# Establishing a System of Care for Severe and Refractory Dual Disorder in the State of Hawai'i

**Presented by: Gerald Busch MD MPH** 

**September 16, 2022** 



Coordinated by the **Department of Psychiatry JABSOM University of Hawai'i** in partnership with **the Hawai'i State Department of Health, Alcohol & Drug Abuse Division (ADAD), Hawai'i Youth Services Network (HYSN),** and the **Hawai'i Interagency Statewide Youth Network of Care (HI-SYNC)** 

#### **Disclosure Statement**

No corporate sponsorship

No relationship with any industry or person that can be construed as a conflict of interest in presenting this material

No off-label therapies or products will be discussed in this presentation

# Acknowledgment and More Disclosure

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The content of this presentation does not reflect the views of the Department of Health.

# **Learning Objectives**

01

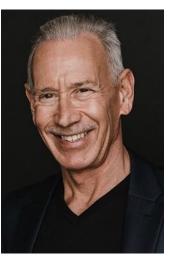
List 3 properties of dual disorders that distinguish them from their component disorders 02

Define "Wrong Door" phenomenon

03

List the most effective intervention for dual disorders currently

#### The Team



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### **ADAD State Plan for a System of Care**

The goal of this project is to assist ADAD in updating its state plan, which states the division's "efforts are designed to promote a statewide culturally appropriate, comprehensive system of substance use services to meet the treatment and recovery needs of individuals and families and to address the prevention needs of communities."

# Data Analytics Core

UH Pacific Health
Analytics
Collaborative

#### Culture Case Study Core

Native Hawaiian Culture Case Study, Puni Ke Ola project

### System of Care (SoC) Implications Core

UH Department of Psychiatry & Chapter Leads

Emerging Adult
Treatment Needs
Assessment

UH Department of Psychiatry

#### SoC Chapters

The SoC Implications Core includes a set of reports which discuss the Systems of Care for the intersection of substance use and public sector or specific populations

# **Substance Use**& Public Sector

Mental Health

Homelessness

**Criminal Justice** 

Juvenile Justice

Violence (IPV, DV, CAN)

# **Substance Use**& Populations

Rural

Native Hawaiian

Sexual & Gender Minorities

Pregnant & Parenting Women

Primary Care Integration

# What we will do today:

- Definition and Properties of Dual Disorders
- World Association on Dual Disorders (WADD)
- Dual Disorders/Cannabis Use Disorder
- State-Specific Data
- Current System of Care in Hawai'i
- Wrong Door Syndrome
- Recommendations

#### **Dual Disorder Defined**

WHO definition: co-occurrence of substance use disorder (SUD) and a psychiatric disorder

World Psychiatric Association (WPA) "dual disorders/pathology"

eg "dual disorder/Major Depressive Disorder

Nomenclature "Dual Disorder" will be used in this talk due to its standardized global use.

#### Dual Disorder > sum of index disorders

# Properties of Dual Disorders

More frequent recurrence than either index disorder

Increased mortality, suicidality

Family, social, employment, and educational dysfunction

Increased violent behaviors, legal problems, incarceration, and homelessness

#### **Properties of Dual Disorders**

- The component disorders exert a "bidirectional negative impact" on each other in the realms of:
  - Clinical manifestations
  - Clinical course
  - Outcomes
  - Treatment compliance

# Properties of Dual Disorders

Increased utilization of health care services.

The severe and refractory dual disorder cohort is the focus today.

#### **WADD**



https://www.worlddualdisorders.org

"Epidemiological evidence and neuroscience knowledge indicate that dual disorders are the expectation, not the exception, but they are still ignored. Why is this?"

# Closer to home...

 Study group included polydrug use included methamphetamine and presented with psychosis

 Psychosis occurred more often in the group that included methamphetamine in polydrug abuse

# Cannabis Use Disorder & Psychosis

The odds of a psychotic disorder occurring in a *daily* cannabis user are 3.2 times greater than for a "never user"

High potency cannabis use was found to increase odds of a psychotic disorder by 1.6 over a "never-user."

# CUD Dual Disorder

> 75% of Cannabis Use Disorder patients in treatment have a dual disorder, predominantly mood and anxiety disorders.

Psychiatric illnesses most commonly found as dual disorders with Cannabis Use Disorder: antisocial personality disorders, Bipolar Disorders, psychosis, and agoraphobia

The younger the cannabis user, the more significant the association with these disorders

# Hawai'i State-Specific Disease Burden – National Survey on Drug Use and Health

- Households selected randomly for survey
- Sampling bias: does not capture disease burden for homeless, hospitalized, or incarcerated

NSDUH 2018-2019, Hawai'i	Any Mental Illness - Past Year (AMIYR_U)		
Illicit Drug and Alcohol Use - Past Year (ILLANDALC)	Total	0 - No Past Year Any Mental Illness	1 - Past Year Any Mental Illness
Total	100.00%	82.10%	17.90%
0 - No drug or alcohol past year use	82.40%	70.10%	12.30%
1 - Drug <i>and</i> alcohol past year use	17.60%	12.00%	5.60%

# Hawai'i State-Specific Disease Burden – Decedents Data and Dual Disorder

- National Violent Death Review System (NVDRS) data (Galanis, 2021)
  - Among 85 homeless decedents, 20 (23.5%) had dual disorders
  - Among 1110 non-homeless decedents, 129 (11.6%) had dual disorders

NVDRS 2015-2019, Hawai'i					
All records (n=1195)					
	Total	Mental Illness Only	Substance Abuse Only	Both (Dual Disorder)	Neither
Total	1195	203	241	149	602
Non-homeless	1110	193	207	129	581
Homeless	85	10	34	20	21

#### Hawai'i State-specific Disease Burden: Life-expectancy/SUD/Homelessness

2020 Medical Examiner Data (personal communication Dr. Kobayashi), City and County of Honolulu:

REDUCED LIFE EXPECTANCY (6<sup>TH</sup> DECADE) IN HOMELESS POPULATION, RESULTING PRIMARILY FROM OVERDOSE OR INFECTION/SEPSIS

# Hawai'i State-Specific Disease Burden – QMC ED Hyper-utilizers and Dual Disorder

- Data from our QMC hyper utilizer group
- 15 patients made 718 ED visits in 2021.
- 48 visits/hyper-utilizer/year

Calendar Year 2021 - 15 hyperutilizers	% hyperutilizers with DD/homelessness	
SUD	66.67%	
Mental health	93.33%	
Homeless	66.67%	
SUD and mental health	60.00%	
SUD, MH and homeless	53.33%	

	Hyperutilizers	All unique patients	% of total
# of unique patients	15	33730	0.04%
# of ED visits CY21	718	54295	1.32%
# of ambulance arrivals	325	14557	2.23%
# of MH1's	38	1156	3.29%

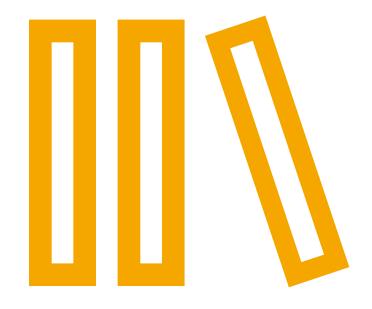
#### **Hyper-utilizer Disproportionate Resource Use**

Comparison of ED Visits,	ambulance	arrivals,	and MH-1	per
patient				

	Hyperutilizer	Gen ED Pop
ED visits/patient	48	1.6
Ambulance/patient	22	0.4
MH-1/patient	38	0.03

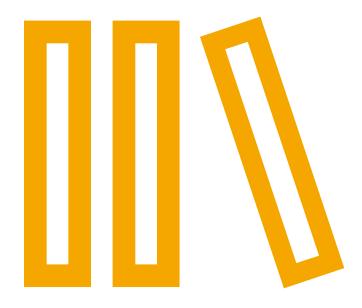
## **Current System of Care in Hawai'i**

- The "system of care" in Hawai'i is not necessarily a system, but a patchwork collection of public and private treatment resources.
- Development not focused on needs assessment across state



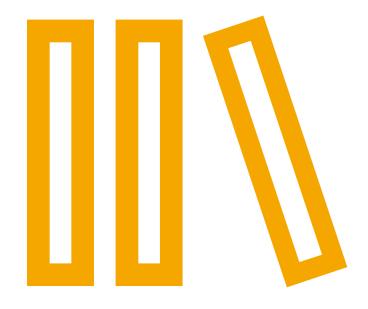
# **Current System of Care in Hawai'i**

- Outpatient fixed ambulatory, and some mobile assessment and treatment services.
- Intensive Outpatient Treatment
- Partial Hospital Programs
- Short term residential treatment for substance use disorders only (+MH add on)
- Longer term treatment for SUD only (Sand Island)
- Inpatient for mental health disorders only



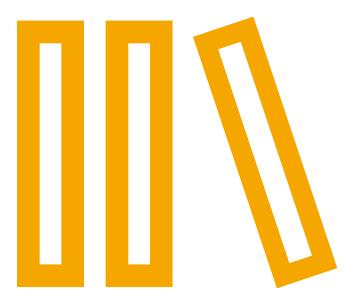
#### **Current System of Care in Hawai'i**

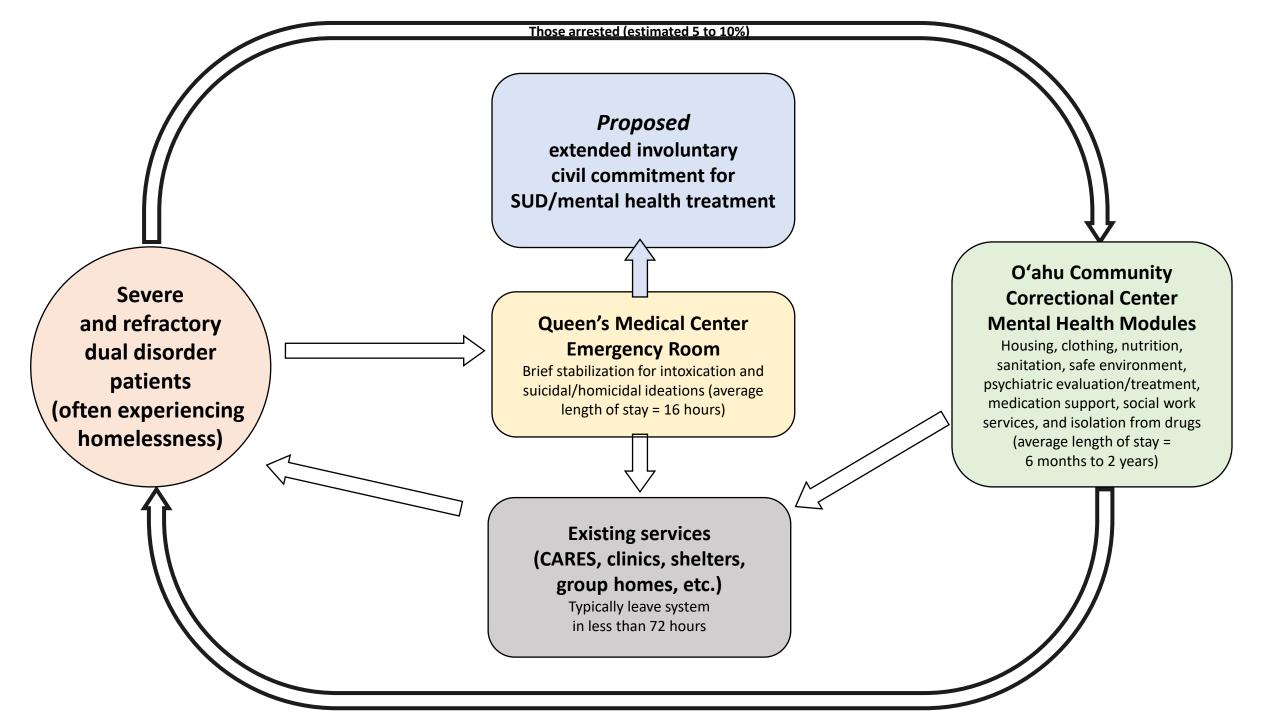
- Hawaii State Hospital: longer term care, must be in criminal justice system for admission
- OCCC: must be pre-trial detainee, provides a protracted structured environment with psychiatric care

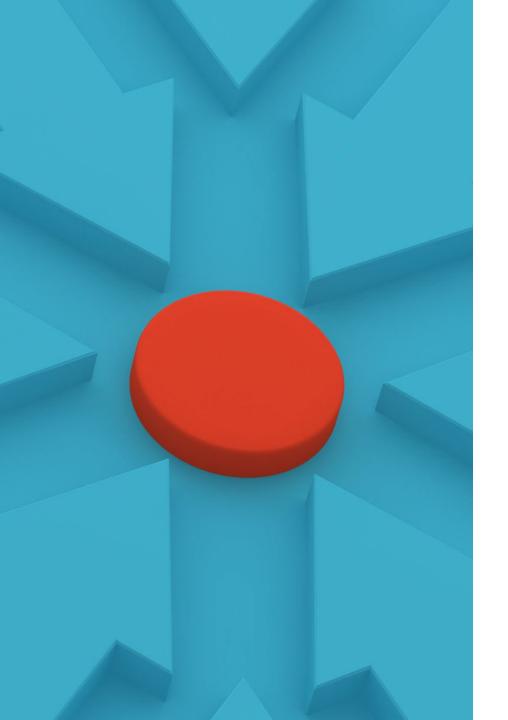


#### **Current System of Care in Hawai'i**

Case Management Services



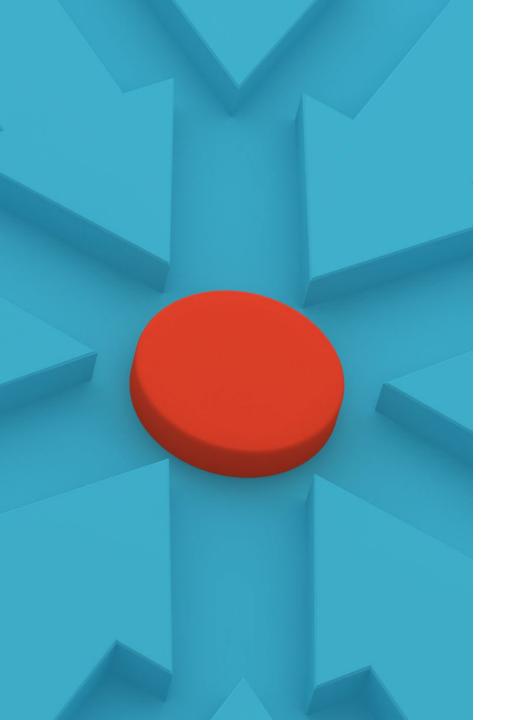




### Wrong Door Syndrome

Dual Disorder patient being managed in a psychiatric environment in which SUDs are either not properly diagnosed or treated, or vice versa, or

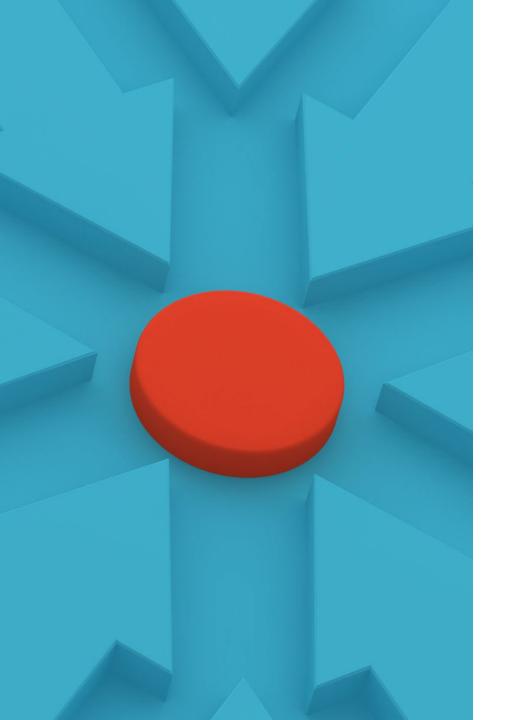
Dual Disorder patients in an SUD treatment environment, lacking diagnostic or treatment services or both in the areas of psychiatric disorders.



## Wrong Door Syndrome

May also occur in research studies in which one or the other disorder is excluded.

As a result, evidence-based treatments for dual disorders may be lacking.



### Wrong Door Syndrome

The treatments for SUDs and psychiatric disorders arose separately and distinctly

Arose along completely different historical lines, contributing to the lack of effective combinations or integration.



# **Treatment: What Does Not Work Well**

Acute inpatient psychiatric admission

**Traditional SUD treatment** 



# What Does Help: Case Management

Over time, may engage an otherwise reluctant patient

Provides lifeline or lighthouse beacon for continuity of care



# **Treatment: What Would Work**

OCCC: empirical model of improvement with longer term structured care

But no SUD care



# **Treatment: What Would Work**

Recommendations for legislation for *involuntary commitment for longer term treatment* for nonforensic refractory dual disorder patients

Would require physical and workforce infrastructure



#### **Data Issues**

- Sample bias
- Data governance
- Silos

DOH: AMHD/ADAD Schism DOH/DPS Schism

- Diagnostic heterogeneity
- Inherent bias in DSM5 SUD criteria



#### **Data Issues**

- State health data standardization initiative
  - Standardize public and private EHR interface
  - Require SUD diagnosis be included if medical admission



#### **Data Issues**

- Initiatives to improve psychiatric diagnostic accuracy
  - E.g., adding diagnostic algorithms in Epic
  - Assisted or guided semistructured diagnostic interviews in Epic

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#### Mahalo

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A draft volume of the ADAD State Plan System of Care Implications Chapters is available for public review and comment at

https://health.hawaii.gov/substance-abuse/state-plan/



### Pau

