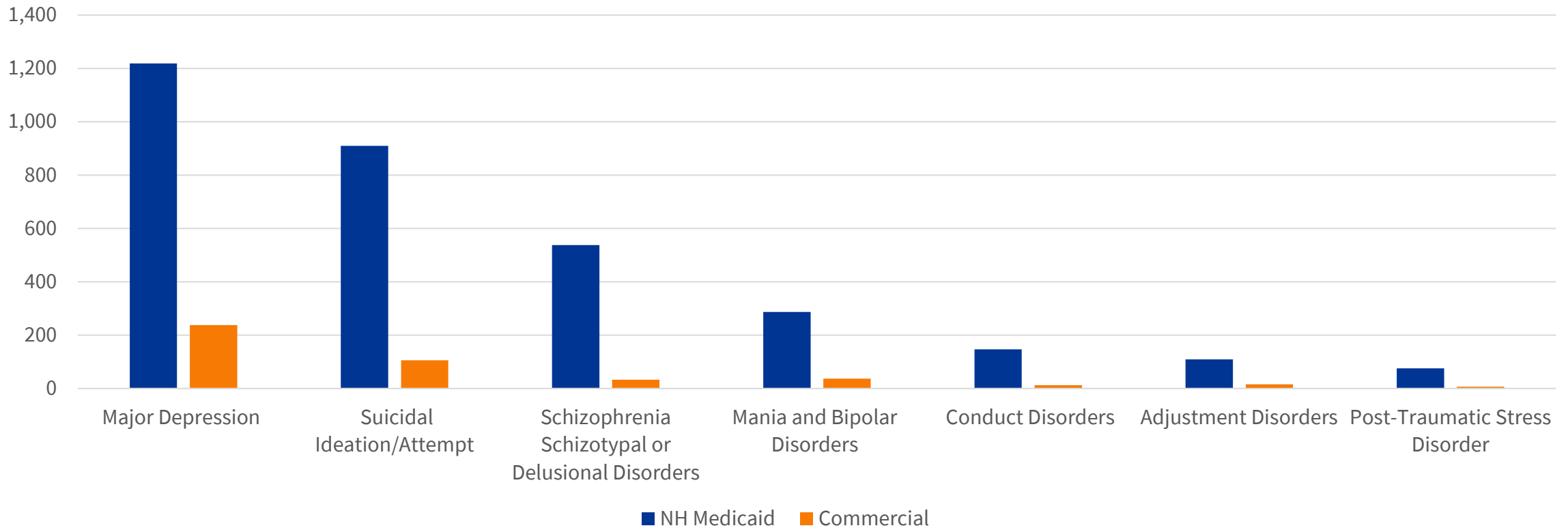
DHHS linked Medicaid data to ED boarding/waitlist episodes. **Overall 11% of paid ED MH visit claims were linked to boarding/waitlist episodes.**

Primary Diagnosis on Paid ED Visit Claims (ICD-10 Codes)	Percent of ED Visits for Condition with a Link to an ED Boarding/Waiting Episode
Schizophrenia Schizotypal or Delusional Disorder (F20-F29)	26%
Mania and Bipolar Disorder (F30, F31)	16%
Major Depression (F32, F33)	10%
Disruptive Mood Dysregulation Disorder (F34.81)	25%
Unspecified Mood Disorders (F39)	9%
Post-Traumatic Stress Disorder (F43.10 - F43.12)	16%
Adjustment Disorders (F43.20 - F43.29)	6%
Specific Personality Disorders (F60)	15%
Conduct Disorders (F91)	18%
Suicidal Ideation & Attempt (R45.851, T14.91X, T40.*X2)	13%

Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

# Rate of ED Visits for Mental Health Conditions

**Rate of ER Visits per 100,000 Members**  
 (for Selected MH Conditions That Are Most Likely to Result in an ED Boarding)

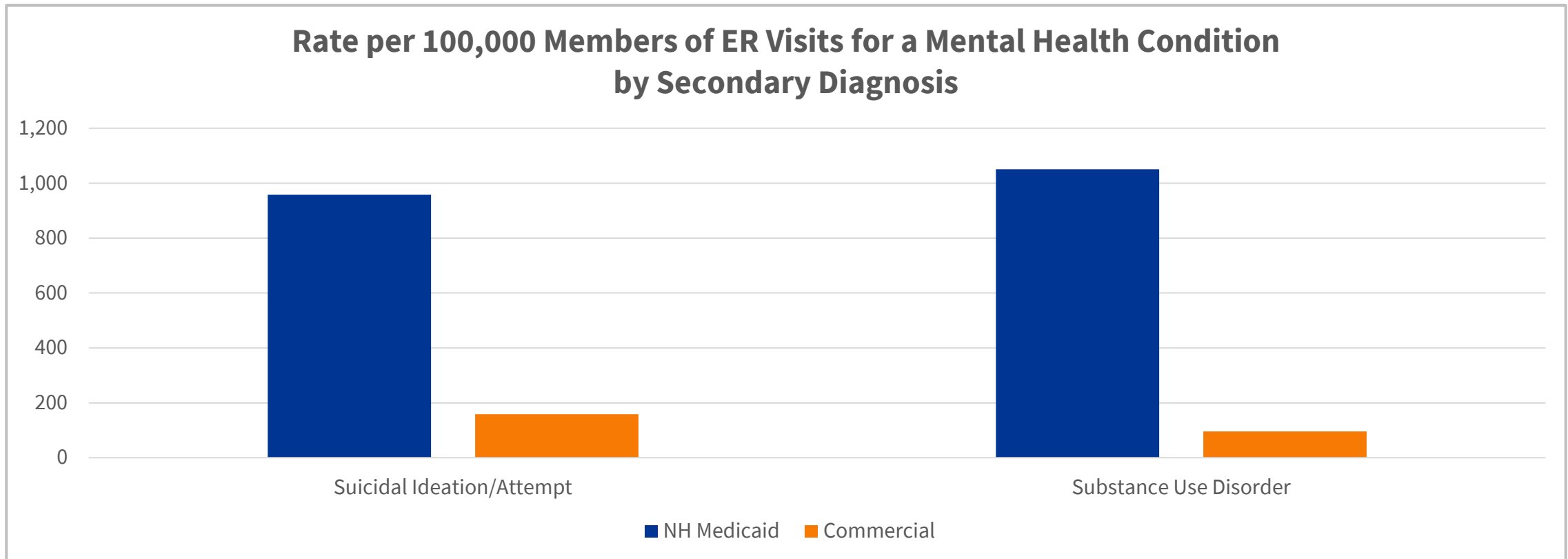


Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.



# Mental Health in the ED with Secondary Diagnoses

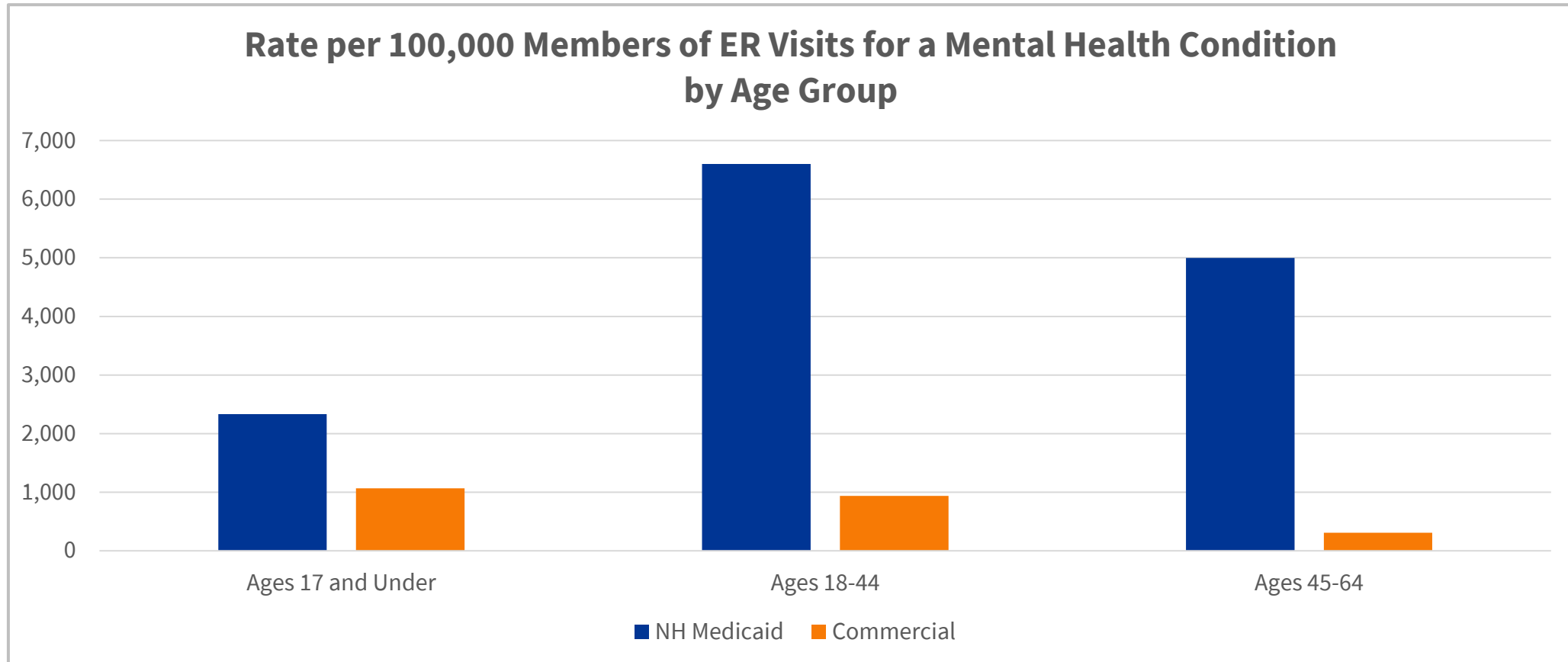
Out of 7,000 visits for NH Medicaid members who had a primary MH diagnosis, almost 1,500 had a secondary diagnosis of suicidal ideation/attempt and over 1,600 had a secondary diagnosis of substance use disorder.



Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

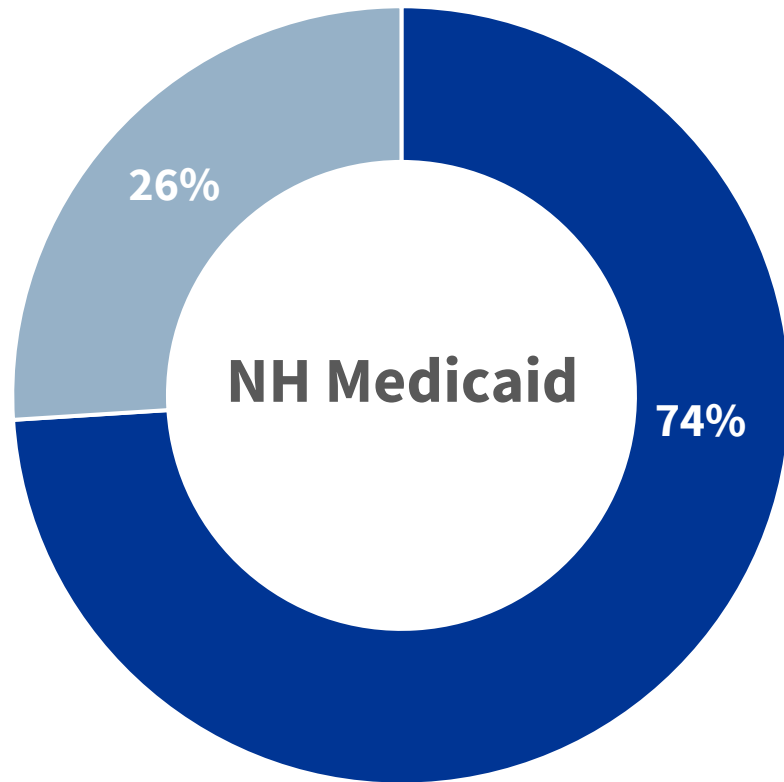
# ED Visits for MH Conditions by Age Group

NH Medicaid members under 18 had 1,500 ER visits for a mental health condition. Members 18-44 had over 4,000 visits and members 45-64 had over 1,400 visits.

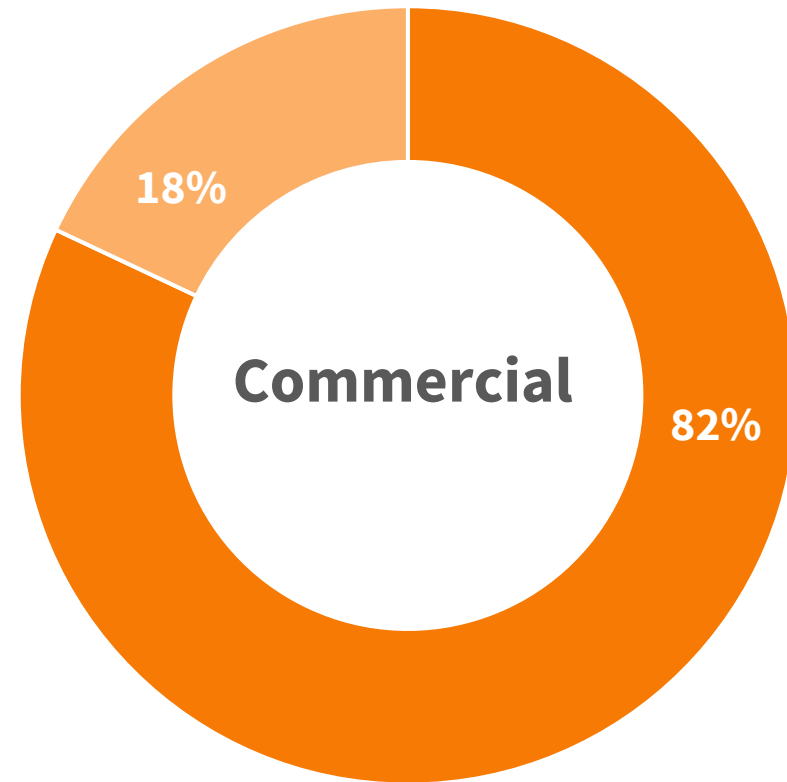


Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

# Percent of Members with MH ED Visits Who Had Multiple MH ED Visits



- Only One ER Visit for a MH Condition
- More than One ER Visit for a MH Condition



- Only One ER Visit for a MH Condition
- More than One ER Visit for a MH Condition

Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

# Follow-Up Within 7 Days After Mental Health ED Visit HEDIS Quality Measure – CY2019

Percent with a follow-up visit with any practitioner with a mental health diagnosis on the claim. NH Medicaid is above the 90th percentile for children and 95<sup>th</sup> percentile for adults when compared to Medicaid plans nationally.

Age Group	Medicaid MCO	Commercial HMO
6 - 17 Years	75%	67%
18 - 64 Years	71%	57%
Total	73%	60%

Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

# Possible Next Steps

- **Future analysis will examine patterns of care prior to, during and following an ED visit. For example:**
  - What are the patterns in treatment for at-risk ED patients?
  - What are the patterns in diagnosis for at-risk ED patients?
  - Look at patient engagement to determine gaps that the Access Point can fill.
  - How common are co-occurring conditions?
- **For Medicaid, examine characteristics statistically. For example:**
  - Link to the ED boarding/waitlist and those without a link
  - Stratify by Medicaid specific characteristics like disability or CMHC eligibility
- **Medicare population**

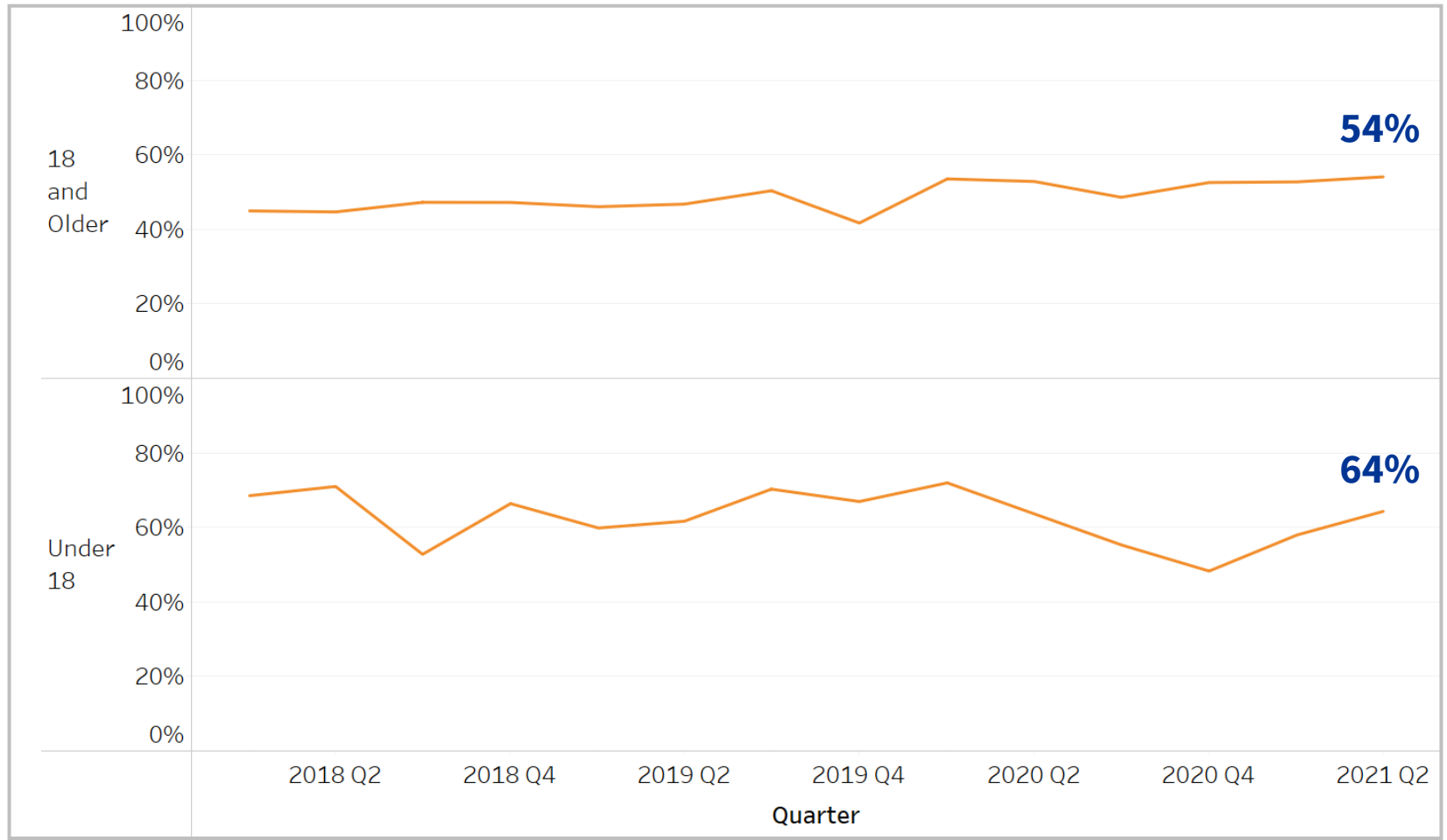


# Q & A



# Supplemental Data

# Trend in Percent ED Boarding/Waiting Episodes That Can be Linked to Medicaid Eligibility



Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.



## Supporting Data: Diagnoses More Likely to Result in ED Boarding/Waiting

Primary Diagnosis for ER Visit	NH Medicaid Counts of ER Visits	NH Medicaid Rate of ER Visits per 100,000 Members	Commercial Rate of ER Visits per 100,000 Members
<b>Top 7 diagnoses more likely to result in an ED boarding/waiting*</b>			
Major Depression	1,896	1,219	238
Suicidal Ideation/Attempt	1,415	910	106
Schizophrenia Schizotypal or Delusional Disorders	837	538	33
Mania and Bipolar Disorders	447	287	37
Conduct Disorders	230	147	13
Adjustment Disorders	170	109	16
Post-Traumatic Stress Disorder	119	76	7

Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021. \* Top 7 diagnosis had more than 100 ED visits in analytic period.

## Supporting Data:



### Percent of ER Visits for Condition that Resulted in ER Boarding for Members

Primary Diagnosis on ED Visit Claim	Ages 17 and Under	Ages 18-44	Ages 45-64
Any MH Condition	17%	10%	10%
Schizophrenia schizotypal or Delusional Disorder	17%	26%	26%
Mania and Bipolar Disorder	21%	15%	18%
Major Depression	19%	8%	3%
Disruptive Mood Dysregulation Disorder	25%	25%	0%
Unspecified Mood Disorder	13%	9%	5%
Post-Traumatic Stress Disorder	31%	10%	5%
Adjustment Disorder	11%	3%	4%
Personality Disorder	0%	18%	8%
Conduct Disorder	18%	16%	0%
Suicidal Ideation	21%	11%	8%
Other Mental Health Conditions	7%	2%	2%
Any MH Condition with Suicidal Ideation as a Secondary Diagnosis	23%	9%	5%
Any MH Condition with SUD as a Secondary Diagnosis	16%	9%	5%
Any MH Condition with Injury as a Secondary Diagnosis	17%	12%	4%

Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

# Supporting Data: Rate of MH ED Visits by Primary Diagnosis Group

Primary Diagnosis for ER Visit	Rate per 100,000 for NH Medicaid Members			Rate per 100,000 for Commercial Members		
	Ages 17 & Under	Ages 18-44	Ages 45-64	Ages 17 & Under	Ages 18-44	Ages 45-64
Any MH Condition	2,333	6,600	4,996	1,067	938	309
Schizophrenia schizotypal or Delusional Disorder	9	896	944	9	54	21
Mania and Bipolar Disorder	22	495	431	11	70	14
Major Depression	670	1,816	1,153	416	311	102
Disruptive Mood Dysregulation Disorder	44	6	0	15	0	0
Unspecified Mood Disorder	23	104	66	6	12	5
Post-Traumatic Stress Disorder	61	95	73	6	13	3
Adjustment Disorder	112	112	97	32	17	10
Personality Disorder	2	109	87	6	6	0
Conduct Disorder	313	40	14	75	5	1
Suicidal Ideation	605	1,221	917	252	124	36
Other Mental Health Conditions	516	1,712	1,215	256	324	118
Any MH Condition with Suicidal Ideation a Secondary Diagnosis	505	1,449	910	287	220	52
Any MH Condition with SUD as a Secondary Diagnosis	86	1,955	1,250	45	165	45
Any MH Condition with Injury a Secondary Diagnosis	129	242	160	58	27	5

Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.