



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

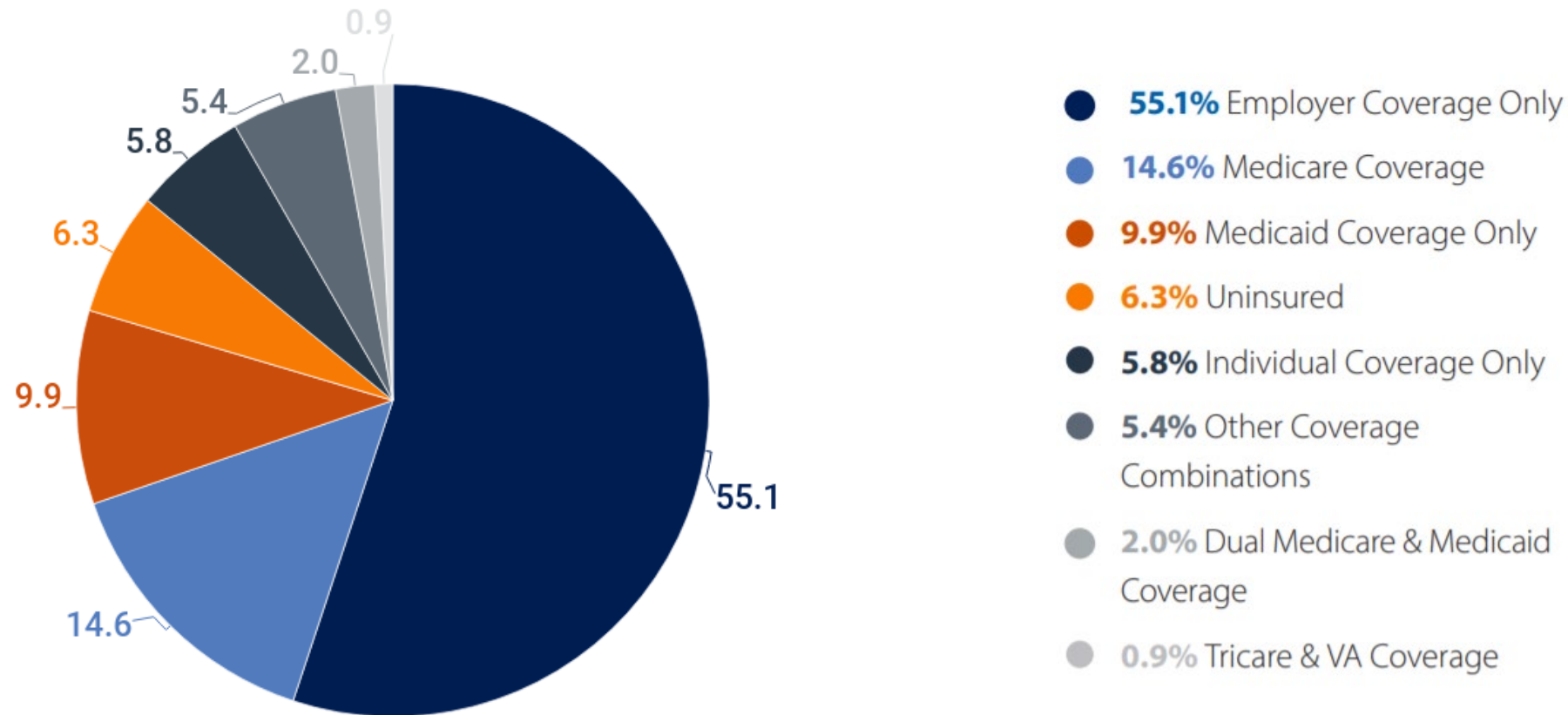
- Analyzed NH Medicaid and commercial* claims in the 12 months prior to COVID-19 (April 2019 to March 2020) for population under 65
- Identified all ED visits for MH conditions in paid claims
- Focused on mental health (MH) conditions with higher rates of ED boarding

**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

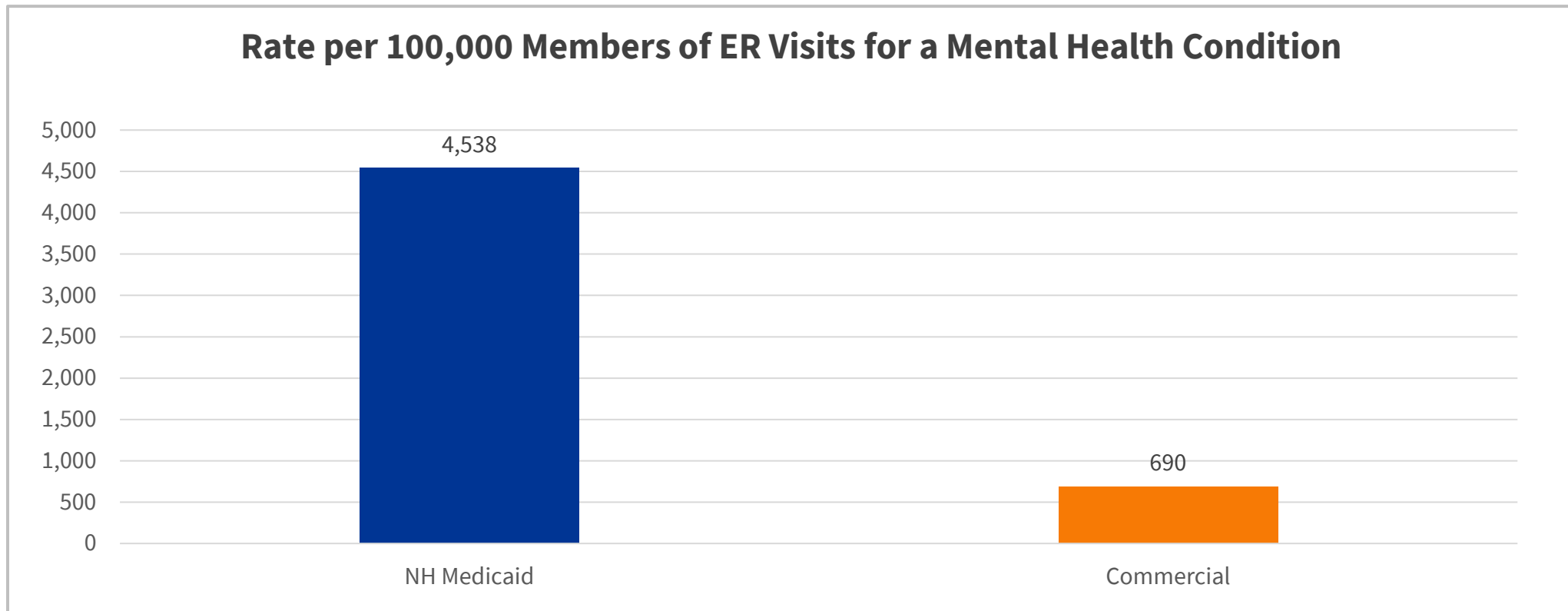
- **Limited indication in the claims about whether the patient is “waiting” or “boarding” and for how long**
 - Claims must be linked to other data sources to obtain ED boarding/waiting information.
- **No information in claims about:**
 - Patient clinical severity
 - Family situation
 - Bed capacity

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

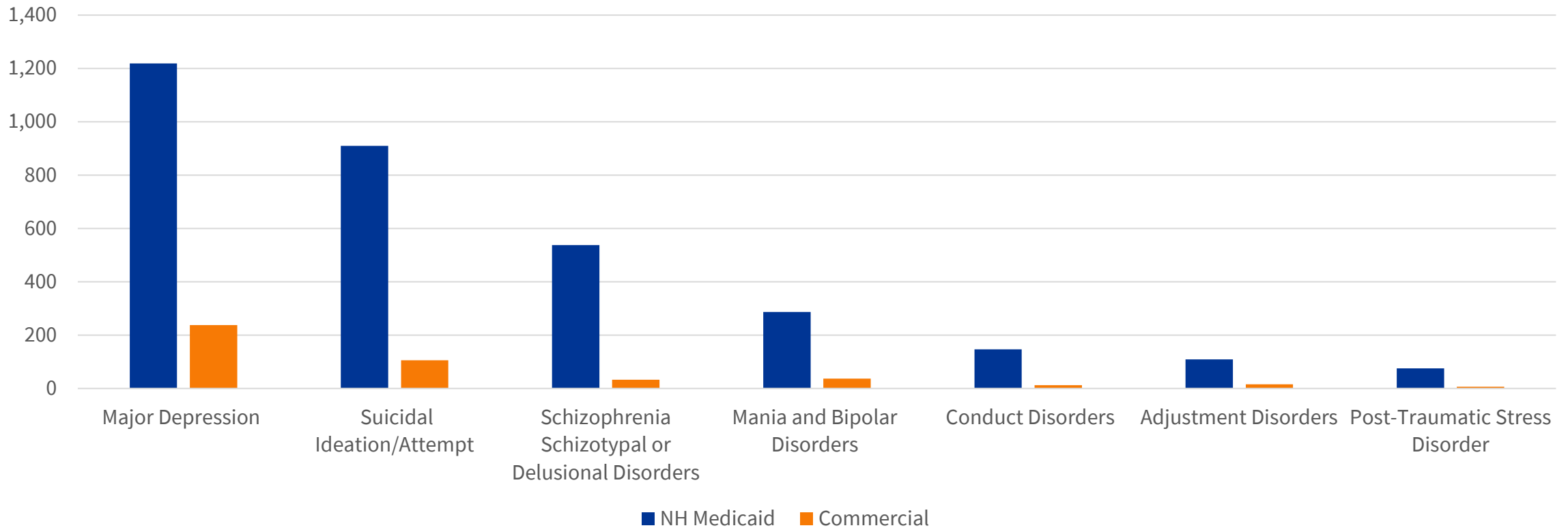
DHHS linked Medicaid data to ED boarding/waitlist episodes. **Overall 11% of paid ED MH visit claims were linked to boarding/waitlist episodes.**

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

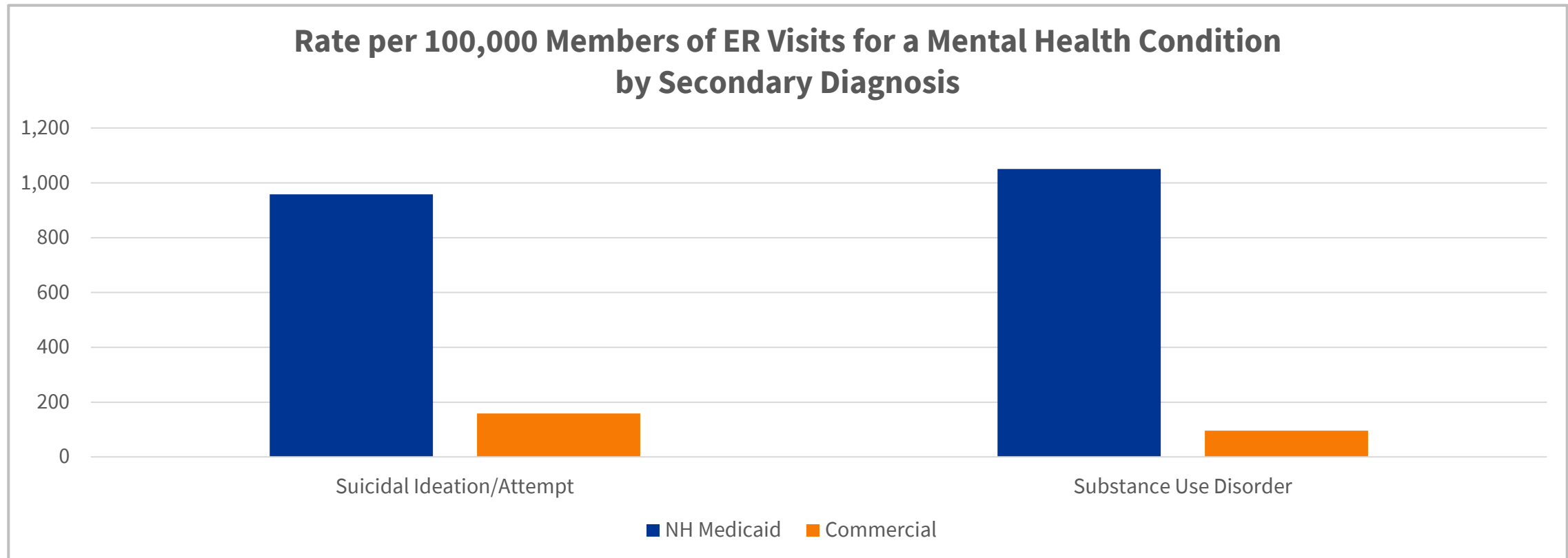
Rate of ER Visits per 100,000 Members
 (for Selected MH Conditions That Are Most Likely to Result in an ED Boarding)



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

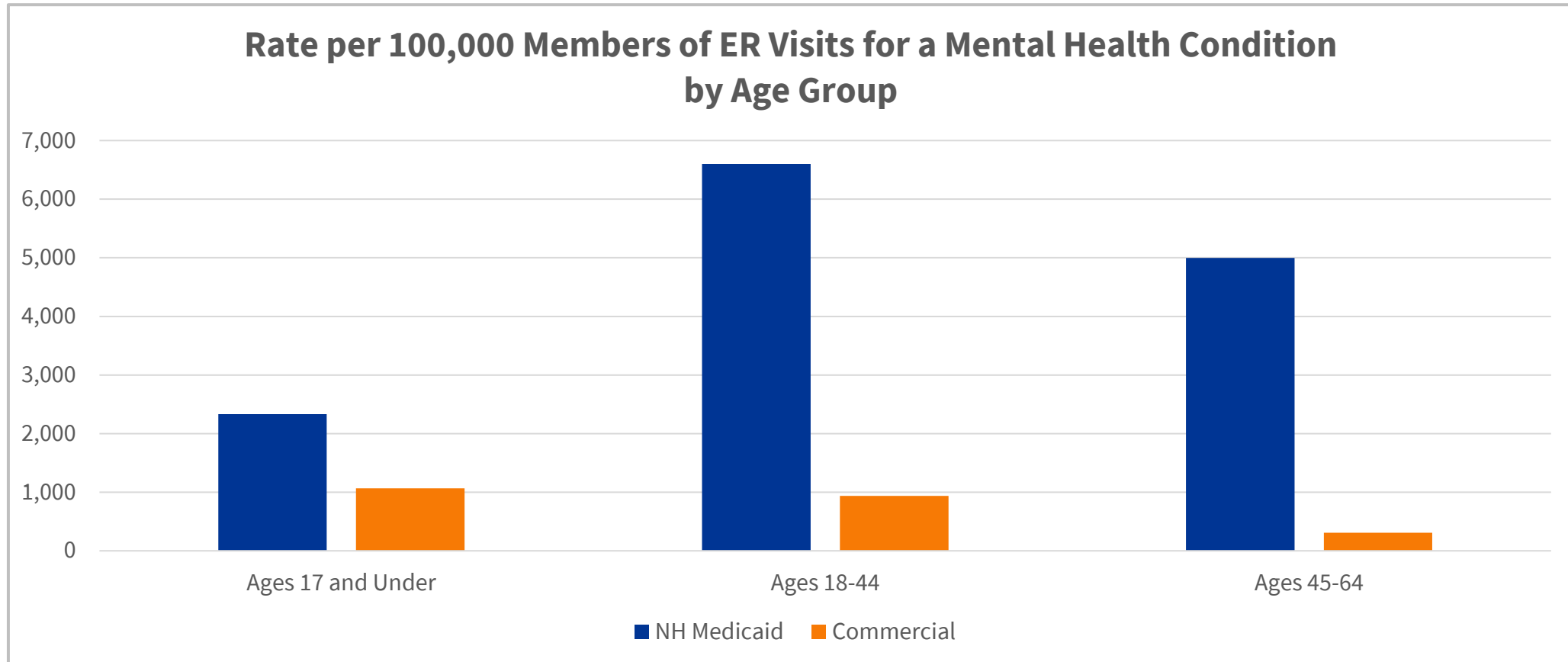
Out of 7,000 visits for NH Medicaid members who had a primary MH diagnosis, almost 1,500 had a secondary diagnosis of suicidal ideation/attempt and over 1,600 had a secondary diagnosis of substance use disorder.



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.

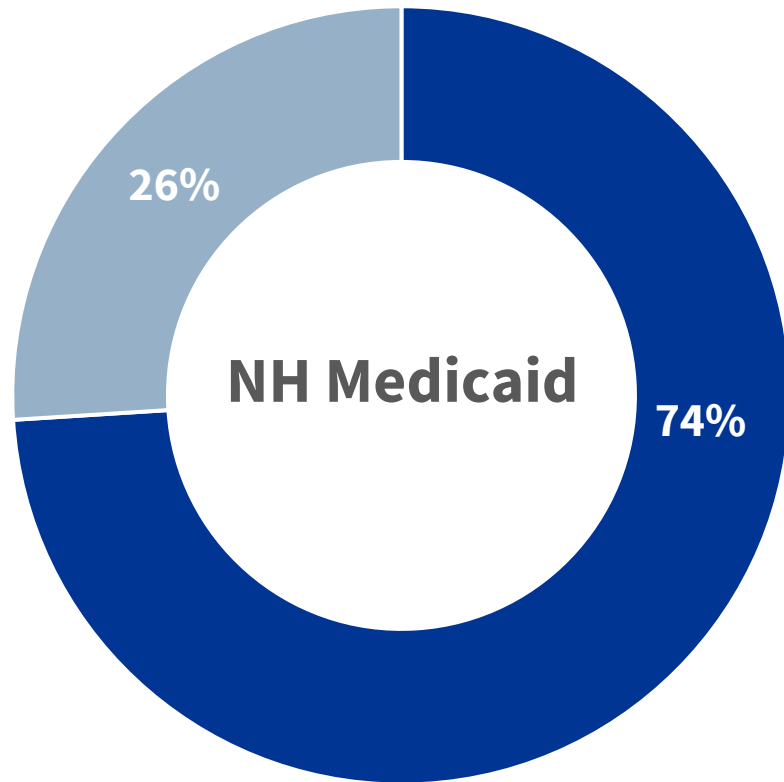
ED Visits for MH Conditions by Age Group

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.

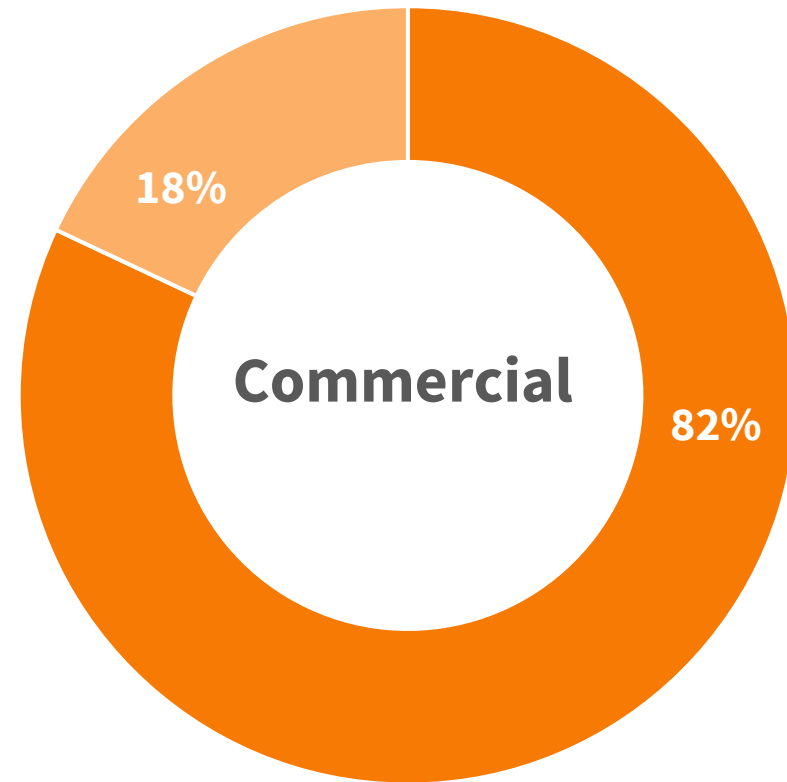


Source: NH Comprehensive Healthcare Information System (NHCHIS) and NH Enterprise Business Intelligence (EBI) data systems, April 2019 – March 2020. Analysis by NH DHHS and the Institute for Health Policy and Practice at UNH, July 2021.

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 95th 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

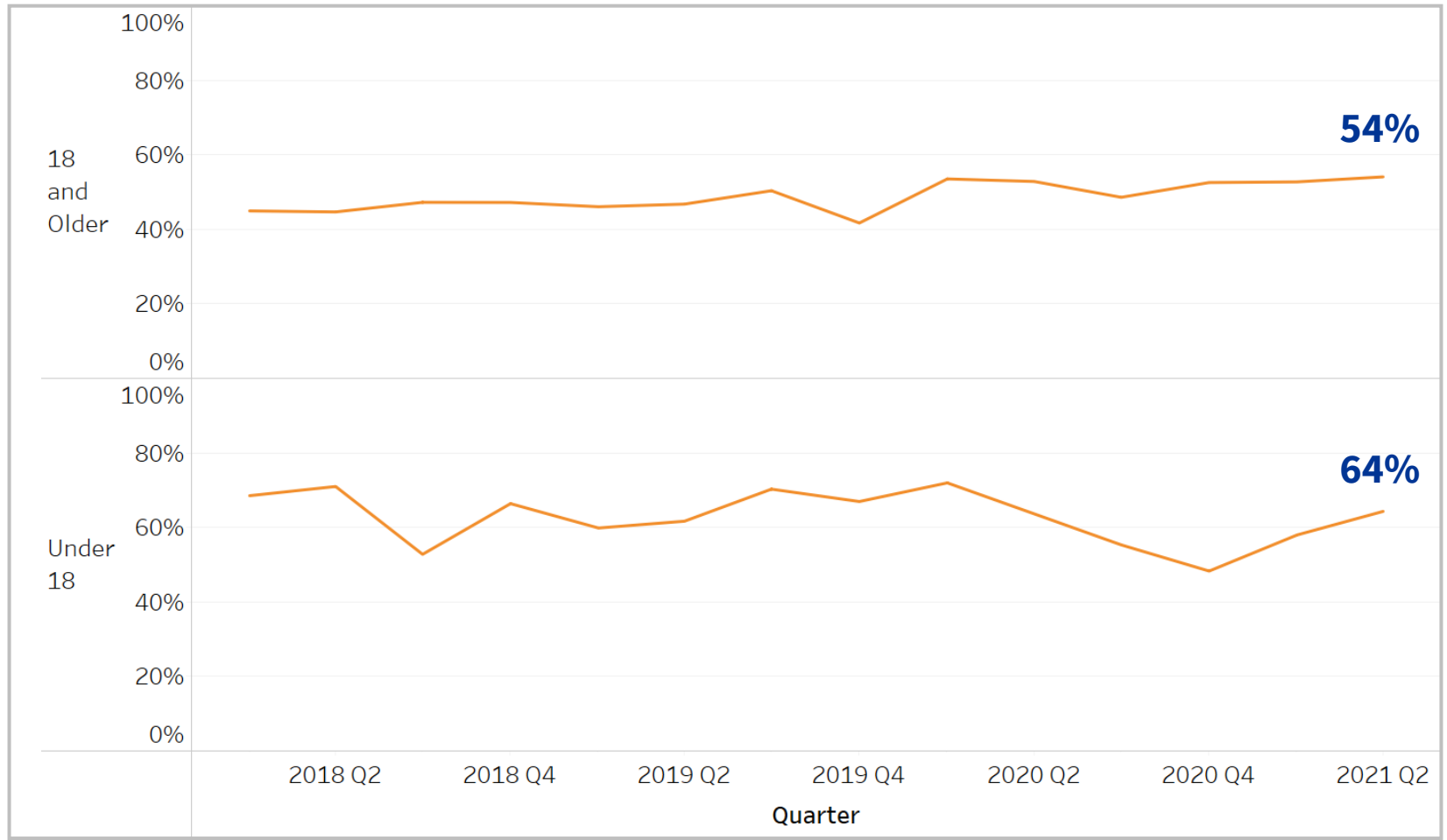
- **Future analysis will examine patterns of care prior to, during and following an ED visit. For example:**
 - What are the patterns in treatment for at-risk ED patients?
 - What are the patterns in diagnosis for at-risk ED patients?
 - Look at patient engagement to determine gaps that the Access Point 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
Top 7 diagnoses more likely to result in an ED boarding/waiting*			
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.