



CHS in Washington State: What Do We Know?

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ADAI Symposium

The Dose makes the Poison:

Cannabinoid Hyperemesis Syndrome Goes Mainstream

September 18, 2026



Cannabinoid Hyperemesis Syndrome (CHS)

Symptoms: Recurrent bouts of intense nausea, debilitating abdominal pain, and cyclical vomiting following **frequent cannabis use**.

Associated symptoms may include compulsive hot showering or baths for relief

It was a rare condition until a decade ago. In Oct 2025, the World Health Organization created a **new disease code for CHS, R11.16**.

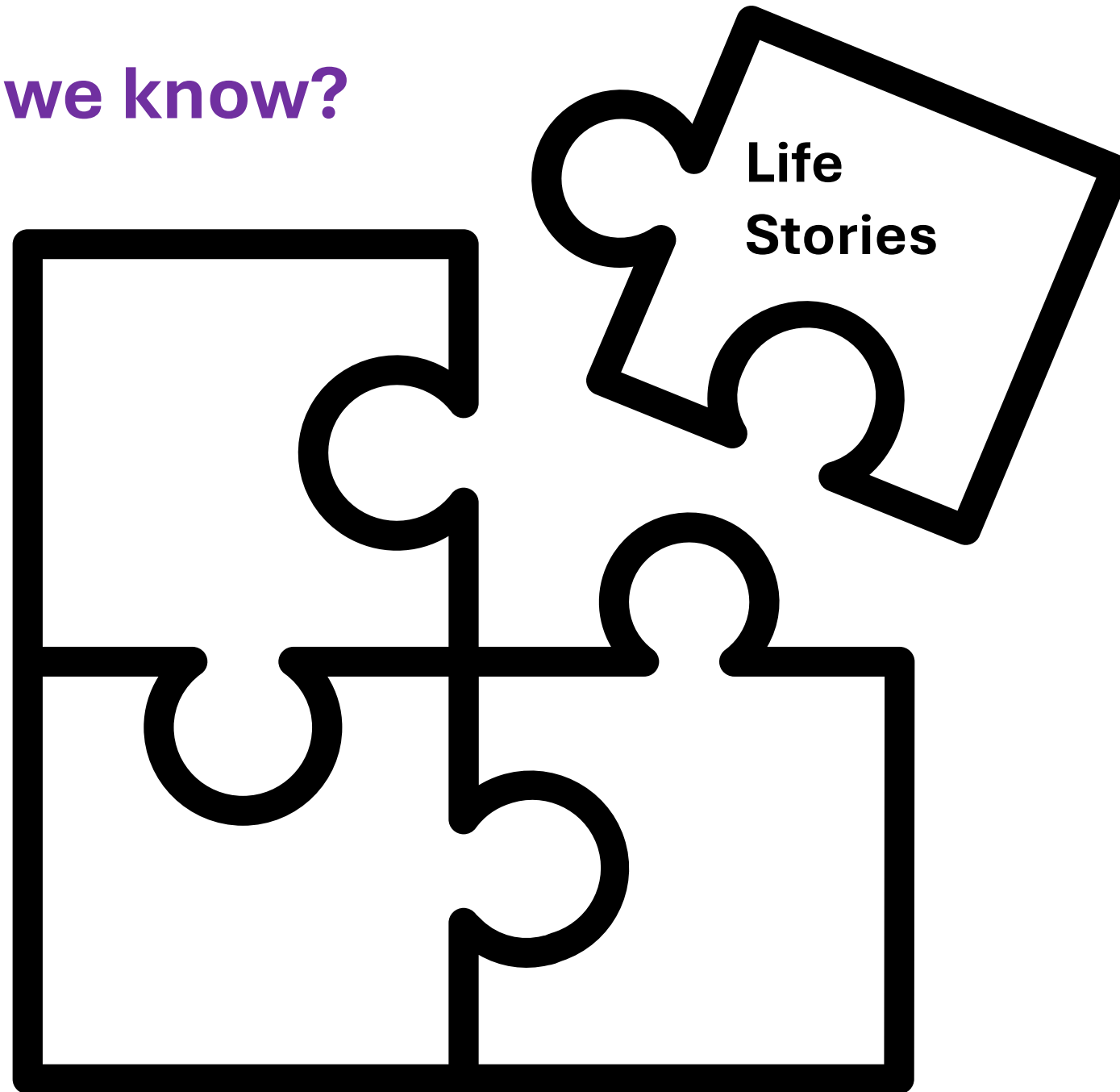
CHS is more than just an unwanted effect of cannabis. It can lead to serious health problems like severe dehydration, kidney failure, or seizures.

Washington State



- One of the first states to legalize cannabis 21+, in 2012
- One of the highest prevalences of cannabis use in the U.S
- Mature legal market
 - wide availability of points of sale
 - vast choice of product types for purchase
 - few regulations in place to prevent cannabis overuse

What do we know?



Mecca

Diagnosed Feb 2023

Accepted Diagnostic July 2024

<https://www.kuow.org/law/2025-01-08/high-potency-cannabis-leads-to-er-visits-illnesses-for-some-users>. by Stephen Howie, Jan 8, 2025



Brandon, 2019

<https://www.kuow.org/law/2025-01-08/high-potency-cannabis-leads-to-er-visits-illnesses-for-some-users>., by Stephen Howie, Jan 8 2025.

CAUSE OF DEATH:

A: **COMPLCATIONS OF CANNABIS HYPERMESIS SYNDROME**

INTERVAL: **HOURS TO DAYS**

B:

INTERVAL:

C:

INTERVAL:

D:

INTERVAL:

OTHER CONDITIONS CONTRIBUTING TO DEATH: **HYPONATREMIA, CEREBRAL EDEMA, PULMONARY EDEMA, ACUTE KIDNEY INJURY, AND PROBABLE SEIZURE**

DATE OF INJURY:

HOUR OF INJURY:

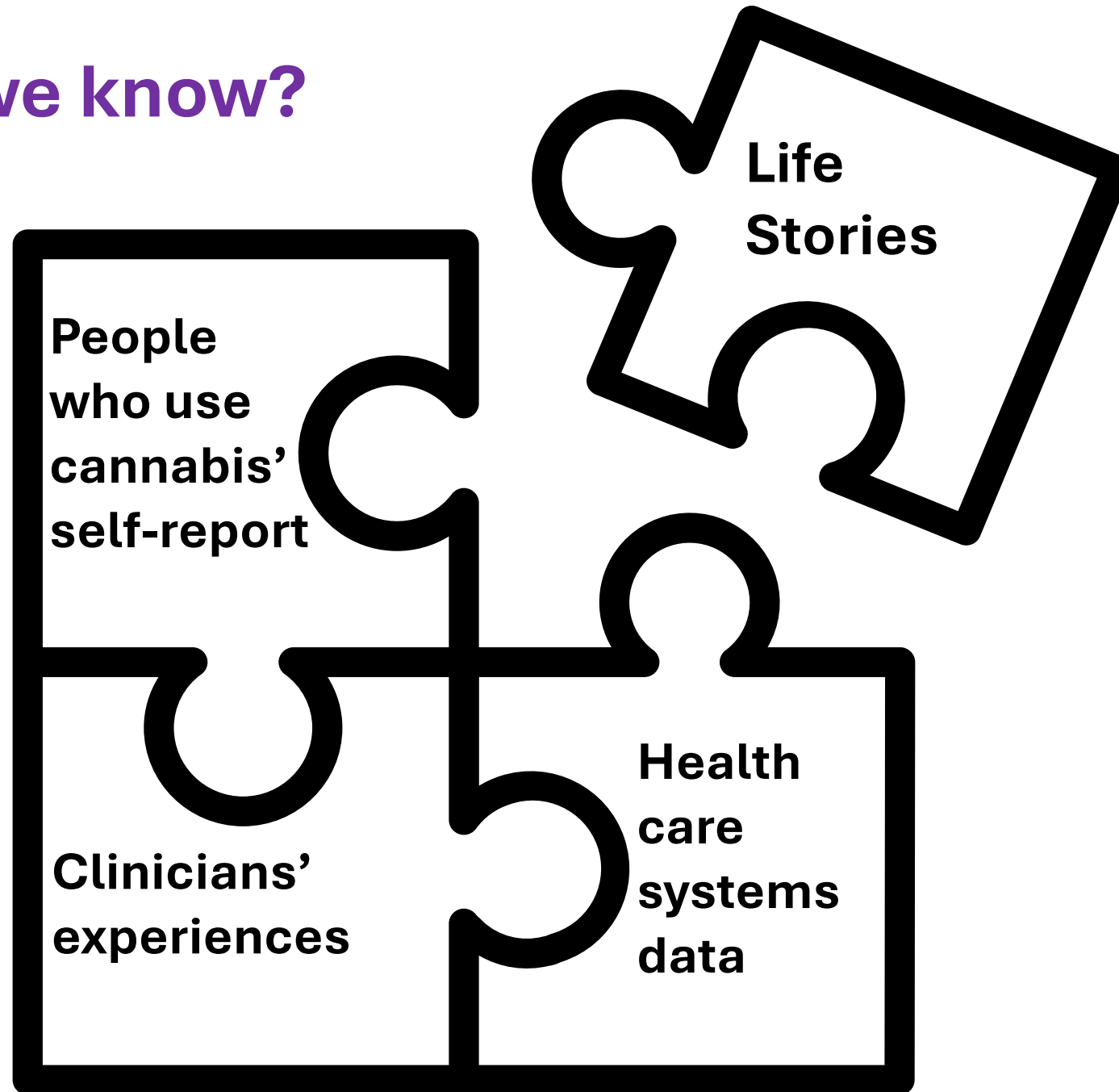
INJURY AT WORK:

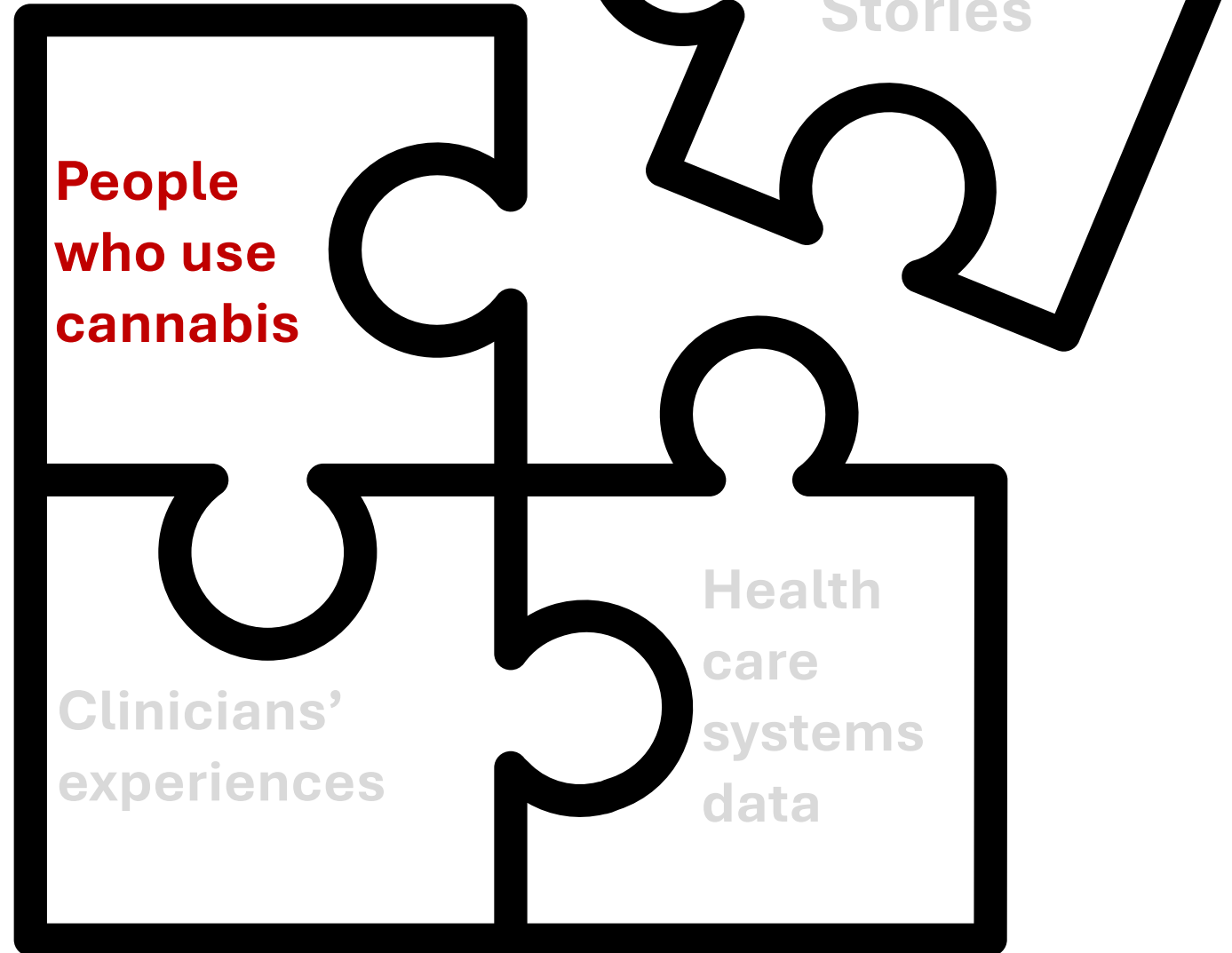
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What do we know?





**People
who use
cannabis**

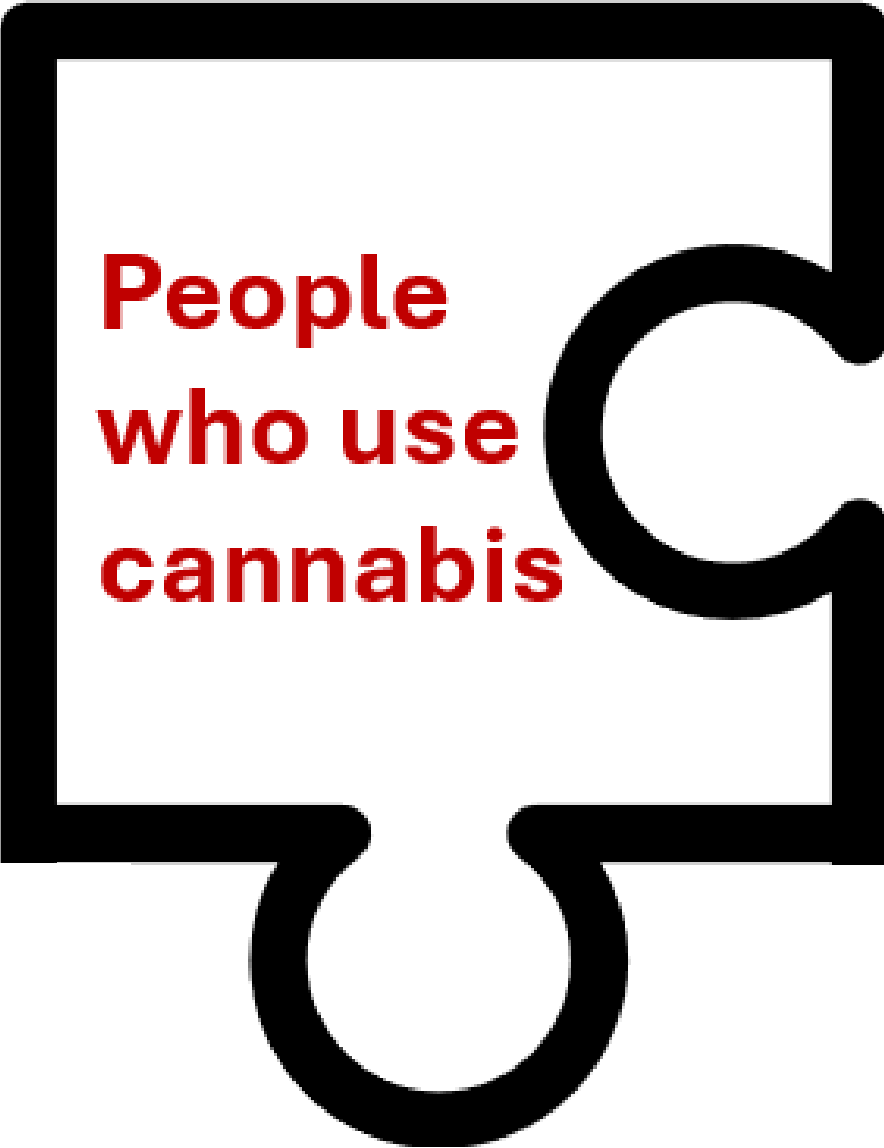
Life
Stories

Clinicians'
experiences

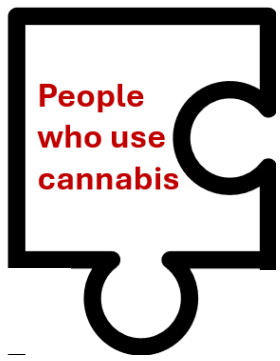
Health
care
systems
data

Survey of Washington residents
who reported consuming
cannabis in the last 12 months.

- *Have you ever experienced cannabinoid hyperemesis syndrome (repeated, severe vomiting from marijuana use)?*
- *Did you experience cannabinoid hyperemesis syndrome in the past 12 months?*



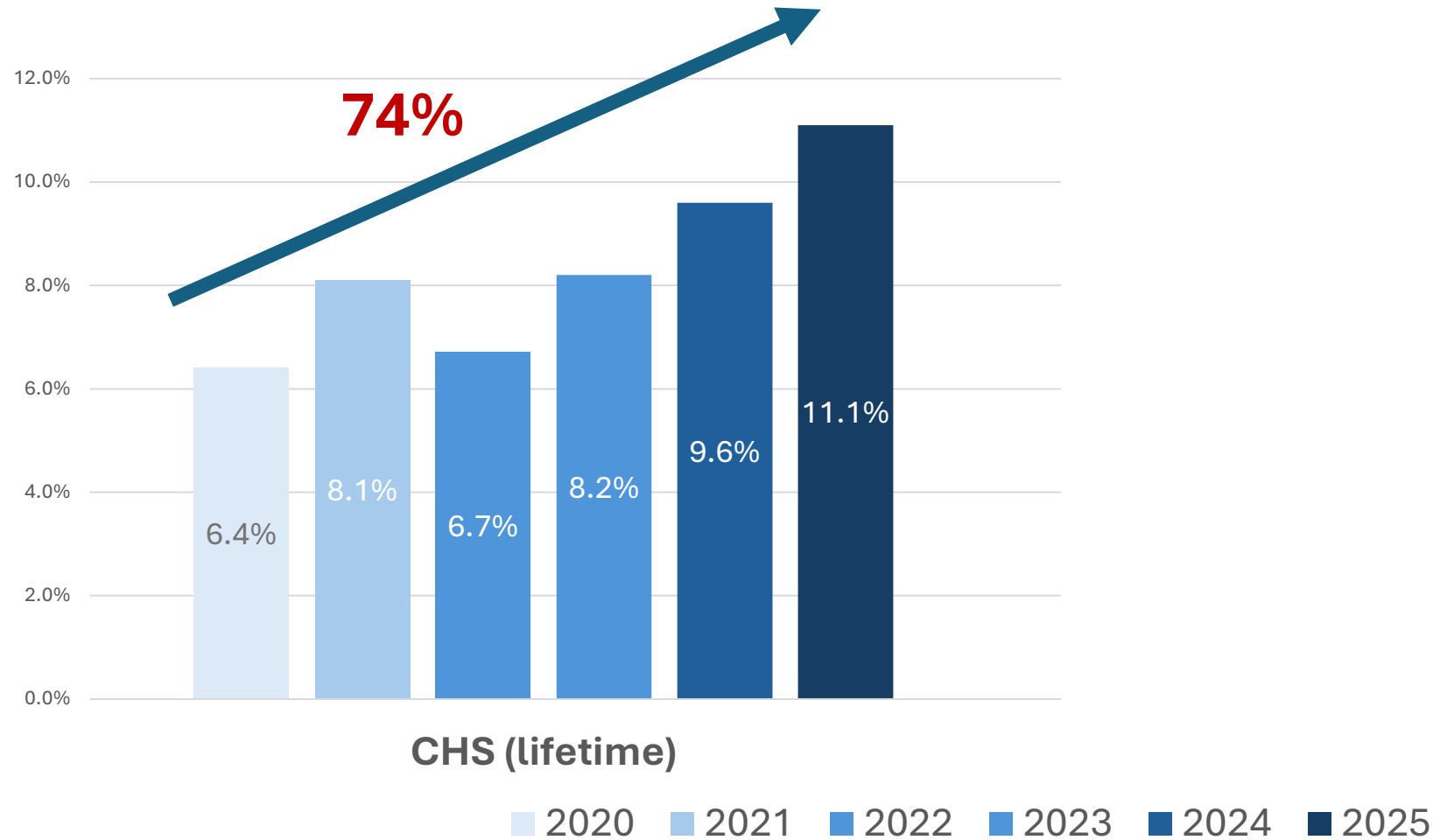
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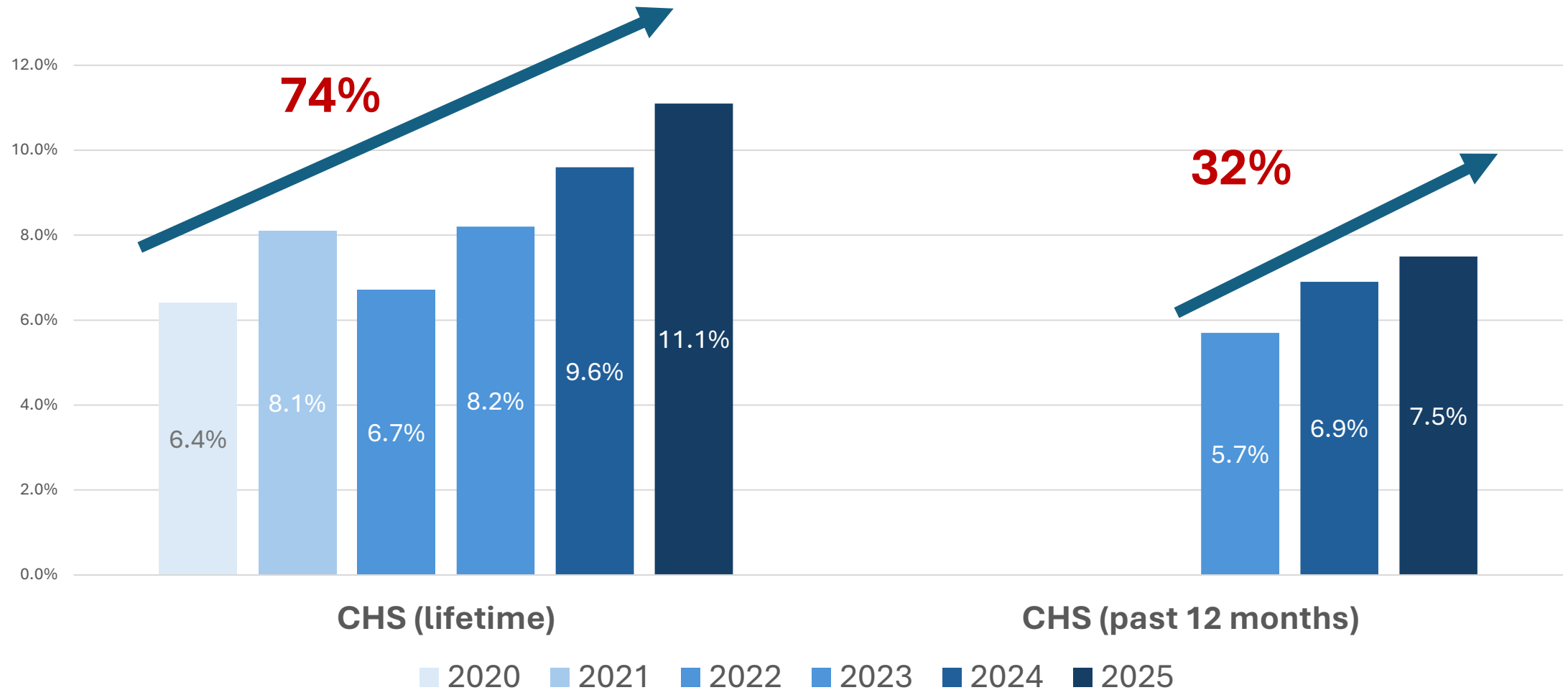
International Cannabis Policy Study (ICPS) Surveys

- Only **cannabis-specific survey** administered in **6 countries** annually, designed to examine cannabis use trends . (D. Hammond, U Waterloo.)
- **Washington-specific** data is managed by WSLCB Research Program.
- **Six years** of data: 2020 – 2025. About **7,000 WA people** who report consuming cannabis aged 16-65.
- Nielsen Consumer Insights Panel – Quotas by age. Post-stratification survey weights according to Census variables. All estimates presented were weighed and rescaled to the WA original sample.

CHS prevalence among Washington residents who consumed cannabis in the last 12 months, 2020-2025 (n=7055)



CHS prevalence among Washington residents who consumed cannabis in the last 12 months, 2020-2025 (n=7055)



High risk groups

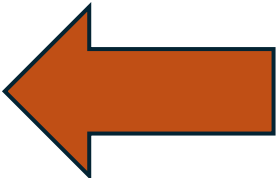
Gender

Age

Mental Health Diagnosis

CHS lifetime prevalence among Washington residents who consumed cannabis in the last 12 months, according to gender and age group (%)

Age	Female	Male
16- 20	18	27
21-25	16	16
26-35	9	18
36-45	7	18
46-55	6	13
56-65	4	5



Have you ever been diagnosed with...

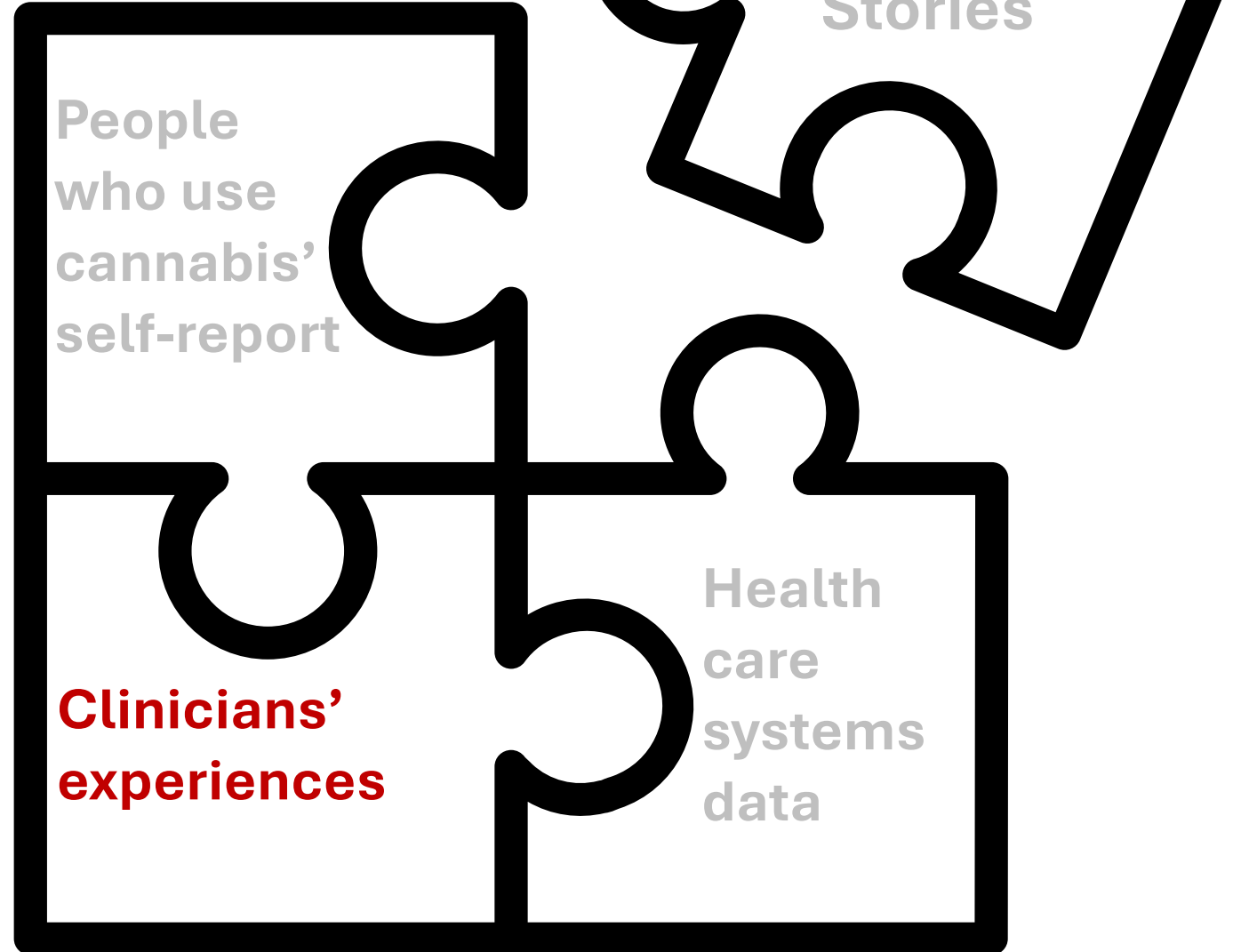
- Psychotic disorder
- Anxiety
- Depression
- Post-traumatic stress disorder (PTSD)
- Bipolar disorder or mania or borderline personality disorder.
- Never had a mental health diagnosis

Lifetime CHS

according to mental health
(MH) diagnostic in WA state (%)

No MH diagnosis	MH diagnosis, no psychosis	Psychotic Disorders
3.8	8.7	26.8

Carlini BH, Williams JR, Garrett SB, Hammond D. People with psychotic disorders are the most vulnerable to cannabis adverse health outcomes: a study in WA State, USA. *Community Ment Health J.* 2026;62(5):889-895.



Survey of clinicians recruited through WA professional associations channels, 2024-2025

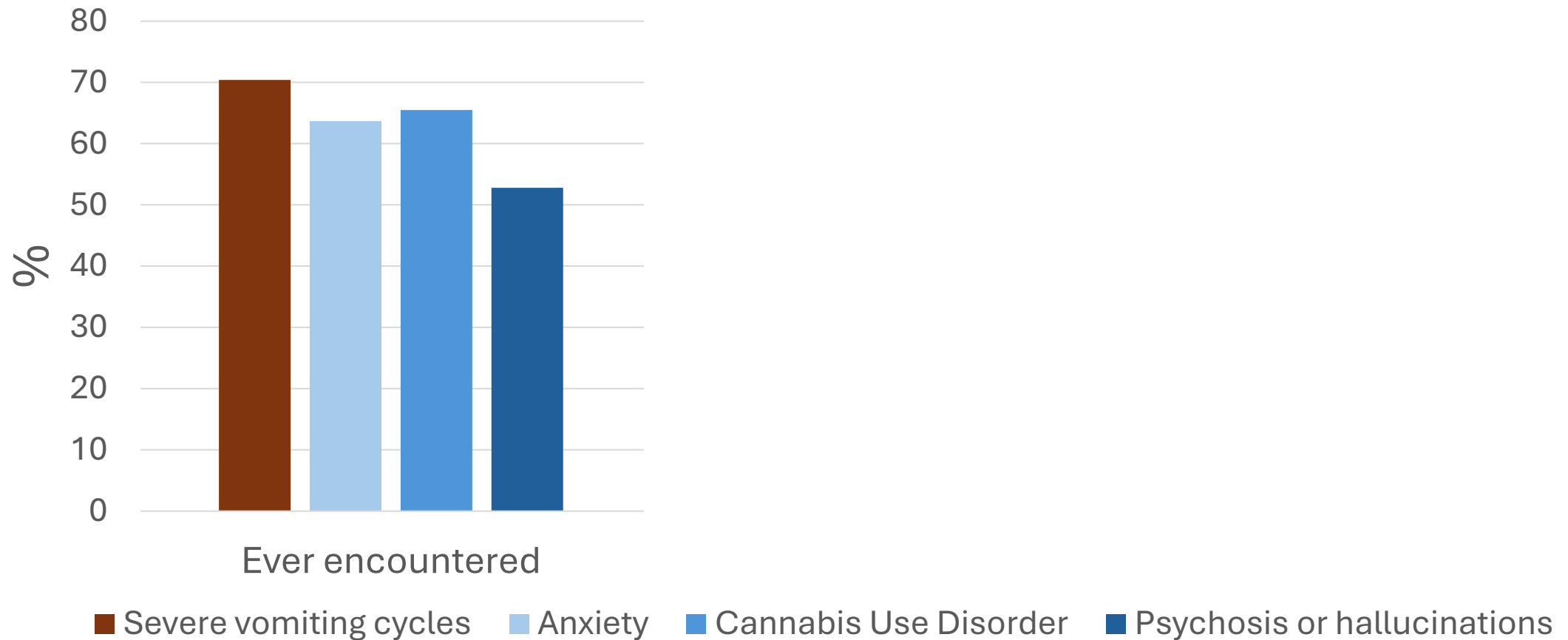
- ***What cannabis-related adverse effects*** have you and/or your clinical team ***encountered*** in your clinical practice?
- What is the ***most frequent*** adverse event you have seen?
- What is the ***most serious*** adverse event you have seen?



WA clinicians' characteristics

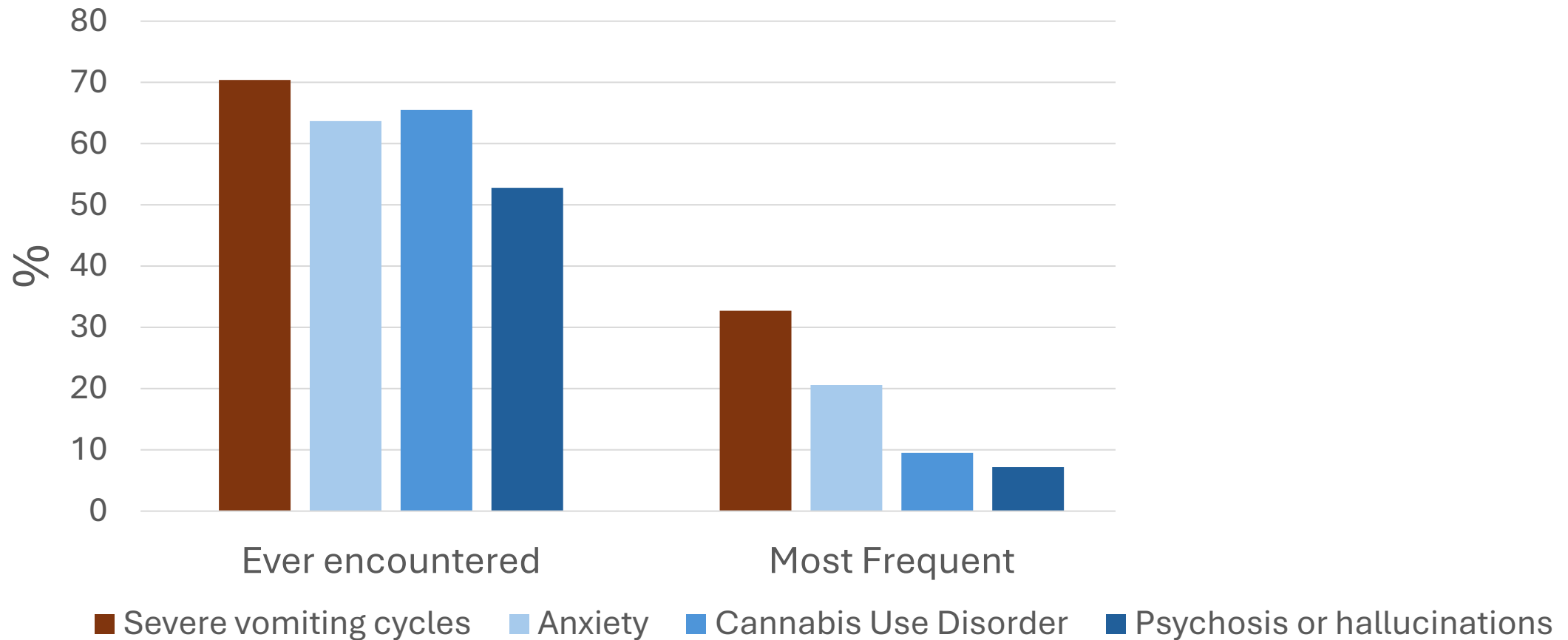
- 388 valid responses
- Most medical doctors (68%) and working in hospitals or primary care clinics.
- Vast majority (95%) had seen cannabis-related adverse events (AEs) in their clinical practice
- 35% reported seeing cannabis AEs and related problems regularly (2x month to 2x week.)

Most frequent cannabis-related adverse events according to frequency and seriousness, reported by 388 health care providers in WA State

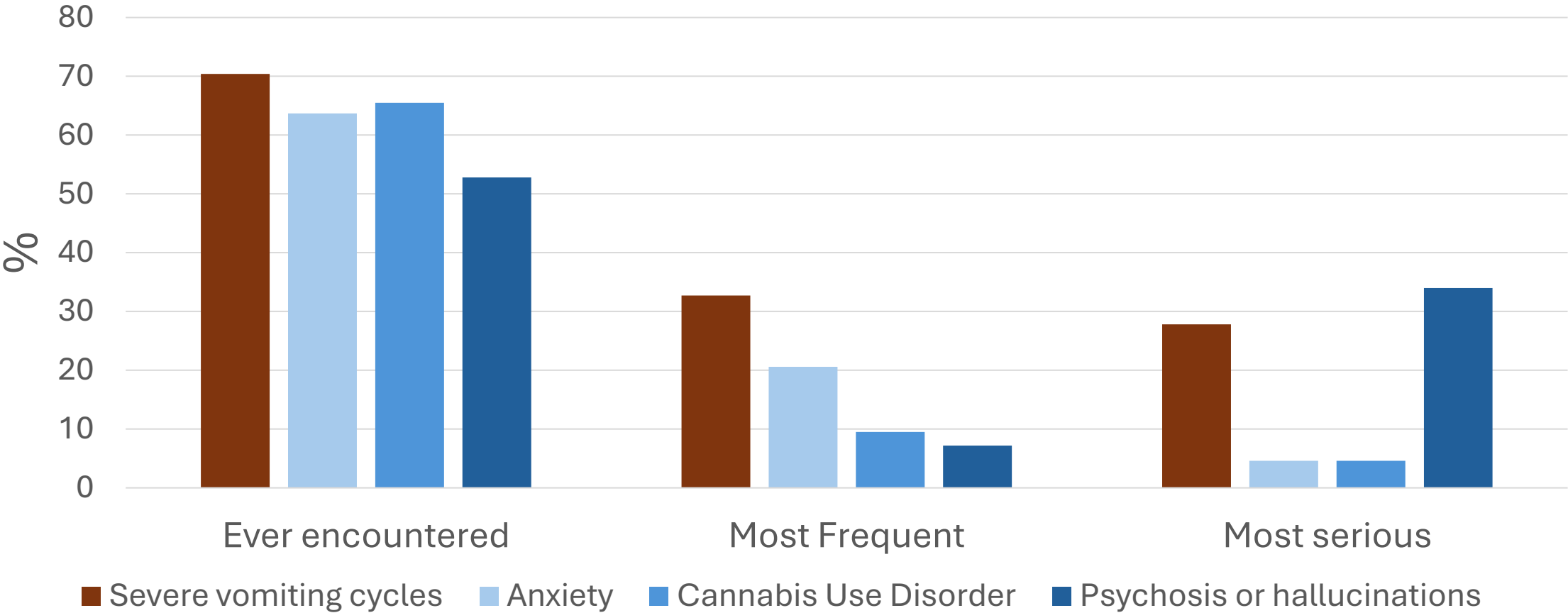


Carlini BH, Kellum LB, Garrett SB, Williams JR. Cannabis-Related Problems, Adverse Events, Clinical Experiences and Barriers to Intervening: Perspectives of Health Care Providers in Washington State. *Subst Use Addctn J*. 2026;47(3):852-863.

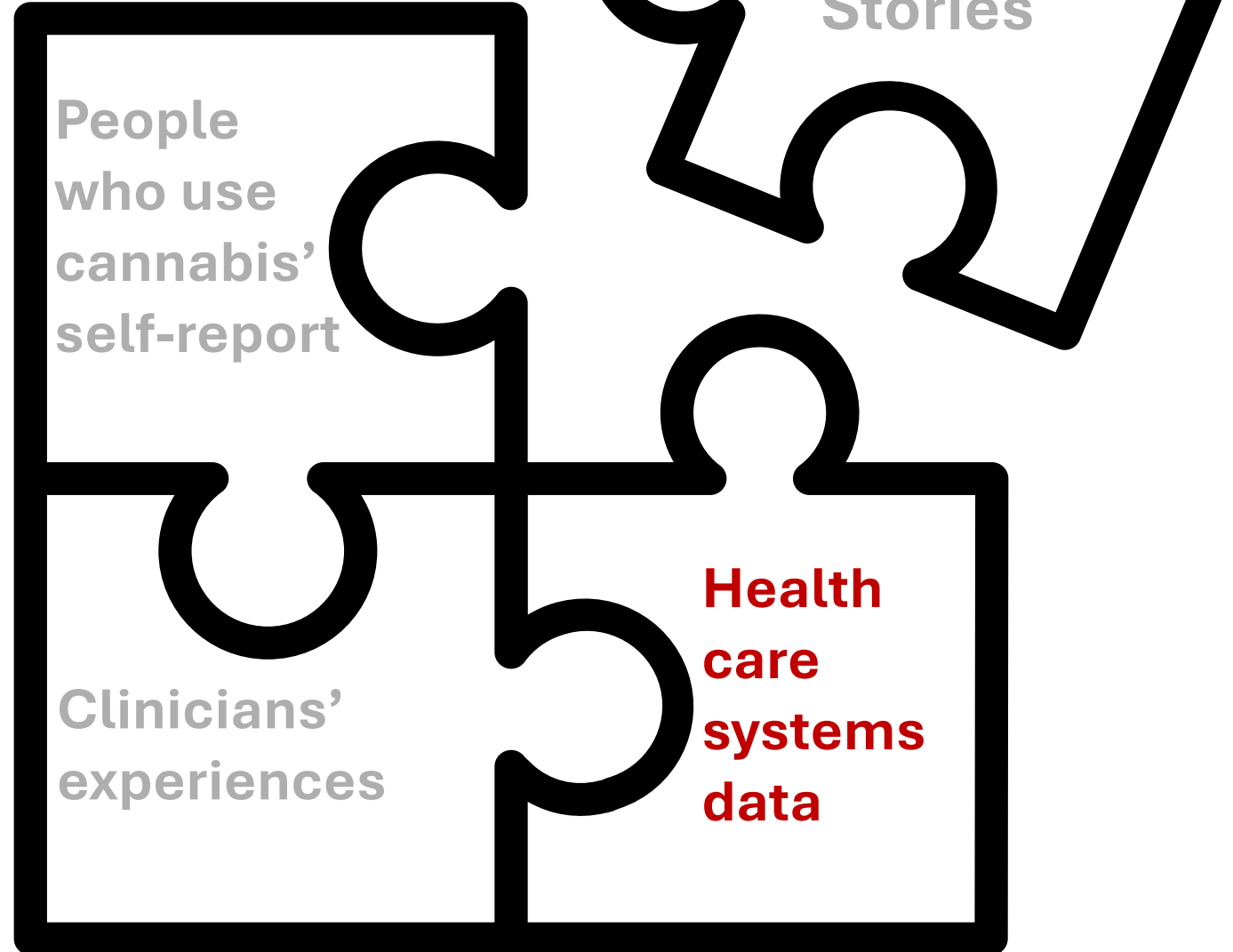
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Washington Department of Health's **Rapid Health Information NetwOrk** program
Syndromic surveillance : real-time,
population-based healthcare monitoring
system



Washington State Hospital Association (WSHA)
Washington State Hospital Discharge Dataset
Comprised of **inpatient and outpatient claims** information and inclusive of all
payors.



Data requested

New disease code for CHS- R11.16.



October 25

n=3113 visits

July 26

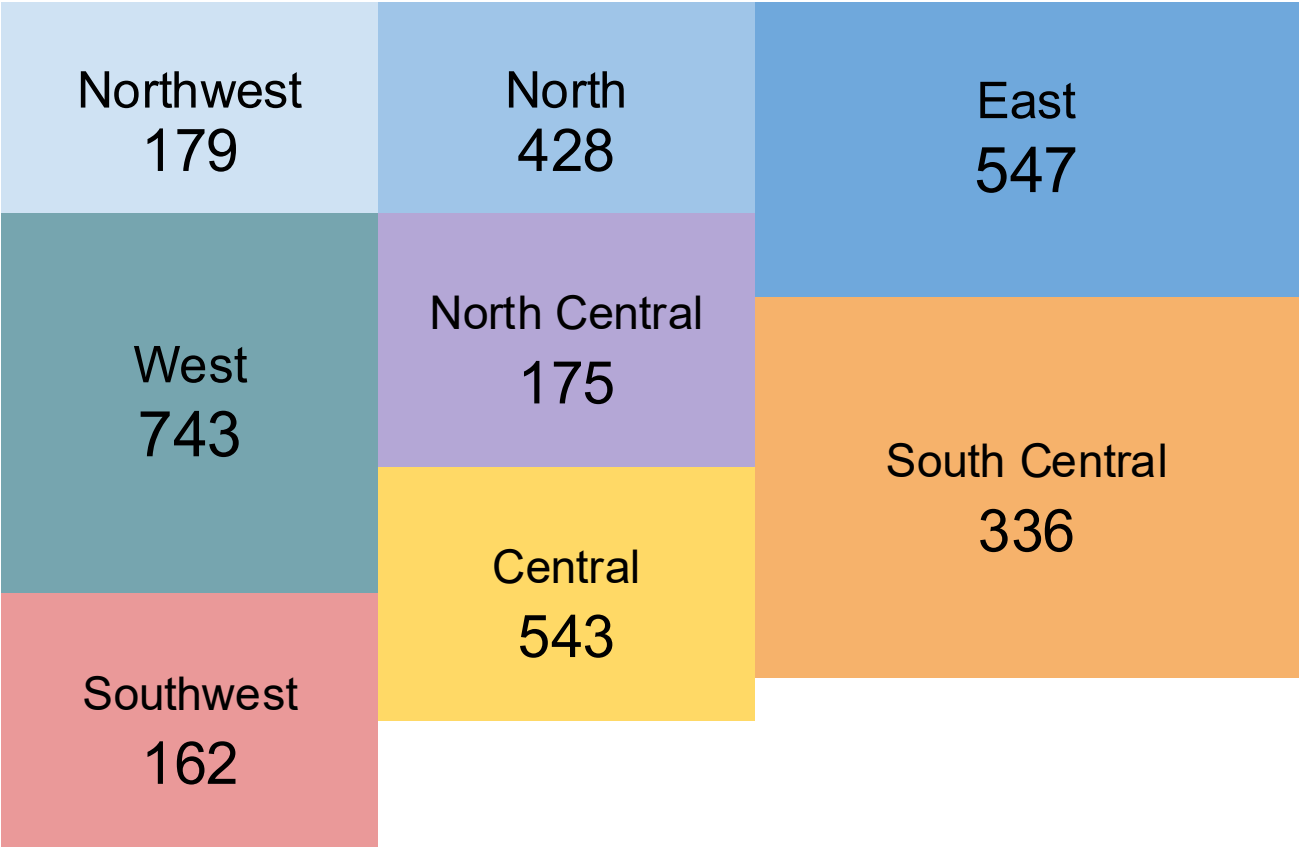


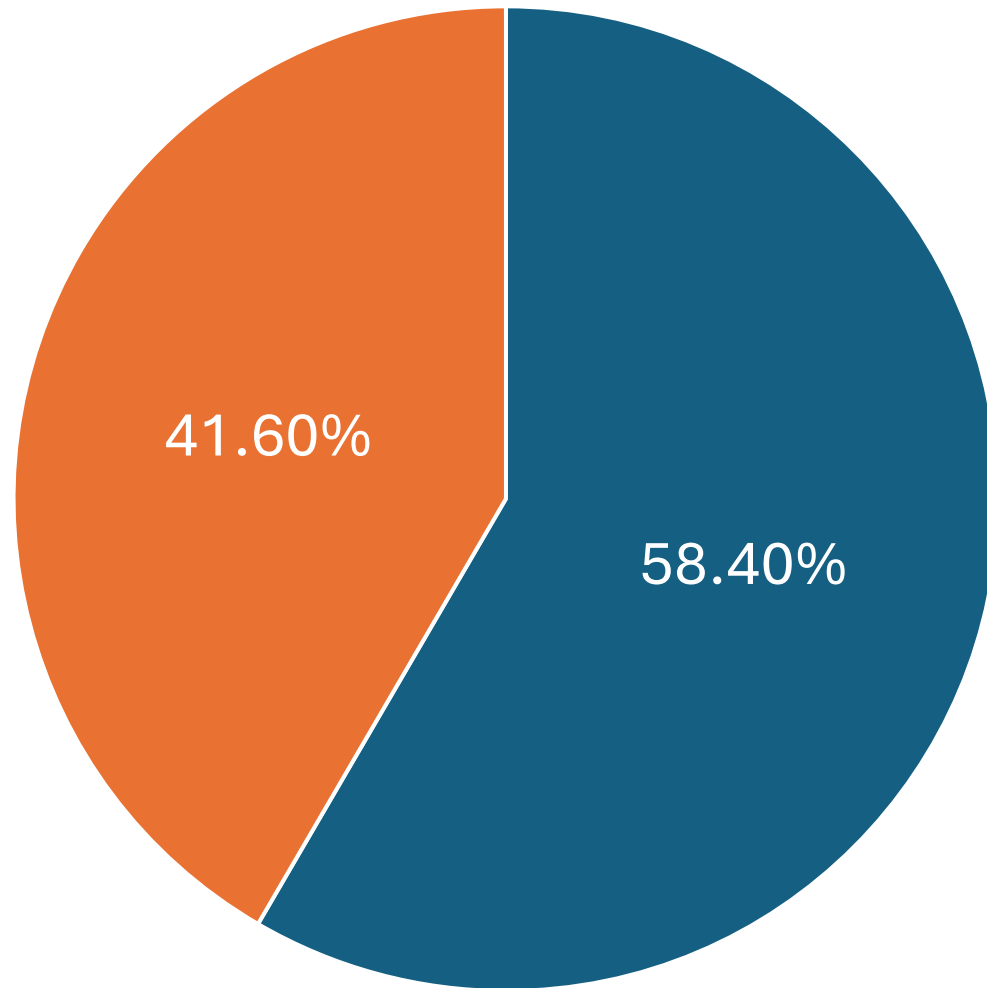
October 25

n=2867 claims

June 26

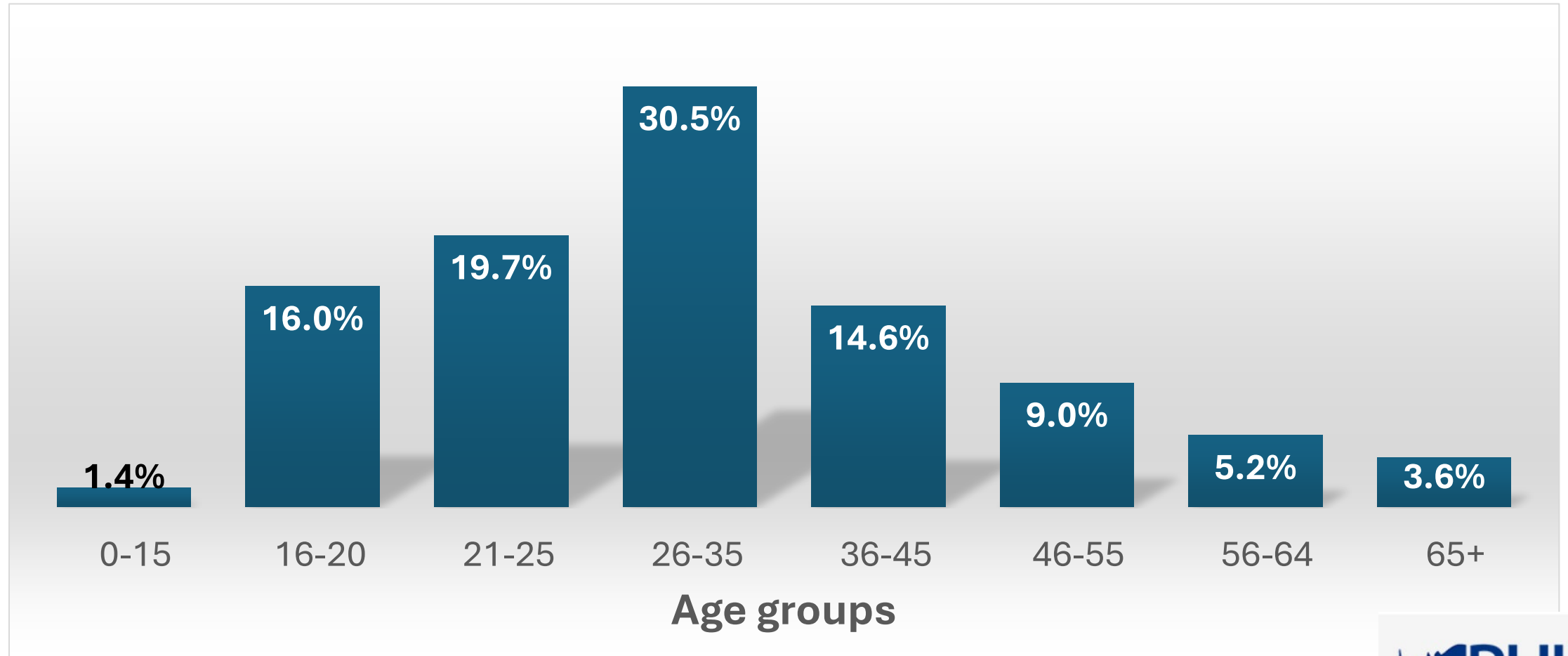
CHS Emergency Visits in WA State, Oct 2025 to July 2026, according to Washington State EMS Regions (n=3113)



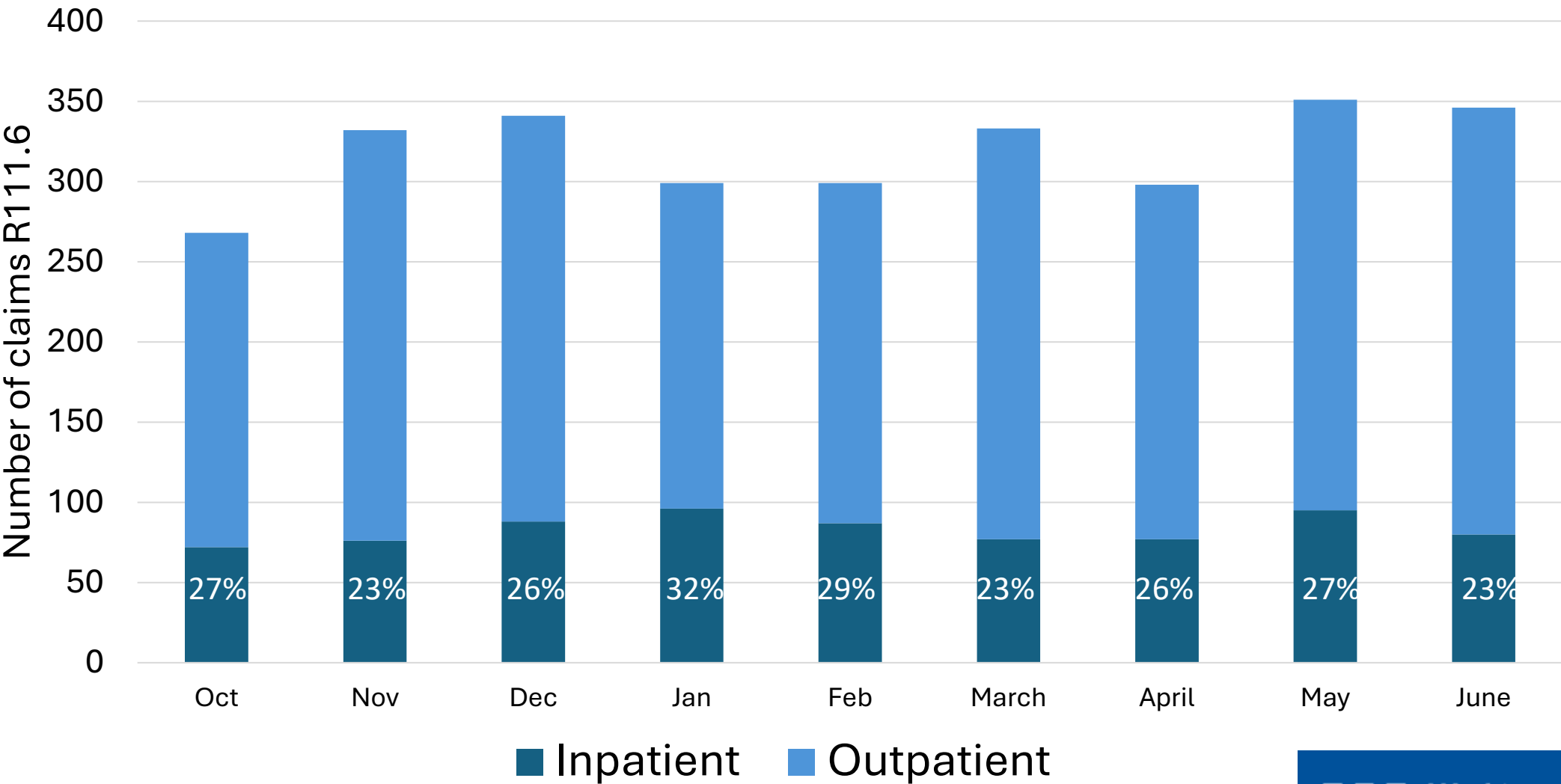


■ Female
■ Male

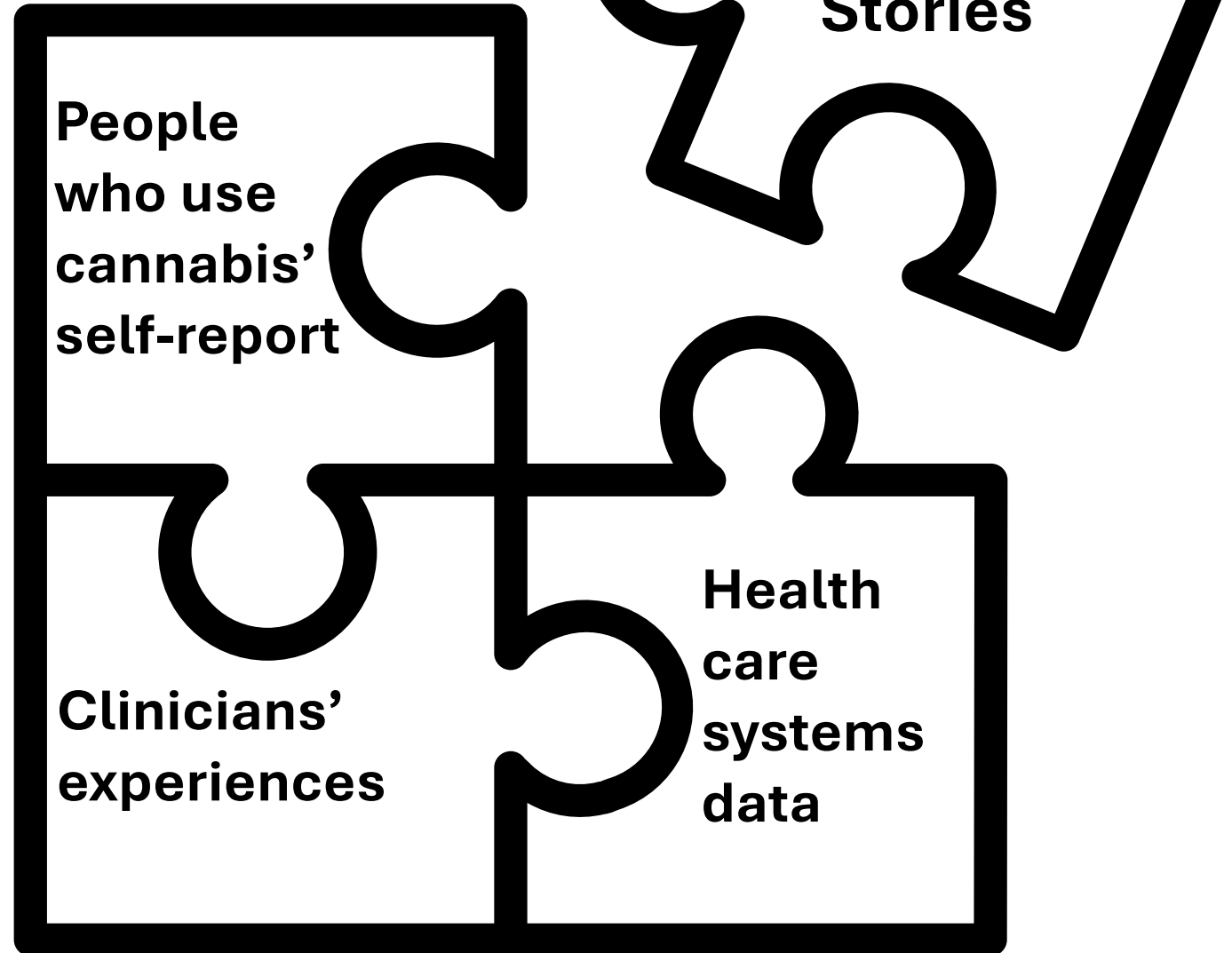
CHS Emergency Visits in WA State, Oct 25 to July 26



Proportion of CHS outpatient and inpatient claims, per month in WA State (n=2867)



What do we make of this?





We need to pay more attention to CHS in WA state

- Sharp increase in self reports of CHS since 2020.
 - Males present higher prevalence of CHS while females seek health services for CHS more often.
 - Teen males and people with mental health diagnosis are the most vulnerable to CHS.
- CHS hyperemetic episodes are the most frequent and the second most serious cannabis AEs according to WA clinicians
- WA has been recording ~300 emergency medical encounters/month for CHS since October 2025.
 - 23% to 32% of these encounters result in hospital admissions.

We need to do more

Decrease CHS burden on health systems

- Clinician resources
- Patient education
- Secondary data analysis (Medicaid)



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CANNABIS EDUCATION
& RESEARCH PROGRAM

<https://adai.uw.edu/cecp/clinicians/#chs>

Increase state surveillance and monitoring

- Healthy Youth Survey (HYS)
- Washington Young Adult Health Survey (WYAHS)

A big thanks to

ADAI

My colleague Jason Williams, PhD

Snohomish County Health Department

- Kali Turner, MPH
- Brittany Bevis-Sciuto, MPH

They have a
great poster!

Washington State Department of Health

- Lauren Draftz, MPH

Washington State Hospital Association

- Brittany Weiner, MS, LMFT, CPPS, PMH-C



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ALCOHOL INSTITUTE

CANNABIS EDUCATION & RESEARCH PROGRAM

<https://adai.uw.edu/cerp/>

<https://www.learnaboutcannabiswa.org/>

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