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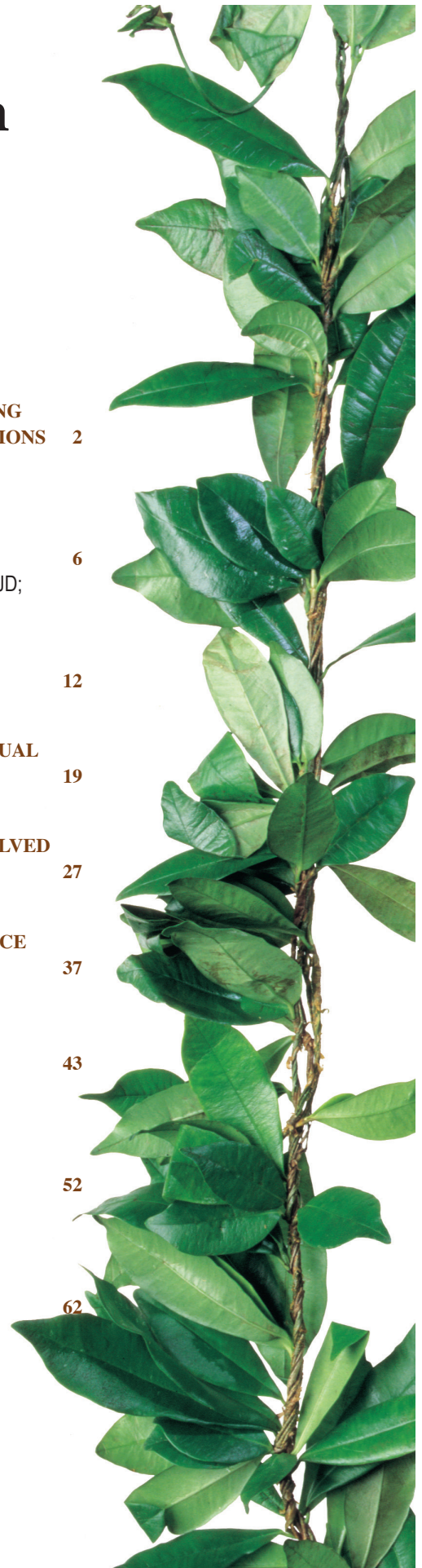
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## Guest Editors' Message

# Toward a Hawai'i State Plan for the Substance Use System of Care: Implications for a Healing System among Public Sectors and Health Disparity Populations

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Tricia Mabellos DrPH

### Keywords

*substance use, system of care, Hawai'i, public sector, health disparity populations*

### Abbreviations and Acronyms

*ADAD = Hawai'i State Department of Health Alcohol and Drug Abuse Division*

Substance use is a significant health problem in Hawai'i, and solutions primarily come under the purview of the Hawai'i State Department of Health, Alcohol and Drug Abuse Division (ADAD). However, substance use is an important consideration among many public sector services and disproportionately impacts specific populations in our state. Therefore, ADAD is in the process of updating its state plan to highlight the intersection of substance use and public sectors and substance use and health disparity populations (<https://health.hawaii.gov/substance-abuse/state-plan/>).<sup>1</sup> The 2022 State Plan for Substance Abuse (State Plan) is meant to serve as a blueprint and reference document so that local and state organizations have a framework for centering substance use in their future action. By taking an intersectional approach, cross-sector and population specific strategies may be implemented prospectively. Through a relational design strategy with the University of Hawai'i Department of Psychiatry, John A. Burns School of Medicine in collaboration with ADAD, local professionals statewide from a variety of public, private, and community-based entities have contributed their subject matter expertise to author these intersectional areas in the State Plan. By leveraging the wisdom of

our local practitioner and scholar experts, we aspire to elevate community voices – those of the clients and their families, as well as of the professionals.

As the work on the State Plan evolved, it became evident that there were few authoritative sources in the existing literature that bridged research and practice-based knowledge to make recommendations around these important intersections of substance use and public sectors and populations. Therefore, the scope of the State Plan specifically addresses the context of Hawai'i's systems of care, which includes both healthcare systems as well as broader systems that serve populations of differing needs and reflect much diversity. This collection of articles presents key highlights from the forthcoming ADAD State Plan's System of Care Implications Core, which reflects the intersection of substance use and the public sector (mental health, homelessness, criminal justice, juvenile justice, and child abuse and neglect), as well as substance use and health disparity populations (Native Hawaiians, and sexual and gender minorities). Alongside these intersectional foci, the final article discusses potential cross-cutting initiatives to improve public sectors and health disparity populations with the integration of substance use specialty care in Hawai'i primary care settings.

This effort has been spearheaded by ADAD to simultaneously and critically examine implications of these specific intersections on the substance use system of care, which had not been undertaken in prior plans (<https://health.hawaii.gov/substance-abuse/state-plan/>). This novel approach leverages not only academic but also practice-based subject matter experts. These



experts allow for a much deeper and comprehensive outlook on the landscape of substance use treatment and recovery in relationship to other continua of care and support systems in our state and potential directions to guide policy and practice. Therefore, this special supplement was conceived as a plan both to celebrate the work done by our academic and community collaborators for the ADAD State Plan around these important intersections in the systems of care, and also to extend the reach of the State Plan to broader audiences beyond usual readers of a state technical report.

The articles in this special supplement reflect peer-reviewed adaptations of sections in the larger State Plan project which is ongoing at the time of this writing. Although not traditional research papers, nor simply columns, the articles here reflect a hybrid type which: (1) highlight relevant literature and describe available Hawai‘i-specific data, (2) offer expert practitioner and scholar insights, which have been vetted in statewide public forums, around the current system of care from practice-based knowledge, (3) relate appropriate evidence-based interventions or innovative approaches relevant for Hawai‘i, and (4) synthesize the aforementioned to offer observations and recommendations around implications for the systems of care in Hawai‘i.

The literature review method for the development of each manuscript entailed a comprehensive initial review beginning 2020 by the Department of Psychiatry System of Care Implications Core team around the current literature, using PubMed, PubMed Central, and Google Scholar or other database searches with key index terms respective to each topic. After screening the abstracts for relevance to substance use and systems of care in Hawai‘i, a set of full-text articles were screened further and selected for inclusion. Selected articles were compiled into an initial literature review package with an annotated bibliography and given to each of the manuscript lead authors. Authors were able to add to the literature review based on their subject matter expertise, either on their own or with assistance from the System of Care Implications team. Additional literature may have been added based on the peer review process.

Available data systems were examined to describe primary issues or problems in substance use and related systems of care. These were most often publicly available data from the literature, technical reports, or accessible databases. In some cases, stakeholder organizations granted permission to include the sharing of available aggregated data statistics, quality improvement data, or data from non-published internal reports. Where data were unavailable or inaccessible, recommendations around these gaps were often noted.

The current systems of care for each intersection topic illustrate where individuals may be accessing services, or conversely where linkages across systems are absent. Descriptions around the current system of care were gathered in consultation with direct service providers and key stakeholders in order to define

different levels of care, highlight examples of intervention models or modalities, and share specific examples of service providing organizations or program resources in the state.

The articles include evidence-based interventions and approaches from the literature as well as community-driven practice-based interventions and approaches. Unfortunately, there are few published studies that distinctly demonstrate the effectiveness of evidence-based interventions in Hawai‘i. Given the deep cultural contexts of our populations, particularly for Native Hawaiians, recognition of Indigenous ways of knowledge and innovative interventions or approaches are also discussed. The inclusion of innovative approaches was also purposeful, as ADAD has expanded the opportunity for funding these types of prevention and treatment services into the systems of care.

Finally, each article offers observations and recommendations for systems of care implications in our state. These recommendations were based on the subject matter experts’ perspectives from having synthesized knowledge from both the literature and from practice. Practice-based feedback was received from a variety of stakeholders such as ADAD, substance use treatment and recovery providers and organizations, and individuals who may have lived experiences around the intersections in the systems of care. In this way, it is hoped that the community voice is reflected in guiding potential future directions of state and community level efforts to address substance use from an integrated behavioral health perspective in practice and policy.

There are a number of ideas that become evident when reading this collection, ranging from conceptual, to policy and practice, to research and evaluation. Beginning with the conceptual, many articles resonate a humanistic stance that is person-first and destigmatizing, upholds a belief in human dignity and transformation, recognizes the non-linearity of the healing journey, and leverages the power of restorative and assets-based approaches (vs. punitive, deficit models). Policy discussions are in line with this humanism – at the local and program level, and especially for larger system change via legislation and institutionalization of standards at the state and federal levels. For example, in the area of child abuse and neglect (in Calistro & Worthington), referral pathways can be made more complete/consistent in order to increase the likelihood of timely treatment and completion. At the state level, discussions to facilitate increasing access for integrated and extended care in mental health-substance use disorder civil commitment (in Busch & Seo), advocacy for restorative justice for youth through reinvestment/diversion (in Miao, Hishinuma, & Umemoto), leveraging federal and state resources for more flexible streams of funding, the explicit inclusion of cultural or other contexts (trauma; in Calistro & Worthington), and incentives for private sector (reimbursement and collaborative care model in primary care; in Kiyokawa & Quattlebaum) are ways in which policy and program level initiatives may begin to take hold.

Practice implications across the articles converged on a set of interrelated improvements. First, culturally and contextually specific practice will improve treatment and recovery (in Daniels et al; Pham et al), particularly when coupled with cross-sector care coordination informed and supported by a robust set of community-based resources (in Lusk et al; Redulla & Nikogosyan). Second, this means that professional development (eg, training and relationship building) of the existing workforce would be aligned accordingly (in Redulla & Nikogosyan; Kiyokawa & Quattlebaum). Concomitantly this would require workforce development to privilege lived experience on par with other professional criteria, as models of recovery coaches and peer support were a common theme (in Daniels et al, Calistro & Worthington). While none of this is expected to happen overnight, fortunately some of this is happening already in our state.

More specific research and evaluation is needed on a variety of levels to demonstrate the evidence base of effective and sustainable interventions and programs, specifically for Hawai'i. There is a need for improved data collection and definition within the existing systems (eg, specific gender; in Pham; and ethnicity identification, in Daniels et al), where ideally data elements are standardized and cross-linked across multiple platforms. Cross-linked data are especially useful to study utilization and improve services for individuals and families that have needs across multiple service systems (eg, mental health, housing/shelter, substance use treatment; in Lusk et al; Busch & Seo). Furthermore, it may be important to evaluate more closely and rebalance the metrics of success in traditionally punitive systems that may begin expanding more toward intervention or connecting to treatment and recovery (eg, examining target numbers of attempted and successful diversions to treatment, continuity of treatment through the system vs. number of drug related arrests, drugs seized, and citations; in Redulla & Nikogosyan). Additionally, because the roots of Western perspectives in research disadvantage research on underrepresented or small populations, it is important to elevate Indigenous research methodologies and ways of knowing into the evidence base, particularly for Native Hawaiian models of care and healing (in Daniels et al).

Reflecting on the past 3 years since our initial relational design meetings to elucidate both the realities and aspirations for a comprehensive State Plan for a substance use system of care, this collection of articles reveals both hope and challenge. These articles reflect a paradigm shift from traditional care systems toward a system of healing and population-based management for substance use in Hawai'i that transcends the existing hierarchical dichotomy (eg, carers and carees; well people are good and deserving, and ill people are bad and undeserving). Given the themes around person-centered care and healing, cultural and contextual practice, and the need for working in teams as well as integration with primary care, it is important to develop

a statewide pipeline for our workforce. Workforce initiatives must include types of training and work that resonate with lived experience and workforce pathways that are responsive to regional and community needs. We hope that readers of the articles in this special supplement are also inspired to view the ADAD State Plan, as some of the topics here are described more fully in their respective chapters of the State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>).

It is with gratitude that we acknowledge the support for the writing and coordination of the larger project for the State Plan for a System of Care and the dissemination effort of this special supplement, provided by ADAD. Special thanks and appreciation are especially given to the State Plan System of Care Implications Project Study Manager, Yoko Toyama Calistro, and graduate assistant Jin Young Seo for their tireless dedication and immense effort in support of the coordination and technical support of the special supplement. *Mahalo nui loa* to the students and staff who helped to support the work of the overall State Plan project that was the basis for the special supplement: Susy Bruno, Alex Nakamoto, Ishmael Gomes, and Cade Akamu. *Mahalo* to Stephen Geib of the Data Analytics Infrastructure Core for his support in connecting available data for our author contributors. *Mahalo* to the Pacific Health Analytics Collaborative for developing and sharing the *State Plan Statistical Report* which includes public health surveillance data relevant to substance use in Hawai'i. We greatly thank the peer reviewers who volunteered their time and effort to provide important feedback and recommendations for improvement, and also extend our deepest thanks and appreciation to the team of the *Hawai'i Journal of Health and Social Welfare* for their patience and support during this journey for the special supplement.

Lastly, we wish to acknowledge the lead champions and the writing teams of each of the articles and the many unnamed individuals and stakeholder groups that have provided their *mana'o* (insight) and have graciously offered feedback throughout this process - *mahalo nui loa* for persevering in this effort through challenging pandemic impacted times, and believing in your passion enough to bring forth an important set of ideas, observations, and recommendations that offer hope for a healing system of care for substance use in our state.

### **Conflict of Interest**

None of the authors identify a conflict of interest.

### **Notice of Duplicate Publication**

This article is based on the draft version of a chapter from the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the

corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>). While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article's publication.

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## Note

1. The State Plan project consisted of four cores, each with its own emphasis. The System of Care Core coordinated the intersectional chapters, of which most are represented in this special supplement (not included in the special supplement are topics on a broader array of violence against women and children, and rural populations). The Data Analytics Infrastructure Core contributed to the establishment of the Hawai'i Behavioral Health Data Dashboard and the State Plan Statistical Report. The Culture Case Study and Emerging Adult Cores focused on emerging issues with youth and young adult substance use prevention and treatment & recovery. The latter three cores are not described in this supplement, but reports can be found at <https://health.hawaii.gov/substance-abuse/state-plan/> and <https://health.hawaii.gov/substance-abuse/survey/>.

# Housing First: Harm Reduction at the Intersection of Homelessness and Substance Use

Heather M. Lusk MSW; David Shaku LCSW; Aashish Hemrajani MA; Nikos Leverenz JD; Juliana Moefu-Kaleopa LCSW, CSAC; Andrea F. Staley MA

## Abstract

*Despite a considerable overlap between people experiencing homelessness and people living with substance use disorder, there is a marked lack of integration between Hawai'i's systems of care for these populations. This gap in the current system of care often creates barriers to services for those living at the nexus of homelessness and substance use. This article describes Hawai'i's current homelessness and substance use systems of care, paying particular attention to the intersection between these two systems. With Hawai'i consistently ranking among the highest per capita rates of homelessness in the United States, this article argues that the intersection of homelessness and substance use is a pivotal site of intervention for addressing significant social problems. This article positions the Housing First paradigm as a critical model for bridging gaps and eliminating barriers in service provision through systems integration at the program level. Greater fidelity to the broader harm reduction principles underlying this model will effectively organize and equip programs to successfully address the needs of people experiencing homelessness and struggling with substance use.*

## Keywords

homelessness, substance use, housing first, harm reduction

## Abbreviations and Acronyms

ADAD = Alcohol and Drug Abuse Division of the Hawai'i Department of Health  
AOD = alcohol and other drugs  
ASAM = American Society of Addiction Medicine  
BJA = Bureau of Justice Assistance  
CARES = Coordinated Access Resource Entry System  
CES = Coordinated Entry System  
CIS = community integration services  
DOH = Department of Health  
HF = Housing First  
HMIS = Homeless Management Information System  
HPO = Homeless Programs Office  
HUD = Housing and Urban Development  
LEAD = Law Enforcement Assisted Diversion  
MAP = managed alcohol program  
PEH = people experiencing homelessness  
SEM = Social-Ecological Model  
SoC = system of care  
SUD = substance use disorder  
TLP = therapeutic living program  
USICH = United States Interagency Council on Homelessness  
VISPDAT = Vulnerability Index–Service Prioritization Decision Assistance Tool

## Background and Introduction

For people experiencing homelessness (PEH) and struggling with harmful substance use or substance use disorder (SUD), a lack of integration between Hawai'i's homelessness and substance use systems of care (SoCs) presents consistent barriers to effective service provision. For example, participation in residential treatment programs may disqualify a person seeking housing assistance from accessing permanent housing support; or a housing program may exit a housed individual for recurrent substance use. As Hawai'i continues to have one of the highest per capita rates of homelessness in the nation, the intersection of homelessness and substance use is an increasingly pivotal site of intervention for addressing significant social problems.

Data from Hawai'i's 2020 Point in Time Count shows that on a single night in 2020, there were approximately 4448 individuals experiencing homelessness on O'ahu and 2010 individuals on the neighbor islands.<sup>1</sup> Of those counted, 683 (18%) indicated harmful substance use on O'ahu and 460 (28%) on the neighbor islands. Compared to neighboring islands, substance use was slightly higher among both sheltered (350, 24%) and unsheltered (333, 27%) populations on O'ahu.<sup>2</sup> Approximately 1 in 7 PEH on O'ahu reported problematic substance use as a cause of homelessness, making it the third most common self-reported cause of homelessness (14% of respondents), behind an inability to pay rent and the loss of employment. These findings are consistent with other populations experiencing homelessness in comparable municipalities in the continental US.<sup>2,3</sup>

Current data and the historical persistence of homelessness in Hawai'i suggest that ongoing structural forces significantly contribute to homelessness and the trauma experienced when living unsheltered.<sup>4-6</sup> For example, economic causes of homelessness outweigh alcohol and drug use 3 to 1 (44% versus 14%).<sup>2</sup> In understanding these structural roots of homelessness, this article argues for integrated programmatic solutions that work across multiple levels to meet individuals with compassion and support rather than moralizing or stigmatizing harmful behavior. Hawai'i can fortify existing interventions, such as permanent supportive housing and intensive case management, to better meet the needs of PEH.

Homelessness and substance use are embedded within a complex network of structural forces (eg, economic, political, and social conditions). While treatment of SUD still focuses on the individual level, appropriate care requires interventions that consider personal health within the context of larger structural forces that provide leverage points for effecting change. Trauma and structural violence further exacerbate homelessness and substance use. In recent years, Hawai‘i’s laws have increasingly criminalized those visibly experiencing homelessness. Where structural violence limits individual choices, harm reduction offers an integrated public health approach to structural change that affords greater agency to individuals living with trauma through holistic, person-centered methods.

Grounded in social justice and human rights, harm reduction is a set of practical strategies and ideas designed to reduce the negative consequences associated with harmful substance use.<sup>7</sup> Close adherence to harm reduction principles will effectively organize and equip programs to successfully address homelessness and substance use on multiple levels and across complex systems. Existing programs can increase fidelity to these principles by addressing multiple levels of trauma, integrating the homelessness and substance use SoCs, and helping clients maintain eligibility for supportive services throughout their journey of care. Housing First (HF) is an evidence-based intervention exemplary of harm reduction principles that considers individual, community, and structural levels in its design.

This article positions the HF paradigm as the most promising solution for addressing homelessness and substance use. HF is an integrated approach to homelessness that aims to “quickly and successfully connect individuals and families experiencing homelessness to permanent housing without preconditions and barriers to entry, such as sobriety, treatment, or service provision.”<sup>8</sup> The model is built around the belief that PEH have the right to housing as a foundation for improving their quality of life regardless of their status of harmful substance use. While remaining recovery-oriented, HF better retains clients in care and provides more effective treatment because it does not condition housing or support on abstinence or penalize recurrent substance use. In this way, HF accommodates the fluctuating position of clients in their process of change. The following sections illustrate that harm reduction interventions such as HF, diversion, and managed alcohol programs (MAPs) have been successful thus far, demonstrating the benefit of implementing full-scale programs and expanding resources to provide housing and wraparound support for PEH.

## **Hawai‘i’s Current System of Care**

Hawai‘i’s current SoCs for homelessness and substance use encompass an evolving network of resources and referrals that intersect the behavioral health system. The Coordinated Entry System (CES) for shelter and housing and the Hawai‘i Coordinated Access Resource Entry System (CARES) for substance

use represent the fundamental components of these systems. CES facilitates the coordination of housing assistance within the housing SoC by quickly and effectively linking eligible individuals and families to resources and services that best meet their needs.<sup>9</sup> Partners in Care (on O‘ahu) and Bridging the Gap (for neighbor islands) represent Hawai‘i’s homeless services provider coalition.<sup>10</sup> CARES is a free, 24-hour referral program for substance use and mental health services. Prior to the launch of these programs, access to housing assistance or state-funded substance use treatment was fragmented into distinct entry processes for each program. CES and CARES provide a solution by offering a single-entry point for each SoC.

PEH who struggle with harmful substance use may access housing resources through formal residential or outpatient treatment. “Clean and sober” homes can be accessed through the Department of Health’s (DOH) Alcohol and Drug Abuse Division (ADAD) Clean and Sober Homes Registry.<sup>11</sup> Emergency and transitional shelters can be accessed directly. The Office of the Governor’s Coordinator on Homelessness produces a vacancy list for these sites that is updated daily with available bed spaces and eligibility criteria for access.<sup>12</sup> Sites include traditional homeless shelters and specialized housing, such as DOH’s Adult Mental Health Division-funded housing for people struggling with mental health challenges.<sup>13</sup> In addition to residential treatment facilities that provide housing and SUD treatment, ADAD funds 9 therapeutic living programs (TLPs) statewide. TLPs are long-term supervised living arrangements that provide mental health and substance use services to individuals or families transitioning to independent living.<sup>14</sup> TLPs can be utilized across the SUD SoC to provide PEH with stable shelter as they access treatment and other services.

For individuals seeking access to substance use treatment services while unsheltered, the main access point is the CARES line. Access to CARES is via telephone, requiring that PEH have their own phone to call in and receive calls with updates once a program space is available unless a case manager or outreach worker is the point of contact and knows where to find them. ADAD has addressed this gap by funding outreach and transportation as part of its treatment contracts.<sup>15</sup> Other barriers include a lack of accommodations for those who continue to use substances or use certain pharmacotherapies, which would not be a barrier to housing placement under the HF model.

PEH who struggle with substance use and are not ready for treatment can access housing through CES. PEH seeking housing services are assessed using the Vulnerability Index–Service Prioritization Decision Assistance Tool (VISPDAT), which assigns an acuity number to determine the eligibility and prioritization of an individual for available resources. Once a person receives a VISPDAT score and consents to enrollment in the Homeless Management Information System (HMIS) database, they are placed on the “By Name List,” which CES utilizes to match people with available housing resources. There may be

upwards of 3000 individuals on the list at any given time. On average, CES facilitates housing for 50 individuals per month.<sup>9</sup> Paradoxically, participation in residential treatment for 90 days or more constitutes a break in an episode of homelessness, which may cause a PEH to lose their chronic homelessness status and fall down the list for prioritization of housing resources.

Services for PEH who live with SUD focus on facilitating traditional treatment modalities, including outpatient, residential, therapeutic, and supportive living, intensive outpatient, social detox centers, and methadone maintenance. **Table 1** describes the size of admissions and fund expenditures by type of treatment in Hawai'i. The numbers are aggregated based on a report by

Kim and Zhang<sup>16</sup> from 2015 to 2017. **Figure 1** visualizes the percentages of the admissions and funds in the table by year. Outpatient programs were the highest expenditure of funding sources, costing \$7-8 million dollars or 44% of all funds. By contrast, social detox programs and treatments using methadone are relatively underutilized, with no more than 500 patients admitted per year. This underutilization creates a noticeable bottleneck in the treatment system because detox or medication management for SUD is required before admissions to residential treatment programs, which do not currently have the funding or capacity to handle acute medical symptoms of chemical dependence.

|   | Outpatient  | Residential | Therapeutic & Supportive Living | Intensive Outpatient | Social Detox | Methadone |
|---|-------------|-------------|---------------------------------|----------------------|--------------|-----------|
| No. of admissions per year (rounded to 50)                | 2,500-2,850 | 500-550     | 150-200                         | 950-1,000            | 450-500      | 1-50      |
| Admissions by modality per year (%)                       | 55-56%      | 9-11%       | 3-4%                            | 19-21%               | 8-10%        | 0.7-1%    |
| Federal and state funds expended by modality per year (%) | 43-44%      | 30-33%      | 7-8%                            | 9-11%                | 2-3%         | 3%        |
| \$ spent (millions, rounded)                              | \$7-8       | \$5-6       | \$1                             | \$1-2                | \$0.4-0.5    | \$0.5     |

<sup>a</sup> Adapted from Kim & Zhang, 2018<sup>17</sup>

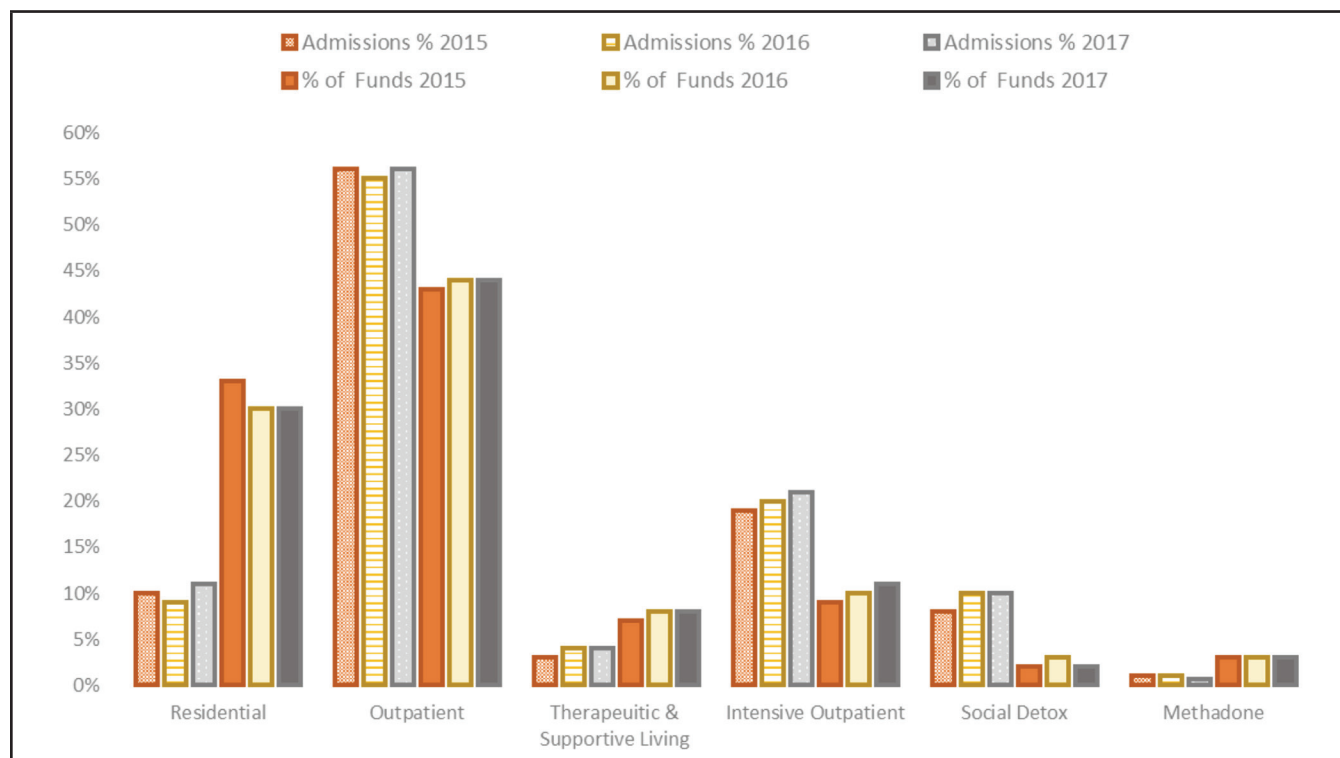


Figure 1. Percentages of Admissions and Funds Expenditure by Type of Treatment (2015 - 2017)<sup>a</sup>

<sup>a</sup> Adapted from Kim & Zhang, 2018<sup>17</sup>



Social detox programs, with an average cost of a little less than a half million dollars per year in Hawai‘i, are also relatively inexpensive. Residential treatment programs are only 9-11% of all admissions but with expenditures roughly on par with outpatient programs costing about \$11 000 per patient per year, providing shelter for only 30-90 days at a time for PEH. In 2020, Hawai‘i spent \$3 million on year-round shelter through HF programs for 351 individuals, costing about \$8500 per person each year.<sup>17</sup> Continued reliance on a historically static model of abstinence-based residential programs presents substantial obstacles for PEH who seek treatment.

Few homeless services include substance use treatment, and few SUD providers offer specific homeless services, although most services lay somewhere in between.<sup>15</sup> PEH who complete residential substance use treatment have limited resources for housing after clinical discharge. Substance use treatment programs have resources to assist with housing placement through clean and sober homes; however, these are difficult for PEH to access as they typically require a security deposit and the first month’s rent.<sup>11</sup> Emergency and transitional shelters are accessible individually, but few provide certified substance abuse counselors on-site. Centralization of shelter and specialty housing vacancies at CARES would facilitate better integration of the housing and substance use SoCs.

## **Interventions and Recommendations**

The pervasiveness of homelessness in Hawai‘i is a multilayered issue requiring an integrated, multidimensional approach at many levels and across various social systems. Hawai‘i can look to HF and the innovative implementation of harm reduction principles in programs like Seattle’s Law Enforcement Assisted Diversion (LEAD)<sup>18</sup> and 1811 Eastlake<sup>19</sup> for ways to integrate the homelessness and substance use SoCs in the state. The continuing problem of SUD among PEH requires closer fidelity to the harm reduction principles underlying the ideal model of HF. Hawai‘i can build upon its existing HF programs and make major strides towards resolving homelessness for this subpopulation by: (1) scaling up available HF vouchers to meet the needs of all those who qualify; (2) integrating the entry systems (CES and CARES); (3) utilizing innovative harm reduction-based approaches for those actively engaged in substance use; and (4) relying upon larger, interdisciplinary teams of support for clients, as demonstrated by the intensive case management of LEAD participants, which follows clients into housing and works with HF programs to ensure housing success.

Given the myriad of challenges in finding shelters for those struggling with SUD, state and local policymakers have increasingly focused on funding HF.<sup>20</sup> In Hawai‘i, HF was initially launched in 2014 through Hawai‘i’s Pathways Project,<sup>21</sup> funded by the Substance Abuse and Mental Health Services Administration through ADAD. Hawai‘i’s Pathways Project was modeled after the original Pathways to Housing project, which housed 99

individuals with substance use and mental health challenges. The evaluation of the original project found an 88% housing retention rate and an estimated healthcare cost savings of \$6197 per client per month. Subsequent HF programs were funded statewide by the Hawai‘i Department of Human Services, Homeless Programs Office (HPO).<sup>20</sup> The City and County of Honolulu also funds HF permanent supportive housing. A 2019 evaluation of the first increment of the program found that only 8% of participants fell back into homelessness after 5 years.<sup>22</sup>

Studies that have examined the effectiveness of HF programs have illustrated its success as an integrated intervention. When implemented with wraparound support services and interdisciplinary care teams, 88% of HF tenants remained housed after 5 years.<sup>23</sup> PEH who use substances report preferring harm reduction services that include shelter and identified that compassion and non-judgment of staff were components of effective treatment.<sup>24</sup> Given the success of HF nationally and in Hawai‘i, the model has become the preferred method for working with PEH who also use substances and is required for those programs funded by HPO and the City and County of Honolulu.<sup>25,26</sup>

Founded in King County, Washington, as a response to the disproportionate imprisonment of minority populations for personal drug use, LEAD provides a solid example of a non-punitive approach to SUD treatment. Hawai‘i recently implemented the model in Honolulu, where 98% of participants reported homelessness within 3 years prior to enrollment. The 2018 Honolulu pilot found 78% of referred clients reported methamphetamine use, while 36% reported alcohol and opioid use. There was 23% reduction in methamphetamine used by the second year of the pilot. The Honolulu LEAD pilot worked to provide the necessary SUD wraparound support and service navigation alongside HF and homeless service providers, seeing clients spend 47% fewer days sleeping on the street. Someone using injection drugs who is not ready for SUD treatment can be connected to the syringe exchange program for safer use supplies or hepatitis C testing and treatment. A person who does not want to stay in a shelter can work with a LEAD case manager in the field to apply for housing resources through CES. Honolulu’s LEAD pilot program shows that a harm reduction approach works in Hawai‘i, where methamphetamine use is a major issue and for which there are generally fewer options for medication-assisted treatment or other non-abstinence-based modalities. LEAD meets individuals at their level of readiness to engage for both housing and SUD treatment, scaffolding steady change that can be sustained over time.<sup>27</sup>

MAPs are integrated harm reduction interventions for individuals living with alcohol dependence, chronic poverty, and homelessness that focus on reducing harms through the provision of safer spaces and supply of alcohol. MAPs utilize an HF framework to provide accommodation, health, and social support and include the administration of beverage alcohol to

stabilize drinking patterns.<sup>28</sup> Seattle's 1811 Eastlake supportive housing program models an HF framework built for people living with alcohol use disorder. The facility includes a clinic and on-site SUD therapists to offer mediation to clients who have difficulty managing anger. Despite only setting out with the goal to provide housing services to underserved individuals, the program reported a 35% decrease in heavy drinking among participants during the first 2 years.<sup>19</sup> The 1811 Eastlake facility saved over \$4 million in foregone costs associated with the provision of public support and health services for PEH in its first year.<sup>19</sup> As with other HF interventions, replicating MAPs in supportive housing environments like 1811 Eastlake in Hawai'i would foreseeably result in reduced costs to the health care and criminal justice systems. This low-threshold approach will reach many of those persons experiencing chronic homelessness who have been rejected by abstinence-based service programs and likely result in improvements in life circumstances and drinking behaviors. Hawai'i's SoCs will be able to more effectively respond to the ongoing behavioral health needs of those who have experienced chronic homelessness and a lack of success in abstinence-based programs.<sup>29</sup> Maintaining fidelity to the HF model and harm reduction principles is a cost-effective way to see a measurable reduction in harmful substance use.

## Conclusion

With one-fifth of PEH on O'ahu also reporting harmful substance use, integration between the homeless and substance use SoCs will be an important part of any serious effort to solve homelessness and support clients in maintaining stability once housed. Increased coordination between the homelessness and substance use SoCs through CES and CARES can ensure that clients are able to access programs that will address their most pressing concerns. For clients who will require permanent housing support after leaving a residential program, it requires attention to contradictions within the 2 systems; for example, clients who have completed 90 days or longer in a residential program will lose their chronically homeless status and thus be ineligible for many HF programs. While this problem must be addressed on a larger systemic level, individual programs can ensure client retention and success by weaving harm reduction-based treatment into their permanent housing programs. Building on the example of the MAP at 1811 East Lake, Hawai'i's HF programs can work with clients to maintain housing while mitigating the negative consequences of harmful substance use. HF and the harm reduction approach to public health more broadly offer the most promising paradigm from which to treat PEH who struggle with SUD. By addressing substance use among PEH compassionately and with the non-punitive approach of harm reduction, housing and treatment programs in Hawai'i can ameliorate a persistent structural problem in the state and set an example for other jurisdictions in the nation.

## Conflict of Interest

None of the authors identify a conflict of interest.

## Notice of Duplicate Publication

This article is based on the draft version of a chapter from the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>). While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article's publication.

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# Implications for a System of Care in Hawai'i for Criminal Justice and Substance Use

Jared K. Redulla BA; Gregory Nikogosyan DO

## Abstract

*Significant opportunities to improve treatment for substance use disorders can occur within the criminal justice system. This article will review the current system of care, understand current interventions available, and explore recommendations to better address community needs. With rising numbers of substance use and substance related deaths, this threat to the community is predicted to only worsen without intervention. There are multiple points in the justice system throughout the pretrial, court, and sentencing periods where the opportunity to help people with substance use disorder may occur. These points of diversion can focus on a more rehabilitative approach to crimes in the context of substance use disorder rather than punitive incarceration without adequate treatment. Police diversion can be increased and new police metrics incentivizing such efforts can be implemented in place of informal disposition by officers. Further training of law enforcement officers and continued development of support staff will help change practice allowing those with substance use disorders in the criminal justice system to connect to appropriate services. Data collection for research and analysis of recidivism among those engaged with diversion services compared to those who have not will help further guide future policy and resources for such programs.*

## Keywords

*substance use, drug diversion, Law Enforcement Assisted Diversion (LEAD), pretrial diversion, drug treatment*

## Abbreviations and Acronyms

ADAD = Hawai'i Department of Health Alcohol and Drug Abuse Division

ASUS = Adult Substance Use Survey

HIDTA = Hawai'i High Intensity Drug Trafficking Area

LEAD = Law Enforcement Assisted Diversion

LSI-R = Level of Service Inventory-Revised

ORAS = Ohio Risk Assessment System

## Background & Introduction

Significant work in stopping drugs and related crimes by law enforcement and criminal justice agencies in Hawai'i has led to a collection of studied data by these same agencies. According to the Hawai'i High Intensity Drug Trafficking Area (HIDTA) 2019 Drug Threat Assessment Report, methamphetamine, and high-potency marijuana pose the greatest threats to the community.<sup>1</sup> For example, in 2015, there were 186 methamphetamine substance abuse treatment admissions per 100 000 people and 141 marijuana treatment admissions per 100 000 people.<sup>2</sup> These drugs surpassed treatment admissions when compared to other substances such as cocaine, heroin, diverted prescription medications, and any other drugs.<sup>1</sup> Methamphetamine posed the greatest overall public health threat due to drug-related deaths, despite both marijuana and methamphetamine being the most widely

available.<sup>1</sup> Given the scope of the problem, the aim of this writing is to review the system of care in Hawai'i, understand current interventions available, and to explore recommendations to better address community needs around the intersection of substance use and the criminal justice system. This paper highlights key points from a chapter of the Hawai'i Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan which examines the intersection of substance use system of care and the criminal justice system in Hawai'i. For more background and context around the overall State Plan project, readers are referred to the introductory article of this special supplement.

The criminal justice system can be broadly described as the, "... structure of laws, rules, and agencies designed to hold criminals accountable for their misdeeds and help them to restore their victims as much as possible."<sup>3</sup> The process for entering and moving through the criminal justice system consists of several parts. First, when a crime is reported to the police, the police perform their role by investigating the crime, identifying the offender, and possibly arresting those responsible. Second, if a person is arrested and charges are filed against an offender, then the criminal justice system, the court, assumes authority over the offender. There are 2 phases in the process for movement in the criminal justice system involving the courts: the pretrial phase and the adjudication phase. In the pretrial phase, there are a series of hearings designed to give defendants their due process. When a case is not dismissed or settled through a plea bargain, defendants are brought to trial to determine their guilt or innocence. Third, if an offender is adjudicated as guilty in the courts, the individual enters the corrections component of the criminal justice system containing 2 parts: (1) probation – which is supervision of the defendant in the community without incarceration, and (2) incarceration – which is imprisonment in a prison. A more detailed overview of how the criminal justice system works can be found in the ADAD State Plan.

## Current System of Care in Hawai'i

The United States Department of Health and Human Services has defined a "system of care" as a "broad, flexible array of services and supports for a defined population that is organized into a coordinated network, integrating service planning, coordination and management across multiple levels. This coordinated network is culturally and linguistically competent, builds meaningful partnerships with families and youth at service delivery, management, and policy levels, and has supportive management and policy infrastructure."<sup>4</sup>

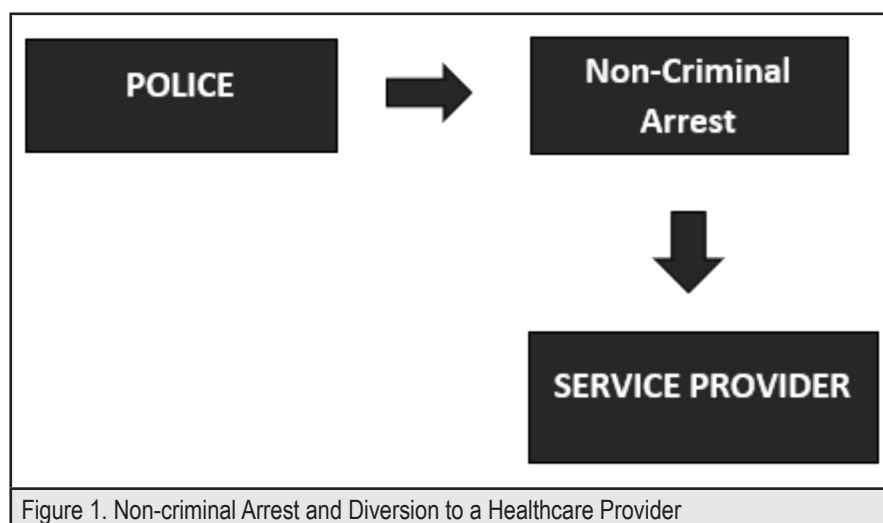
In Hawai‘i, a common access point for care of individuals with substance use disorders is arrest, which leads to a person’s entry into the criminal justice system. After arrest, a person with a substance use disorder can be supervised by the courts and later by corrections officials to get substance use treatment. However, there are 2 scenarios within Hawai‘i law for officers to engage individuals who are not criminally arrested. The first is when an officer determines an appropriate response to individuals who are imminently dangerous to themselves or others. In such cases, a common action is for police to take such people into custody if probable cause is determined.<sup>5</sup> Those people then have the opportunity to be offered mental health treatment and services outside the criminal justice environment via treatment and services in the healthcare setting.

The second scenario is diversion or alternatives to arrest which fall into 2 categories. The first involves the pre-arrest stage where the officer uses discretion to not arrest. In pre-arrest diversion, specialized training of officers and/or having ancillary support staff to address mental health and substance use disorders are essential. Diversion and mental health training for officers may lead to a decrease in informal dispositions. Such dispositions conveniently decrease paperwork and officer downtime as there is no engagement with mental health resources or process for arrest.<sup>6</sup> Diversion can also involve specialized teams to improve pre-booking assessments. In this model, officers can make referrals to services or transport to emergency care with a “no refusal” policy, which is seen commonly throughout the United States. This model may also involve a mobile crisis team where behavioral health experts can help police decide a course of action.<sup>7</sup> The second category is the Law Enforcement Assisted Diversion (LEAD) initiative which also allows diversion from prosecution.<sup>8,9</sup> LEAD is focused on individuals where criminal activity is due to behavioral health issues. Typically, the suspect

has committed minor offenses where police may offer a referral to a LEAD worker who can coordinate services, housing, medical care, substance use services, and mental health care. In Hawai‘i, this category has yet to be practiced in a meaningful way. **Figure 1** below shows a simple flow of when a police officer determines that a person is imminently dangerous to self or others and makes a non-criminal arrest diverting the person to a healthcare provider.

In Hawai‘i, there are generally 2 situations where the courts are involved in care for substance use disorders: bail and probation. The first situation, bail, is where the system of care in the courts begins. After a person is arrested and charged with a crime, bail occurs and is used to secure attendance in court. In Hawai‘i, a defendant, with little exception, is nearly guaranteed the right to bail. When a defendant appears in court at their initial appearance before a judge, the judge will confirm the defendant’s bail and that confirmation of bail triggers an assessment to determine a defendant’s fitness for bail compared to their risk to the community. Commonly, bail is set immediately after arrest, clearing the way for a defendant to be released after completing the booking process.<sup>10</sup> Consequently, because of this short timeframe, defendants who post bail after booking will have no assessment for substance use.

The second situation is when the courts sentence a person to probation. Probation is a sentence served in the community while under court supervision. In Hawai‘i, all probationers must comply with conditions that include: a restriction against illegal drug use, a requirement to submit to drug testing, and if directed, a requirement to participate satisfactorily in substance use treatment. Accordingly, the courts work with community organizations to treat offenders who are directed into treatment.



The Hawai'i Corrections System has an established treatment program consisting of several parts. The first is screening. The Department of Public Safety uses instruments for incoming inmates that assist in classifying risk and predicting recidivism. The Hawai'i Interagency Council on Intermediate Sanctions reported that these tools include the Level of Service Inventory-Revised (LSI-R) instrument which contains a subdomain for substance use and the Adult Substance Use Survey (ASUS).<sup>11</sup> The LSI-R and ASUS were used to measure "criminogenic and alcohol/drug dependency risk levels, as well as the severity of criminogenic and alcohol/drug patterns, known as subdomains." This report further notes that "all offenders are classified by risk levels, which provide invaluable information needed for case supervision purposes and determining treatment levels."<sup>11</sup> There were significant associations with increased LSI-R score and offender recidivism, and with subdomains including criminal history, education/employment, companions, alcohol/drugs, and accommodations.<sup>11</sup> The ASUS social subdomain was also found to be associated with offender recidivism.<sup>11</sup> It is important to note that these instruments help risk classify offenders to allow for appropriate treatment determination which are evidenced-based for substance use disorders.

Another risk assessment tool which may help determine supervision level is the Ohio Risk Assessment System (ORAS). The ORAS was designed and validated to allow more accurate risk assessment for offender recidivism at different points in the criminal justice system. It includes 5 different risk assessment tools for the different stages of the criminal justice system. These include the ORAS for: Pretrial Assessment Tool, Community Supervision Tool, Community Supervision Screening Tool, Prison Intake Tool, and Reentry Tool. These tools are also used to determine supervision level and to assist case managers to determine possibly modifiable risk factors and treatment barriers. These modifiable or dynamic risk factors can include substance misuse, association with antisocial peers, mental health needs, low income, and problems with employment.<sup>12</sup>

The next stage following assessment is treatment. The corrections system uses a variety of treatment types including: "no" treatment, increased urinalysis testing with drug/alcohol education, weekly outpatient therapy, intensive outpatient therapy, residential treatment, and therapeutic community treatment.

## Interventions

Presently, the county police departments and the Sheriff Division are involved in the LEAD program.<sup>13</sup> LEAD's goal is to reduce client recidivism for minor offenses. LEAD diverts offenders on the front end of the criminal justice system by diverting individuals away from the criminal justice system to a more rehabilitative approach. There are short-term goals over the initial 6 months to coordinate resources to improve housing stability, increase social support, reduce substance use, and for stress mitigation. The long-term goals include improved

quality of life and reductions in emergency room use, inpatient hospital stays, and arrests.<sup>13</sup> **Table 1** below shows the results of the LEAD program in Honolulu after 2 years.

The LEAD 2-Year Program Evaluation Report released in 2020<sup>14</sup> showed significant improvement in the community for many of the aforementioned goals. Between July 1, 2018 and July 31, 2020, 101 individuals through different outlets were encountered and assessed for LEAD. Of the 101, 57 individuals were referred to LEAD through social contacts (mostly from the Sheriff's Division or Honolulu Police Department Health Efficiency Long-term Partnership Initiative). Of the 101, 50 were enrolled and were provided services through the LEAD program, while 44 were triaged to other service providers; the remaining 7 were not enrolled due to incomplete intake and assessment. For the short-term goals, the LEAD program evaluation found a 47% reduction in the average number of days sleeping on the street, park, or bench (**Table 1**). There was an also increase from 13% to 48% in the percentage of individuals who were housed for the entire previous month at the time of their last assessment (not shown in table).<sup>14</sup> There was a 50% decrease in the average number of days spent in an emergency shelter with a concurrent 46% increase in average number of days in transitional housing. Furthermore, there was a 118% increase in days living in shared apartment or in an independent apartment. There was a 23% decrease in the average number of days of methamphetamine use by clients since the start of the program. Overall there was 20% reduction for the average number of days (9.29) for opioids/heroin use in the 30 days prior, compared to the first assessment (11.67). However, when excluding the period after the COVID-19 emergency orders, the average number of days (5.82) for opioids/heroin use in the 30 days prior, decreased by 50% (not shown in table).<sup>14</sup> There was an 11% increase in the number of days of alcohol use from 6.3 to 7.0 days over the past month. Finally, with community resource engagement, the number of days clients felt hopeful increased by 70%.

The long-term goals showed improvements in multiple domains as well.<sup>14</sup> Overall, there was a 30% decrease in hospital admissions in the past month (from 10% at baseline to 7% of clients at last assessment) (**Table 1**); furthermore, hospital admission decreased 43% (from 10% to 5.7%) when excluding the period after the COVID-19 emergency orders (not shown in table). There was a 56% decrease in emergency room visits in the past month from 32% at baseline to 14% of clients at last assessment (**Table 1**); furthermore, emergency room visits decreased 64% (from 32% to 11.4%) when excluding the period after the COVID-19 emergency orders (not shown in table). On average, there were 304% more citations per month with referred LEAD clients compared to the 82% increase seen with clients triaged to other services and not enrolled in LEAD (not shown in table). However, it is important to note that the most common citations for LEAD clients were for entering closed parks, sitting/lying on sidewalk, and jaywalking, while the citations for

| Table 1. Law Enforcement Assisted Diversion (LEAD) Honolulu 2-Year Program Data Results, July 1, 2018 and July 31, 2020, n=50. <sup>a</sup> |   |
|---|---|
| Short Term Measures (% change from baseline to last follow up assessment) <sup>b</sup>  |   |
| Housing   | ↓ 47% days sleeping on street/park/beach  |
|   | ↓ 50% days staying in emergency shelter   |
|   | ↑ 46% days living in transition housing   |
|   | ↑ 118% days living in shared apartment  |
|   | ↑ 531% days living in independent apartment                                       |
| Substance Use   | ↓ 36% days used benzodiazepines past month  |
|   | ↑ 11% days used alcohol past month  |
|   | ↓ 25% days used marijuana/hashish past month                                      |
|   | ↓ 20% days used opioids/heroin past month   |
|   | ↓ 23% days used methamphetamine past month  |
|   | ↓ 6% days used cocaine past month   |
| Stress  | ↓ 12% days felt unable to control the important things in life                    |
|   | ↓ 9% days felt difficulties could not be overcome                                 |
|   | ↑ 19% days felt that things were going their way                                  |
|   | ↑ 18% days felt confident about ability to handle personal problems               |
|   | ↑ 70% days felt hopeful about future  |
| Long Term Measures (% change from baseline to last follow up assessment) <sup>b</sup>   |   |
| Emergency & Hospital use  | ↓ 56% percentage gone to the emergency room in the past month                     |
|   | ↓ 30% percentage admitted to hospital in the past month                           |
| Crime & Recidivism <sup>c</sup>   | ↑ 7% frequency of cited encounters  |
| Community Support   | ↓ 78% times visited a spiritual group in last month                               |
|   | ↓ 92% times attended a community group in the last month                          |
|   | ↑ 67% times engaged in recreational activities in the last month                  |
|   | ↓ 88% times participated in a support group in the last month                     |
| Social Support  | ↑ 33% someone able to help if confined to bed                                     |
|   | ↑ 25% someone to take to doctor if needed   |
|   | ↑ 24% someone to share private worries and fears with                             |
|   | ↑ 17% someone to turn to for suggestions about how to deal with personal problems |
|   | ↑ 24% Someone to do something enjoyable with                                      |
|   | ↑ 26% someone to love and make you feel wanted                                    |
| Health & Wellbeing  | ↑ 3% general health improvement   |
|   | ↑ 5% # physically unhealthy days past month                                       |
|   | ↓ 32% # mentally unhealthy days past month  |
|   | ↓ 26% # activity limitation days past month                                       |
|   | ↓ 24% # days in pain past month   |
|   | ↓ 29% # days depressed past month   |
|   | ↓ 38% # days anxious past month   |
|   | ↓ 32% # days not enough sleep past month  |
| ↑ 47% # days full of energy past month  |   |
| Experiences with Trauma   | ↓ 23% experienced violence, trauma, or sexual maltreatment/assault in past month  |
|   | ↓ 5% witnessing physical or emotional trauma                                      |

<sup>a</sup> Percentages are rounded, adapted from Willingham et al, 2020<sup>14</sup>

<sup>b</sup> Percent change values are based on comparison of baseline first assessment to last follow-up assessment data for LEAD enrolled individuals.

<sup>c</sup> Percent change value is based on comparison of pre-enrollment to post-enrollment in LEAD.

triage only clients were commonly related to vehicles, such as expired safety checks or vehicle registrations or driving without a license. In contrast, there was only an increase of 7% more encounters with law enforcement resulting in a citation issued for LEAD clients (Table 1) compared to the 93% increase for triaged only clients (not shown in table).

The second intervention in Hawai'i involves drug treatment courts. The Hawai'i Judiciary reported in 2019 that more than 2100 people have graduated from Drug Court programs in the state since 1996.<sup>15</sup> The Government Accounting Office assessed the effectiveness of drug court programs leading to statistically significant recidivism reductions (ie, reductions in rearrests and convictions).<sup>16</sup> Because these programs provide offenders with court supervision, mandatory drug testing, substance use treatment, and other social services, drug courts are considered to be an important strategy for reducing incarceration and providing access to treatment and reducing drug use and recidivism. The National Institute of Justice's multi-site adult drug court evaluation showed that drug court participants were less likely to have a drug relapse, report criminal activity, or need employment, educational, or financial services at 18 months.<sup>17</sup>

## Observations & Recommendations

One key observation is the concept of discretion in the criminal justice system. Discretion is traditionally defined as "an authority conferred by law to act in certain conditions or situations in accordance with an official's or an official agency's own considered judgment and conscience."<sup>18</sup> Discretion provides officials with authority conferred by law to act with a range of choices including choices to not enforce laws, to arrest or not to arrest, to drop cases, to grant bail, to dismiss charges, and to reward and punish defendants.<sup>19,20</sup> Discretion impacts the way in which the system deals with those with substance use disorders. Entry into the criminal justice system requires the police to make an arrest. Thus, if police exercise their discretion when investigating a crime and choose not to arrest, a person suffering from a substance use disorder will not receive services and treatment within the criminal justice system. Moreover, even if the police were to arrest that person, there is opportunity for prosecutors, judges, and other criminal justice officials to exercise discretion. Consequently, the criminal justice system is a filtering process that may either fail to identify people who have a substance use disorder or exclude people who might otherwise use criminal justice system services and treatment.

Management of criminal justice discretion is important to connect people with treatment regardless of the decision made. First, it is important that the police and the courts be well-connected to non-criminal justice treatment providers who can take referrals for people who never entered or are filtered out of the system. The police and the courts must know what treatment resources

exist and be trained in a practical procedure that can quickly connect people to services at the point of police, or court contact.

A second critical aspect is that people in the criminal justice system who have not been convicted are presumed innocent and are generally entitled to receive bail upon arrest. Consequently, a defendant who has been given the opportunity for bail may post bail and be released anywhere along the pretrial timeline. Forecast data published by the Hawai'i Department of Public Safety in 2021 showed the amount of time to settle one's affairs with the court was about 200 days or more in 2020, and the felony court processing time was 400 days or more in 2020.<sup>21</sup> It is important to note there are limited to no substance use treatment options in pretrial jail, and those who bail out of pretrial detention may have limited community supervision for substance use. Therefore, treatment opportunities for those out on bail, especially those on bail for long periods must be made available and enduring.

A third key point is that people who have been convicted and sent to prison with a substance use disorder cannot be forced into correctional drug treatment programs. This is concerning for those who "max-out" or complete their prison sentences without even starting a program, or for those who do not complete substance use treatment. The recidivism rate for maximum term release prisoners was 57%.<sup>22</sup> Consequently, 2 important ideas should be mandated. First, procedures should be implemented to reduce the number of offenders who "max-out" with no treatment. Research by Florida State University and the Florida Department of Corrections into the benefits of supervised or conditional release has shown that those offenders who undergo conditional or supervised release are less likely to reoffend.<sup>23</sup> Offenders should be required to participate in conditional release or community supervision programs where treatment can be mandated or continued. Second, offenders should be incentivized to complete treatment while incarcerated. Currently, earned time credit towards early release does not occur in Hawai'i. Attractive incentives such as earned time credits, moves to lower levels of security supervision or increased privileges should or continue to be a carrot for participation and completion of treatment. These 2 ideas taken together would ensure that greater numbers of offenders start treatment and continue their treatment upon release, thereby offering greater opportunity to be successful after release, and decreasing the recidivism rate.

To improve the criminal justice system of care in Hawai'i, the following recommendations across the components of the criminal justice system (police, courts, and corrections) should be considered. Recommendations were synthesized based on the literature, available data, as well as the historical perspective and conversations with stakeholders over several decades by the lead author from within the criminal justice system.



## **Priority should be placed on alternatives to arrest and incarceration.**

When the LEAD program was introduced in Hawai‘i, a pilot project was completed to gauge the effectiveness of the program. The results of the project showed a 23% decrease in methamphetamine use by clients since the start of the program.<sup>14</sup> This measurable decrease in methamphetamine use shows the promise of LEAD’s impact in reducing drug use. When LEAD’s efficacy was studied in Seattle, where LEAD has been practiced for a longer time, the study showed that the effects of LEAD in reducing arrests revealed lower odds of recidivism resulting in arrest.<sup>9</sup> This is promising because offenders tend to achieve better outcomes when substance use treatment is community-based rather than occurring in incarceration. Consequently, alternatives to arrest and incarceration coupled with community-based treatment should be prioritized in the future.

## **Harness opportunities to offer services and treatment.**

The police traditionally do not screen for substance use disorders and in the pretrial phase there are currently limited assessments for substance use. The police and others should use the opportunity when people are in custody to assess and coordinate referrals for services. Brief assessment tools, such as the ORAS Pretrial Assessment Tool,<sup>24,25</sup> may be a simple starting place in identifying opportunities to begin the process of helping people.

## **Ensure that there is continuity of care while justice-involved people move through the criminal justice system.**

The Hawai‘i criminal justice system must ensure uninterrupted continuity of care. Those who have initiated treatment and/or services prior to their arrest and introduction into the criminal justice system must be assured that their treatment can continue while they are involved with the justice system. Similarly, those who are released from the criminal justice system because their charges are dropped or they are found not guilty must also be assured that any treatment that was started can continue even after their justice system involvement is over. Moreover, the role of continuity of care and its effects on recidivism should be studied to determine if continuity of care started before, during, and after involvement with the justice system lowers the rate of recidivism.

## **Ensure or create incentive programs that motivate incarcerated people to participate in treatment programs while incarcerated.**

A significant situation within the corrections population are those offenders who decide not to participate in any treatment programs and “max-out” of the system. The 2019 recidivism rate amongst the maximum sentence offender group was 57%. To reduce the recidivism rate in this group, treatment programs can be incentivized to increase participation and complete the requirements of such programs.

## **Conflict of Interest**

None of the authors identify a conflict of interest.

## **Notice of Duplicate Publication**

This article is based on the draft version of a chapter from the Hawai‘i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>). While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article’s publication.

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

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## Abstract

*Dual disorder is the diagnosis of both substance use disorder and a psychiatric disorder in the same individual. This paper focuses on the cohort of persons with severe and refractory dual disorders (SRDD). This cohort exhibits disproportionately high use of emergency services, poor response to existing care resources, high risk of homelessness, and elevated risk of violent deaths. Clarifying the unique and problematic aspects of SRDD can provide direction for intervention and policy within the system of care in Hawai'i. Data regarding the prevalence of dual disorder in Hawai'i are reviewed along with Hawai'i data on emergency room utilization, and violent death rates relevant to a cohort of individuals with SRDD. The current system of care in Hawai'i is examined. Although not an official component of the public health system or system of care, the O'ahu Community Correctional Center is presented as a potential model for longer-term stabilization for those with SRDD. Interventions from the literature for dual disorders and their implications for SRDD are discussed. Based upon this review, the following recommendations are made: (1) strengthen specific dual disorder diagnosis data collection, including stratification of dual disorder severity, (2) enhance coordination and establish uniform state data governance across public safety, public health, and private sectors, (3) develop a care environment that makes long-term and integrated treatment available, (4) enhance case management services and patient engagement, and (5) encourage policy discussions of longer-term civil commitment for residential treatment for individuals with SRDD.*

## Keywords

*dual disorders, co-morbidity, co-occurring disorders, mental health, substance use*

## Abbreviations and Acronyms

ADAD = Hawai'i Department of Health Alcohol and Drug Abuse Division  
CARES = Coordinated Access Resource Entry System  
ER = emergency room  
MH-1 = Mental Health-1 (involuntary application for mental health evaluation submitted by the police to a qualified health care facility)  
NSDUH = National Survey on Drug Use and Health  
NVDRS = National Violent Death Review System  
OCCC = O'ahu Community Correctional Center  
PEH = people experiencing homelessness  
QMC = Queen's Medical Center  
SoC = system of care  
SRDD = severe and refractory dual disorder  
SUD = substance use disorder

## Background and Introduction

### Purpose

Recommendations are provided for the system of care (SoC) for persons with severe and refractory dual disorder (SRDD) in Hawai'i based on knowledge of the properties of SRDD and examinations of effective interventions in the current SoC and from the literature. Dual pathology or dual disorder is the coexistence of mental disorders with substance use disorders (SUDs).<sup>1</sup> Individuals with dual disorders exhibit high use of emergency services, high rates of homelessness, and high risk of premature death.<sup>2-5</sup> Among those with dual disorders, there is a subgroup of individuals who have severe mental and SUD and who do not respond well to available treatment.<sup>4,6</sup> These individuals are categorized as having SRDD. Individuals with SRDD have a disproportionately high use of emergency services, poor response to existing care resources, high rates of homelessness, and high risk of violent death. Thus, there is a need to identify and implement additional services to assist persons with SRDD with more sustained recovery. This article was developed as part of the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan. For more background and context around the overall State Plan project, readers are referred to the introductory article of this special supplement.

### Definition and Prevalence

According to the 2020 National Survey on Drug Use and Health (NSDUH),<sup>7</sup> 17 million Americans have dual diagnoses. Among individuals with a mental illness, 47% also had an SUD, and 80% of individuals with an SUD had a mental illness.<sup>8</sup> A 1990 study demonstrated that, compared to those without mental illness, individuals with schizophrenia were more than 5 times more likely to have an SUD, and individuals with bipolar disorder were 11 times more likely to have an SUD.<sup>9</sup> A multicenter study in Europe found people who use cannabis daily have 3.2 times greater odds of having a psychotic disorder than never users.<sup>10</sup> In addition, a Spain-based study showed that 76.5% of patients in treatment for a cannabis use disorder have a dual disorder, predominantly mood and anxiety disorders.<sup>11</sup> The most common dual disorder is SUD comorbidity with major depressive disorder. Compared to persons with SUD only, those with SUD and major depression reported poorer quality of life, overall health, and vitality.<sup>12</sup>

## Properties of SRDD

Many of the properties of dual disorders in general also apply to SRDD. Protective conditions for dual disorders include strong familial, peer, and community connections.<sup>13</sup> Also, early detection of dual disorder increases treatment access.<sup>14</sup> People with dual disorders have more frequent recurrence and relapse than people with substance use or mental health disorders alone. Accordingly, the costs of managing people with dual disorders may exceed the combined costs of treating people with co-occurring conditions separately.<sup>15</sup> The co-occurrence of SUD among people with bipolar disorder<sup>4</sup> and schizophrenia<sup>6</sup> is known to be associated with poor treatment adherence.

Persons with SRDD frequently encounter the concept of wrong door syndrome.<sup>3,16</sup> A wrong door incident occurs when a patient with dual disorder enters the system and receives diagnosis and treatment for only one of their conditions. Integrated treatment for both SUD and psychiatric disorders is known to be effective; however, nationally only 50% of SUD treatment facilities provided customized treatment programs for dual disorders in 2018.<sup>17</sup> When dual disorders are not adequately treated, for some individuals, there may be a progression into SRDD.

Dual disorder in general is often underdiagnosed and undertreated.<sup>17</sup> There are service gaps between the need for SUD and mental disorders treatment, and care delivery.<sup>3,18</sup> Individuals with dual disorders experience an earlier onset of their index disease, have more severe disease manifestation, experience delayed treatment caused by diagnostic complexity, and exhibit decreased response to treatment<sup>4</sup> because of the misalignment of available services and their needs. Health care utilization may be increased in terms of hospital days, emergency room (ER) visits, municipal emergency services in the form of Mental Health-1s (MH-1s; involuntary application for mental health evaluation by the police), and use of SUD and mental health services.<sup>3,4</sup> Persons with dual disorders also experience significantly increased rates of psychiatric hospitalization and a higher risk of premature deaths, including those resulting from suicide, than their counterparts without comorbid mental disorders.<sup>3</sup>

## Dual Disorders in Hawai'i

The NSDUH<sup>7</sup> provides the only available survey estimates of the percentage of people who have dual disorders in Hawai'i. In 2019-2020, 7.1% of Hawai'i residents ages 12 and older (75 000 people) reported both alcohol and illicit drug use and any mental illness in the past year (**Table 1**) and 2.9% (29 000) reported both alcohol and illicit drug use and serious mental illness in the past year. Persons who used drugs and alcohol in the past year were significantly more likely to report any mental illness ( $P<.001$ ) and serious mental illness ( $P=.003$ ) than those with no drug or alcohol use. Persons with marijuana dependence or abuse in the past year ( $P=.01$ ) and those with nicotine dependence in the past month ( $P<.012$ ) were also significantly more likely to report any mental illness than their

non-dependent counterparts. However, since these findings are based on a household survey, they may underestimate the number of people with dual disorders, as the survey does not adequately capture the disease burden for people experiencing homelessness (PEH), hospitalization, or incarceration.

There are limited emergency department- and treatment-related data on dual disorder prevalence in Hawai'i. According to the State of Hawai'i Behavioral Health Dashboard, in 2021, there were 1170 treatment consumers in Adult Mental Health Division, 721 clients in ADAD services, and 224 clients in Child and Adolescent Mental Health Division and Developmental Disabilities Division treatments, who had dual disorders.<sup>19</sup> Also, in 2021, there were 878 emergency department discharges related to co-occurring SUD (as the primary diagnosis) and mental health disorder (as the secondary diagnosis), and 899 discharges related to co-occurring mental health disorder (primary) and SUD (secondary).<sup>19</sup> Because patients with dual disorders are in treatment services in multiple sectors of the government in Hawai'i, a challenge is the lack of a uniform data system for data collection, prevention, identification, and/or management of dual disorders in Hawai'i.

## SRDD in Hawai'i

Given the high rates of homelessness among persons with dual disorders<sup>5</sup> and SRDD, anecdotal and/or approximate data have been gathered from a variety of agencies within the state to obtain relevant data. The following paragraphs are descriptions of data that were used with permission.

The Queen's Medical Center (QMC) in Honolulu County is a non-profit hospital located in geographic proximity to areas with a large population of PEH. A quality improvement workgroup at QMC (Hyperutilizer Team) has examined medical records of patients who have the greatest ER utilization, including the reasons for their frequent ER visits, and proposes solutions to reduce ER utilization. According to the QMC Hyperutilizer Team in 2021 there were 15 patients who made total of 718 ER visits.<sup>20</sup> Of the 15 people, 67% had SUD, 93% had behavioral health problems, and 67% were experiencing homelessness. Sixty percent of the 15 patients had both SUD and behavioral health problems. Moreover, 53% of them fell in all three categories: having SUD, behavioral health problems, and experiencing homelessness. This cohort is characterized by the highest utilization of emergency resources, including ambulance arrivals and frequency of police use of MH-1s, the involuntary detention of individuals with psychiatric disorders that present a danger to self or others. A single hyperutilizer, on average, accounted for approximately 47.9 ER visits, 21.7 ambulance arrivals, and 2.5 MH-1s. These results are disproportionately higher than those for the average ER patient who has 1.61 ER visits, 0.43 ambulance arrivals, and 0.03 MH-1s per patient visit/year. The hyperutilizer data demonstrate that the SoC lacks a treatment component necessary for sustained recovery in this cohort.

Table 1. Past Year Mental Health Indicator by Illicit Drug and Alcohol Use from the National Survey on Drug Use and Health 2019-2020,<sup>7</sup> Hawai'i Data

| The National Survey on Drug Use and Health 2019-2020 Hawai'i Data      |                |  |  |
|--|----------------|--|--|
| Illicit Drug and Alcohol Use - Past Year <sup>a</sup>                  |                | No Past Year<br>Any Mental Illness     | Past Year<br>Any Mental Illness <sup>d</sup>     |
| No drug or alcohol past year use                                       | Weighted Count | 769 000                                | 115 000  |
|  | Total % (CI)   | 72.7% (67.6% - 77.2%)                  | 10.8% (8.1% - 14.4%)                             |
| Both drug and alcohol past year use                                    | Weighted Count | 100 000                                | 75 000   |
|  | Total % (CI)   | 9.4% (7.1% - 12.3%)                    | 7.1% (5.1% - 9.7%)                               |
| Wald Chi-Square Test of Association: <i>P</i> -value < .0001           |                |  |  |
| Illicit Drug and Alcohol Use - Past Year <sup>a</sup>                  |                | No Past Year<br>Serious Mental Illness | Past Year<br>Serious Mental Illness <sup>e</sup> |
| No drug or alcohol past year use                                       | Weighted Count | 858 000                                | 25 000   |
|  | Total % (CI)   | 81.1% (76.8% - 84.7%)                  | 2.4% (1.3% - 4.3%)                               |
| Both drug and alcohol past year use                                    | Weighted Count | 146 000                                | 29 000   |
|  | Total % (CI)   | 13.8% (11.0% - 17.2%)                  | 2.7% (1.6% - 4.5%)                               |
| Wald Chi-Square Test of Association: <i>P</i> -value = .003            |                |  |  |
| Marijuana Dependence or Abuse - Past Year <sup>b</sup>                 |                | No Past Year<br>Any Mental Illness     | Past Year<br>Any Mental Illness <sup>d</sup>     |
| No/Unknown   | Weighted Count | 856 000                                | 176 000  |
|  | Total % (CI)   | 80.9% (76.7% - 84.4%)                  | 16.6% (13.4% - 20.4%)                            |
| Yes  | Weighted Count | 13 000                                 | 14 000   |
|  | Total % (CI)   | 1.2% (0.5% - 3.0%)                     | 1.3% (0.70% - 2.2%)                              |
| Wald Chi-Square Test of Association: <i>P</i> -value = .01             |                |  |  |
| Nicotine Dependence in the Past Month Based on NDSS Score <sup>c</sup> |                | No Past Year<br>Any Mental Illness     | Past Year<br>Any Mental Illness <sup>d</sup>     |
| No/Unknown   | Weighted Count | 837 000                                | 170 000  |
|  | Total % (CI)   | 79.1% (75.0% - 82.6%)                  | 16.1% (12.9% - 19.8%)                            |
| Yes  | Weighted Count | 32 000                                 | 20 000   |
|  | Total % (CI)   | 3.0% (2.0% - 4.5%)                     | 1.9% (1.1% - 3.0%)                               |
| Wald Chi-Square Test of Association: <i>P</i> -value = .012            |                |  |  |
| Nicotine Dependence in the Past Month Based on NDSS Score              |                | No Past Year<br>Serious Mental Illness | Past Year<br>Serious Mental Illness <sup>e</sup> |
| No/Unknown   | Weighted Count | 960 000                                | 47 000   |
|  | Total % (CI)   | 90.7% (88.3% - 92.7%)                  | 4.4% (3.2% - 6.1%)                               |
| Yes  | Weighted Count | 44 000                                 | 7000   |
|  | Total % (CI)   | 4.2% (2.90% - 5.90%)                   | 0.7% (0.3% - 1.40%)                              |
| Wald Chi-Square Test of Association: <i>P</i> -value = .071            |                |  |  |

<sup>a</sup> Illicit Drug and Alcohol Use - Past Year = having used alcohol and illicit drug (used cocaine, hallucinogens, heroin, inhalants, methamphetamine, or marijuana; or misused pain relievers, sedatives, stimulants, or tranquilizers) in the past year.

<sup>b</sup> Marijuana Dependence or Abuse - Past Year = defined as having either marijuana abuse or dependence.

<sup>c</sup> Nicotine Dependence in the Past Month Based on NDSS Score = classified as having nicotine dependence in the past month if their Nicotine Dependence Syndrome Scale (NDSS) score was greater than or equal to 2.75.

<sup>d</sup> Past Year Any Mental Illness = any mental illness in the past year based on the 2012 revised predicted probability of serious mental illness.

<sup>e</sup> Past Year Serious Mental Illness = serious mental illness in the past year based on the 2012 revised predicted probability of serious mental illness.

Hawai‘i violent death data from the National Violent Death Review System (NVDRS) reveals the prevalence of dual disorders among individuals who died violent deaths. Hawai‘i NVDRS data from 2015, 2016, and 2019 (the database does not include 2017-2018) revealed that 24% of decedents who were homeless (20 of 85) had dual disorders compared to 11.6% of decedents who were not homeless (129 of 1110).<sup>21</sup> Dual disorder appears to be frequent among non-homeless people whose deaths were recorded in the NVDRS, and twice as common among PEH compared to those who were not experiencing homelessness. A limitation of this data may be that this database does not separate SRDD from dual disorder in general. However, the QMC Hyperutilizer data<sup>20</sup> showed that many patients with SRDD are also experiencing homelessness; it is possible that a portion of the decedents and homeless decedents in the NVDRS data were patients with SRDD. Those with SRDD may potentially be at risk for premature, violent deaths than those without SRDD or dual disorders.

### Current System of Care in Hawai‘i

In order to better understand the current SoC and needs related to substance use among the individuals with SRDD, information was gathered through conversations with relevant stakeholders such as administrators at the Hawai‘i State Department of Health, QMC, treatment centers on O‘ahu and neighbor islands. Monthly discussions with psychiatric service providers, mental health emergency workers, and emergency treatment providers also contributed to understanding the current SoC in Hawai‘i. **Figure 1** describes the treatment programs that are not tailored for people with SRDD. Individuals with SRDD may have cycled through some of these services at some point of their disease progression without achieving recovery because the services are not suitable for their needs.

In each component of care shown in **Figure 1**, the patient can leave treatment, except for the Hawai‘i State Hospital (identified in the last bullet of **Figure 1**, Inpatient, for mental health disorders only), which is only available for forensic patients with psychiatric disorders. Patients who have not entered the criminal justice system do not have access to Hawai‘i State Hospital. Note that no long-term residential confinement for the non-forensic SRDD population is available in the current SoC.

An important element that does not function within the current SoC in Hawai‘i is the O‘ahu Community Correctional Center (OCCC), which operates under the Department of Public Safety but provides a critical role in the SoC—a longer-term treatment setting. OCCC has 4 mental health treatment modules: psychiatric intensive, subacute, residential, and women’s services for pre-trial detainees. Each module is a self-contained detention and psychiatric treatment environment, designed to manage the level of acuity in terms of staffing.

The mental health modules at OCCC provide an example of long-term involuntary treatment for people with SRDD. When a patient with SRDD is incarcerated in this facility and has psychiatric acuity, they remain in this care system for a relatively long stay compared to the existing treatment service array for the general population. One disadvantage of the OCCC’s mental health modules for SRDD treatment is the absence of SUD treatment. While in OCCC’s mental health modules, patients are prevented from being on the streets or other environmental adversity, as well as provided with sanitation, nutrition, medication, clothing, structure, safety, and therapeutic support. The extended time in treatment allows the distinction of substance-induced psychosis from chronic psychotic disorders. Clinical observation reveals that the same patients with SRDD who may have cycled repeatedly through the SoC with little to no benefit, are able to attain significantly more progress and stability while in these mental health modules, although there is no SUD treatment at OCCC. There is no data sharing between the Department of Health and Department of Public Safety so the treatment outcomes of these 2 systems are not available for statistical analysis.

### Entry Points into the Current SoC for Patients with SRDD

Currently, there are 2 main entry points into the SoC for persons with SRDD – clinical or forensic. **Figure 2** illustrates how patients with SRDD enter the SoC but do not receive adequate treatment. The most common path into the SoC is through an ER at a hospital in Honolulu County, where patients with SRDD often arrive involuntarily on MH-1s. On average, patients stay in the ER for 16 hours. During the brief stay, patients are stabilized for intoxication and dangerous behavior. Upon discharge, patients are placed in the current SoC, which lacks the treatment resources needed to adequately treat SRDD.

- Outpatient ambulatory assessment, and treatment services—predominantly clinic-based with limited mobile services. Some of these outpatient providers treat dual diagnosis, while others treat psychiatric disorders only. These outpatient providers are the frontline for engaging and managing those patients with the greatest severity.
- Intensive outpatient treatment for either or both dual disorders.
- Partial hospital program for either or both disorders.
- Short-term residential treatment for SUD only. Some short-term residential treatment providers may recognize need for mental health treatment.
- Longer-term treatment for SUD only (eg, Sand Island).
- Inpatient, for mental health disorders only, may be a mental health disorder resulting from SUD (eg, Hawai‘i State Hospital [only forensic and compulsory]) .

Figure 1. Components of Existing Treatment Services for Mental Health, SUD, or Both, but Are Not Tailored for Patients with SRDD

Another entry point into the SoC is forensic, through arrest and detention for alleged criminal conduct. A small number of the cohort of individuals with SRDD with criminal charges are placed in Honolulu pre-trial detention facility's mental health treatment modules. The treatment modules at the pre-trial detention facility provides patients with a safe, structured, substance-free environment, as well as comprehensive mental health services. The average length of stay at the facility is between 6 months to 2 years. During their stay, some patients start to recover. However, after release, many experience substance use relapse, despite placement in residential substance use facilities. By contrast, many patients who are discharged from the psychiatric ER leave the SoC in less than 72 hours and return to homelessness and substance use.

The structured, drug-free environment of OCCC can lead to a period of recovery for patients with SRDD. The current SoC and the State of Hawai'i have civil commitment laws for psychiatric and SUDs.<sup>22</sup> However, what is lacking is a structured treatment venue that would replicate the long-term compulsory aspects of OCCC and Hawai'i State Hospital, and also include specialized dual treatment of dual disorders (the shaded circle in **Figure 2**).

Entry points into the SoC for patients with SRDD are available in Honolulu County and most other island counties, however, more specialized treatment environments are only available in Honolulu. For example, Hawai'i, Kaua'i, and Maui Counties each have a pre-trial detention center, yet they do not have mental health modules like OCCC. Patients with complex and refractory psychiatric disorders are transferred to OCCC.<sup>23</sup>

### Challenges

One of the most fundamental problems of the current care delivery system, modeled after the traditional complaint-driven presentation to a clinic or hospital, is the notion that the patient must present for treatment to prove that they are motivated for treatment. However, patients with dual disorders (and SRDD) are unlikely to seek treatment<sup>24</sup>; some lack decision-making capacity for their self-care.<sup>25</sup> One of the biggest barriers to care may be that patients with SRDD tend not to seek or receive treatment.<sup>4,6,24</sup> According to clinical observations, they enter the SoC for serious medical complications or compelling consequences (such as criminal arrest or MH-1).

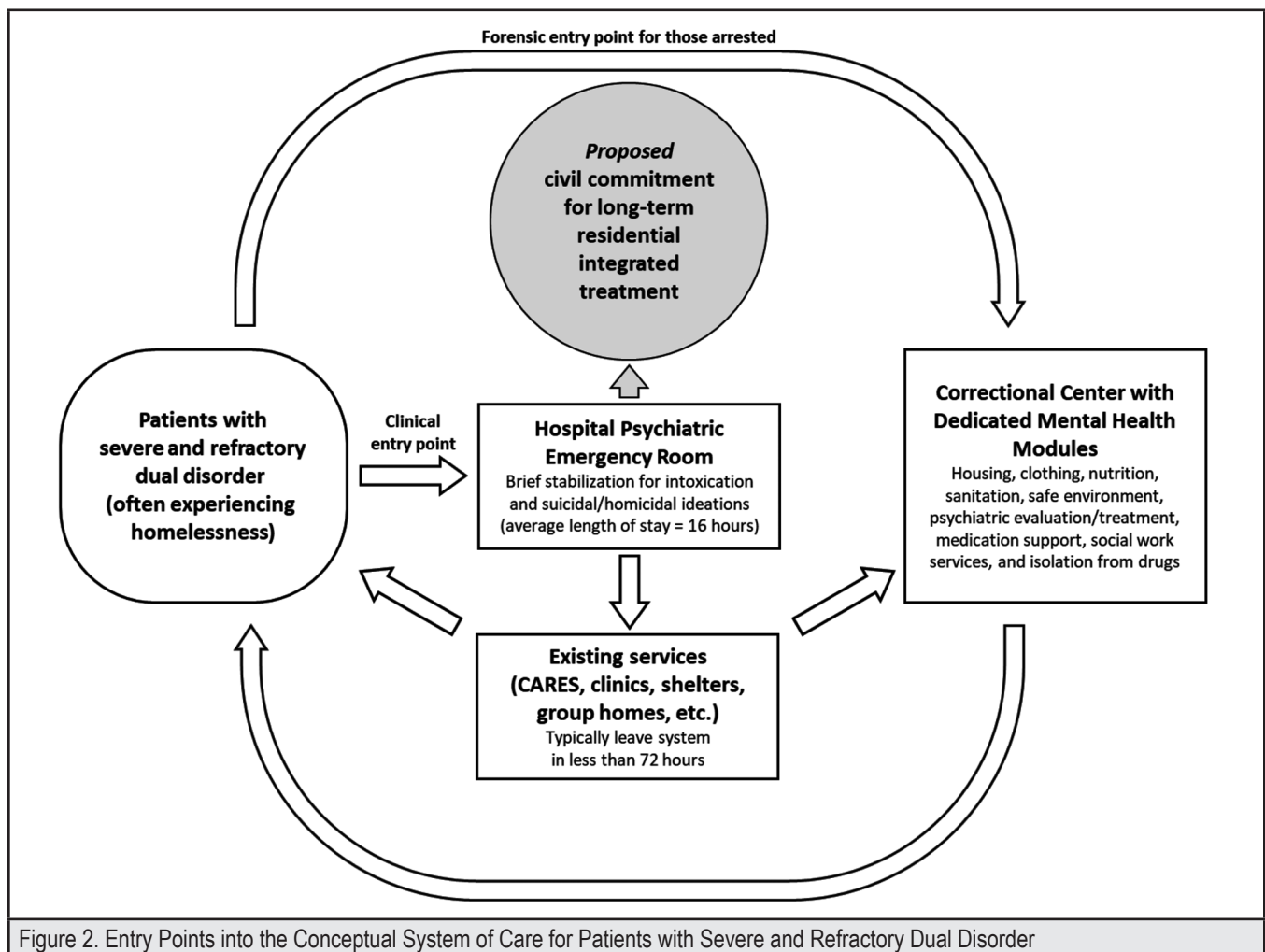


Figure 2. Entry Points into the Conceptual System of Care for Patients with Severe and Refractory Dual Disorder

## Interventions

### Improving Data Collection

It is beneficial to clearly define and differentiate types of dual disorders to capture the heterogeneity of each subtype in diagnosis and data collection endeavors. Different subpopulations of people with dual disorders may have different characteristics. For example, the combinations of methamphetamine and psychosis, of opioids and depressive disorders, and alcohol and anxiety disorders are heterogeneous.<sup>24</sup> Clearly differentiating subtypes of people with dual disorders including the general severity will provide more guidance than aggregating all cases and combinations of SUD and psychiatric disorders in diagnosis and data collection efforts.

### Improving Treatment and Care Delivery

Findings from studies on dual disorders in general can provide guidance about improving treatment and care delivery for patients in this cohort. First of all, there is support for integrated treatment of dual disorders in the literature.<sup>17,26</sup> A recent review of best practices indicates that integrated treatment is more effective than sequential treatment.<sup>26</sup> Hawai'i has a coordinated intake system for evaluation and disposition for substance use treatment and psychiatric treatment services: Hawai'i Coordinated Access Resource Entry System (CARES). Hawai'i CARES, used in conjunction with integrated treatment facilities for dual disorder and SRDD, can be beneficial in preventing wrong door incidents. Making integrated treatments available through Hawai'i CARES can help prevent patients with dual disorders from progressing to SRDD. Also, if patients with SRDD can readily be referred to integrated treatments regardless of their entry point into the SoC, they would have better access to services and achieve better treatment outcomes.

Research suggests that drug addiction treatments in general should be a long-term process.<sup>27</sup> Based on national outcome studies from 1969 to 1995,<sup>28</sup> which assessed approximately 70 000 patients, of whom 40-50% were court-referred or otherwise mandated to residential and outpatient treatment programs, 2 important findings emerged. One is that the duration of treatment was a predictor of the patients' treatment performance. After 3 months of time in treatment the outcomes were in a positive correlation with the length of time in treatment<sup>27,28</sup>; moreover, it was found that at least 1 year was needed in order for a treatment to be effective.<sup>27,28</sup> The National Institute on Drug Abuse<sup>27</sup> suggests that programs should seek ways to engage and keep patients in treatment, since patients often leave treatment before positive outcomes are stable. However, helping patients with SRDD to seek treatment is especially hard since some of their abilities to make decisions are impaired.<sup>25</sup>

Case management is an important element for patients with dual disorder in general, providing a lifeline for continuity of care

as well as promoter of treatment engagement and adherence.<sup>24</sup> Case management can be used to engage a patient with dual disorder who is otherwise reluctant to enter/continue treatment. Even though case management is beneficial for engagement of patients in general, it alone is not sufficient for engaging patients who have an impaired ability to make decisions for themselves, as they are unlikely to seek or remain in treatment voluntarily. Nevertheless, case management may still be useful for patients with dual disorders before they progress to SRDD, or after patients with SRDD start recovering and are able to make conscious decisions for treatment.

Extended civil commitment for integrated residential treatment of SUD and mental illness is needed to adequately treat patients with SRDD. Patients with dual disorders (and SRDD) are unlikely to seek or stay in treatment voluntarily.<sup>4,6</sup> As mentioned, recovery from addiction is a long-term process<sup>27,28</sup> and integrated treatment achieves better treatment outcomes than sequential treatment<sup>17,26</sup>; therefore, extended and integrated treatment is beneficial. Clinical observation reveals that patients with SRDD achieve more progress at OCCC's mental health modules, even though there is no SUD treatment at OCCC. So, a residential setting can be beneficial for patients with SRDD, as it will provide basic necessities, structure, therapeutic support, and protection in protracted substance-free environment. Some patients with SRDD have impaired decision-making capacity; from such individuals, consent to treatment is often not attained.<sup>25</sup> Given that patients with SRDD may be at increased risk for mortality, civil commitment may be one of the options. Hawai'i has a law for civil commitment to a psychiatric facility for mental illness and substance use<sup>22</sup>; however, a venue for the type of longer-term care needed for recovery is missing in the SoC. Hence, civil commitment for long-term residential integrated treatment of SUD and mental illness is necessary to help patients with SRDD survive and recover.

## Recommendations

(1) Strengthen specific dual disorder data collection, including stratification of dual disorder severity. This will require state-wide standardization of health data, including all medical hospitals as well as psychiatric units, residential treatments, partial hospitalization programs, intensive outpatient programs, outpatient services, and case management services. Data collection needs to be standardized throughout the SoC, and this would include different public sectors.

(2) Enhance coordination across different public sectors, including the Department of Health, Department of Public Safety, and Department of Human Services (which is in charge of housing- and homelessness-related policies). Dual disorder-related public functions are scattered across many divisions of the government. The structure of these various divisions needs to be partly modified to better serve patients with dual disorder. The structure should be set up with a "no wrong door" policy



in mind, so that referrals to appropriate services can be made in a timely and seamless manner. A “no wrong door” policy would help prevent patients with dual disorder from progressing to SRDD.

(3) Develop legislative proposals for funding long-term (at least 1 year) and integrated treatment, including treatment venue, staffing, and funding for non-forensic patient care. These proposals would start with obtaining the current cost of care for the SRDD cohort in terms of emergency services and MH-1s in comparison to estimates of longer-term residential care.

(4) Enhance case management services. Case management should be in place to help patient engagement before, during, and after SRDD treatment. As noted above, case management coordination across and within public sector systems would be essential.

(5) Encourage policy discussions of protracted court-ordered commitment for integrated residential treatment for individuals with SRDD. Data demonstrating high psychiatric ER utilization and increased danger of mortality can help substantiate legislation supporting a greater than or equal to 12 months period of residential confinement for integrated treatment (see the shaded circle in **Figure 2**).

### Conflict of Interest

None of the authors identify a conflict of interest.

### Notice of Duplicate Publication

This article is based on the draft version of a chapter from the Hawai‘i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>). While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article’s publication.

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# Implications for a System of Care in Hawai'i for Youth Involved in the Justice System and Substance Use

Tai-An Miao PhD; Earl S. Hishinuma PhD; Karen N. Umemoto PhD

## Abstract

*The shift from punitive responses to restorative public health approaches to tackle the problem of youth substance use and justice system involvement follow a nationwide trend. Hawai'i has made significant strides towards transforming the justice system and developing effective substance abuse programs. However, these efforts require changes in policies, practices, and paradigms to be fully and permanently realized. Such a philosophical shift requires a major reallocation of resources from downstream, high-cost punitive modalities, such as incarceration, to upstream solutions that allow adolescents to heal past trauma and grow the understanding and tools to lead a healthy and meaningful life. Research and evaluation to support ongoing learning and system improvement will also be required. Most critically, taking an approach to work with youth so they can overcome the root problems they face holds the most promise of ending the cycle of justice involvement and substance use that the state has witnessed for far too long.*

## Keywords

*Hawai'i, substance use, juvenile justice, adolescents, review*

## Abbreviations and Acronyms

CAMHD = Child & Adolescent Mental Health Division  
COFA = Compact of Free Association  
HYCF = Hawai'i Youth Correctional Facility  
JDAI = Juvenile Detention Alternatives Initiative  
SoC = System of Care  
SU = Substance Use  
SUD = Substance Use Disorder

## Background & Introduction

### Significance of the Problem

Although the association between substance use (SU) and justice system involvement can be direct (appropriately 9%-10% of youth arrested and detained for drug charges as compared to other offenses),<sup>1</sup> the link can also be much more intertwined. The National Center on Addiction and Substance Abuse reports that 78% of the 2.4 million juvenile arrests in 2000 involved youth who stated they were under the influence of alcohol or drugs, tested positive for drugs, were arrested for committing an alcohol or drug offense, or reported having substance abuse problems.<sup>2</sup> Of the 54% of juvenile arrestees testing positive for drugs at the time of their arrest, 92% tested positive for marijuana.<sup>2</sup> The number of drug-law-violation cases referred to juvenile courts increased at more than 12.5 times the rate of the total number of cases referred to juvenile courts from 1991

to 2000.<sup>2</sup> Finally, the more often youth were arrested, the more likely they were to drink alcohol and use drugs.<sup>2</sup>

In addition, adolescents who used substances and were involved with the justice system were at greater risk for polysubstance use,<sup>3</sup> sexually transmitted infections,<sup>4,5</sup> suicidality,<sup>6,7</sup> and recidivism.<sup>7</sup> Further, formerly detained youth were found to be disproportionately at risk to meet criteria for a substance use disorder in adulthood.<sup>8</sup>

Unfortunately, despite the robust co-occurrence of adolescent SU and justice involvement, there has been limited service utilization, and thus, under-treatment, before, during, and after confinement.<sup>7,9</sup> For example, nationally only 21% of the youth received SU services before or after detention or incarceration.<sup>9</sup> In addition, for moderate SU, ethnic differences were found whereby non-Hispanic European Americans were more likely to receive SU services as compared to Hispanic and African American youth.<sup>10</sup>

Ethnoracial disparities in the US and Hawai'i justice systems must be acknowledged in this discussion on improving SU supports for system-involved youth. Beginning with the adoption of a western legal system during the 1800s in Hawai'i, Native Hawaiians and less assimilated migrant populations have been disproportionately impacted by "energetic police and judicial activity."<sup>11</sup> The long arc of colonization has undermined traditional cultural practices and exacerbated inequalities and pains of injustice experienced in pronounced ways within these diverse Pacific populations (eg, substance use, homelessness, suicide, unemployment, lack of health care, and incarceration).<sup>12</sup> In the post-plantation era, over-representation in the justice system has continued to impact Native Hawaiians and migrating populations often characterized by economic vulnerability and social pressures to assimilate. Samoan youth were subject to greater scrutiny and a trend of justice system involvement in the 1990s-early 2000s.<sup>13</sup> Currently, as families migrate to Hawai'i under the Compact of Free Association (COFA) from the Republic of the Marshall Islands and the Federated States of Micronesia, COFA nations' youth are increasingly becoming involved with the youth justice system and SU.<sup>14</sup> This sociohistorical context is essential to understanding the interconnection of SU and youth justice, with the goal of strengthening Hawai'i's system of care for youth. This article features key highlights from a chapter of the Hawai'i Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan which examines the intersection of substance use and juvenile justice and implications for a

system of care. For more background and context around the overall State Plan project, readers are referred to the introductory article of this special supplement.

**Prevalence.** SU has been consistently found to begin and substantially increase during the early adolescent and adolescent years. According to the national Monitoring the Future Survey, in 2020, the overall lifetime prevalence (among 8th, 10th, and 12th graders combined) was 34.7% for illicit drug use, 30.2% for marijuana, 44.0% for alcohol, 16.2% for cigarettes, and 37.2% for e-vaporizers.<sup>15</sup> Although sparse, research findings in Hawai‘i on the intersection between adolescent SU and conduct behaviors, including justice involvement, are consistent with national data. Baker, Hishinuma, Chang, and Nixon<sup>16</sup> found a statistically significant, positive relationship between self-reported ever used drugs and violence perpetration for Filipino American, Native Hawaiian, and Samoan youth in Hawai‘i. Consistent with this result, the National Center on Indigenous Hawaiian Behavioral Health found that adolescent self-reported SU, and in particular, smoking cigarettes regularly, was robustly and positively related to “was arrested or got in serious trouble with the law,” school suspensions, and school infractions for Native Hawaiian and non-Hawaiian youth.<sup>17,18</sup> Based on the Hawai‘i Youth Risk Behavior Survey (**Table 1**), the weighted comorbidity rates between substance use and conduct problems (eg, fights) were very high. On average, 4.0% (standard deviation [*sd*]=2.0, median=3.5%, range=1.4% to 10.2%, denominator=entire sample) self-reported both substance use and violence involvement. Of the youth who self-reported violence, 35.5% also self-reported substance use. Of the youth who self-reported substance use, 24.2% also self-reported violence. The 35.5% was statistically higher than 24.2% ( $F[1,92] = 18.2, P < .0001$ ), indicating that while the comorbidity is strong for both associations, there should be a higher need to screen for substance use for youth who self-report violence compared to the need to screen for violence for youth who self-report substance use.

For Hawai‘i, the proportion of youth charged with drug-related offenses underestimates the actual prevalence of SU among young people involved with the youth justice system. In particular, a study by the State Attorney General reported that only approximately 10.0% of youth arrests were for drug offenses,<sup>19</sup> and only 12.0% of the arrests were for unique individuals with a drug offense.<sup>20</sup> However, a random sample of youth adjudicated in Honolulu County for any law violation indicated that 71.8% of youth had a history of SU recorded in their probation case files.<sup>21</sup> In a review of diagnostic medical records for youth incarcerated in Hawai‘i in FY2005-2007, approximately three-fourths of the youth files indicated a biological parent history of substance use. In addition, for the data that were available, 96% of youth had a history of SU, with the most commonly used substances as follows: 85% marijuana, 82% alcohol, 73% cigarettes, and 54% methamphetamine. The earliest average start of SU was with cigarettes (11.9 years of age); the latest initiation of substances involved methamphetamine (14.1 years

of age). Further, history of hard drug use was one of the most salient risk factors associated with recidivism.<sup>22</sup> In a more recent profile of youth incarcerated in Hawai‘i and discharged between CY 2014-2019, the proportion of youth who had received at least 1 SU disorder diagnosis was 83.6% and the entire study population reported a history of SU.<sup>23,24</sup>

## **Risk and Protective Factors**

**Social Ecological Model Framework.** The social ecological model is a valuable construct commonly used to map the risk and protective factors that may influence physical, mental, and behavioral health across different levels: individual, interpersonal, communal/institutional, and societal.<sup>25-28</sup> Research on interventions to reduce or prevent SU for justice-involved youth often center on decreasing risk and enhancing protective factors at the individual and interpersonal levels, with promising work addressing individual behavioral change in step with environmental change at the community or institutional level.<sup>29,30</sup> Unfortunately, research has focused less at the institutional and societal levels. These broader domains come into sharper focus through the lens of racial and ethnic disparities. Observations from the literature are highlighted in **Table 2**, focusing on the levels beyond the individual.

## **Current System of Care and Youth Justice System Transformation in Hawai‘i**

For decades, the public education, mental and behavioral health, child welfare, and juvenile justice systems in Hawai‘i have sought to institutionalize a state system of care (SoC). The goal of the SoC is to provide coordinated evidence-based services using a community-based, culturally and linguistically responsive, family-centered approach.<sup>62</sup> **Table 3** provides the basic delineation of the state youth justice process and available SU services and supports at each stage.

The Hawai‘i SoC for SU among justice system-involved youth is a loose constellation of supports that delivers services in a fairly unsystematic manner. At the early stages of justice involvement, the challenges to prevention and diversion include inconsistency of funding, misalignment between available programs and community acceptance and trust, and the requirement for adult permission for youth to participate in most interventions, which disadvantages youth who lack the support of adult caregivers. Exacerbating economic vulnerability, the cost of SU assessment and treatment at the early stages of justice-system involvement are often placed on families, with public support available for only those who can navigate the eligibility process and meet the required criteria. Even youth on probation are not systematically assessed for SU needs, due in part to hesitation by court officers to incur the associated costs. At the downstream end of the system, the availability of out-of-home placements for youth who need SU treatment has dwindled, leaving only 1 stable provider (Bobbie Benson

Table 1. Hawai'i Youth Risk Behavior Survey (YRBS), 2019 - Weighted Co-Occurring Prevalence Cross Tabulations Between Substance Use & Violence Items (N < 5,879) [Table 1 continues on next page]

| Substance Use Items |  | Violence Items           |      |      |                             |      |     |                                 |      |     |   |      |     |
|---------------------|--|--------------------------|------|------|-----------------------------|------|-----|---------------------------------|------|-----|---|------|-----|
|                     |  | Were in a physical fight |      |      | Were electronically bullied |      |     | Were bullied on school property |      |     | Did not go to school because they felt unsafe at school or on their way to or from school |      |     |
| Category            | Item Description   | SUB                      | VIO  | ALL  | SUB                         | VIO  | ALL | SUB                             | VIO  | ALL | SUB   | VIO  | ALL |
| Cigarettes          | Ever tried smoking   | 29.9                     | 35.1 | 5.3  | 25.0                        | 35.3 | 4.4 | 26.5                            | 28.7 | 4.6 | 17.6  | 28.7 | 3.1 |
|                     | First tried smoking before 13 years                        | 42.6                     | 19.6 | 3.1  | 28.6                        | 15.1 | 1.9 | 27.4                            | 11.4 | 1.8 | 29.5  | 18.3 | 2.1 |
|                     | Currently smoked cigarettes                                | 55.8                     | 17.4 | 2.9  | NA                          | NA   | NA  | NA                              | NA   | NA  | NA  | NA   | NA  |
| Vapor Products      | Ever used electronic vapor products                        | 21.2                     | 66.8 | 10.2 | 17.6                        | 69.3 | 8.5 | 20.0                            | 59.6 | 9.7 | 14.5  | 63.3 | 7.0 |
|                     | Currently used electronic vapor products                   | 27.0                     | 53.3 | 8.2  | 20.5                        | 50.5 | 6.1 | 22.6                            | 41.9 | 6.8 | 17.4  | 46.7 | 5.3 |
|                     | Currently used electronic vapor products frequently        | 33.8                     | 22.7 | 3.5  | 16.4                        | 14.1 | 1.7 | 19.0                            | 12.2 | 2.0 | 18.3  | 16.9 | 1.9 |
|                     | Currently used electronic vapor products daily             | 35.5                     | 18.2 | 2.8  | NA                          | NA   | NA  | NA                              | NA   | NA  | NA  | NA   | NA  |
|                     | Currently smoked or used vapor products                    | 28.6                     | 57.0 | 9.1  | 21.0                        | 52.5 | 6.5 | 22.9                            | 44.1 | 7.2 | 18.7  | 50.9 | 5.9 |
| Alcohol             | Had 1st alcohol before 13 years                            | 34.8                     | 31.9 | 5.2  | 24.7                        | 27.2 | 3.5 | 27.1                            | 23.6 | 3.9 | 20.1  | 25.2 | 3.0 |
|                     | Currently drank alcohol                                    | 32.1                     | 42.0 | 6.5  | 21.5                        | 34.5 | 4.3 | 23.9                            | 29.4 | 4.8 | 18.5  | 33.3 | 3.7 |
|                     | Currently binge drink                                      | 40.0                     | 27.5 | 4.3  | 22.1                        | 18.5 | 2.3 | 24.2                            | 15.8 | 2.6 | 23.5  | 21.6 | 2.5 |
| Marijuana           | Tried marijuana before 13 years                            | 45.3                     | 19.1 | 3.1  | 22.0                        | 11.0 | 1.4 | 25.0                            | 10.1 | 1.7 | 27.8  | 15.6 | 1.8 |
|                     | Currently use marijuana                                    | 32.0                     | 34.5 | 5.4  | 21.4                        | 28.5 | 3.6 | 21.8                            | 22.3 | 3.7 | 20.5  | 29.7 | 3.5 |
| Other Drugs         | Ever took prescription meds w/o doctor order               | 33.0                     | 28.3 | 4.7  | 26.5                        | 28.3 | 3.6 | 29.5                            | 24.6 | 4.1 | 22.9  | 26.8 | 3.2 |
|                     | Ever used cocaine  | 48.5                     | 17.2 | 2.8  | NA                          | NA   | NA  | NA                              | NA   | NA  | 30.3  | 14.2 | 1.7 |
|                     | Ever used heroin   | 52.6                     | 11.3 | 1.9  | NA                          | NA   | NA  | NA                              | NA   | NA  | NA  | NA   | NA  |
|                     | Ever used meth   | 54.3                     | 14.7 | 2.4  | NA                          | NA   | NA  | NA                              | NA   | NA  | 45.0  | 15.5 | 1.9 |
|                     | Ever used ecstasy  | 48.7                     | 12.9 | 2.1  | NA                          | NA   | NA  | NA                              | NA   | NA  | 31.5  | 11.6 | 1.4 |
|                     | Drank alcohol or used drugs before last sexual intercourse | 42.6                     | 33.7 | 8.7  | NA                          | NA   | NA  | NA                              | NA   | NA  | NA  | NA   | NA  |

SUB = substance use item prevalence = weighted % of (100)(# self-reported yes to both substance use and violence)/(# self-reported yes to substance use)  
VIO = violence item prevalence = weighted % of (100)(# self-reported yes to both substance use and violence)/(# self-reported yes to violence)  
ALL = comorbid prevalence between substance use item and violence item = weighted % of (100)(# self-reported yes to both substance use and violence)/(total sample size)  
NA = not applicable (too few occurrences for a cross-tabulation); Five substance use items are not included in this table because there were no comorbidity prevalence rates with violence for these items: (1) "Currently smoke cigarettes daily," "Currently smoked frequently," "Usually got their own vapor products at store," "Usually got alcohol by someone giving to them," and "Ever injected illegal drugs."

Table 1. Hawai'i Youth Risk Behavior Survey (YRBS), 2019 - Weighted Co-Occurring Prevalence Cross Tabulations Between Substance Use & Violence Items (N < 5,879) [Table 1 continued]

| Substance Use Items |  | Violence Items   |      |     |                                       |      |     |                                    |      |     |                                      |      |     |
|---------------------|--|--|------|-----|---------------------------------------|------|-----|------------------------------------|------|-----|--------------------------------------|------|-----|
|                     |  | Were ever physically forced to have sexual intercourse |      |     | Experienced sexual violence by anyone |      |     | Experienced sexual dating violence |      |     | Experienced physical dating violence |      |     |
| Category            | Item Description   | SUB  | VIO  | ALL | SUB                                   | VIO  | ALL | SUB                                | VIO  | ALL | SUB                                  | VIO  | ALL |
| Cigarettes          | Ever tried smoking   | 18.0   | 44.2 | 3.2 | 19.0                                  | 33.4 | 3.3 | NA                                 | NA   | NA  | 16.2                                 | 49.3 | 3.7 |
|                     | First tried smoking before 13 years                        | NA   | NA   | NA  | 28.1                                  | 18.9 | 1.9 | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Currently smoked cigarettes                                | NA   | NA   | NA  | NA                                    | NA   | NA  | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
| Vapor Products      | Ever used electronic vapor products                        | 10.8   | 74.9 | 5.2 | 13.6                                  | 68.7 | 6.5 | 7.7                                | 71.4 | 4.7 | 9.1                                  | 78.4 | 5.6 |
|                     | Currently used electronic vapor products                   | 12.9   | 57.8 | 3.9 | 17.7                                  | 55.5 | 5.3 | 10.1                               | 56.0 | 4.1 | 12.1                                 | 66.5 | 4.9 |
|                     | Currently used electronic vapor products frequently        | 15.8   | 24.0 | 1.6 | 19.4                                  | 20.3 | 1.9 | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Currently used electronic vapor products daily             | NA   | NA   | NA  | NA                                    | NA   | NA  | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Currently smoked or used vapor products                    | 14.2   | 62.3 | 4.5 | 19.7                                  | 59.9 | 6.1 | 11.0                               | 60.7 | 4.6 | 14.6                                 | 73.5 | 6.2 |
| Alcohol             | Had 1st alcohol before 13 years                            | 15.2   | 29.8 | 2.2 | 21.8                                  | 31.3 | 3.2 | NA                                 | NA   | NA  | 16.4                                 | 37.8 | 3.1 |
|                     | Currently drank alcohol                                    | 15.0   | 43.2 | 4.1 | 12.6                                  | 52.4 | 3.4 | 20.7                               | 44.0 | 4.1 | 17.4                                 | 60.7 | 4.9 |
|                     | Currently binge drink                                      | 16.4   | 24.6 | 1.7 | 21.8                                  | 22.6 | 2.2 | NA                                 | NA   | NA  | 22.6                                 | 45.0 | 3.5 |
| Marijuana           | Tried marijuana before 13 years                            | NA   | NA   | NA  | 26.3                                  | 16.7 | 1.7 | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Currently use marijuana                                    | 14.7   | 34.5 | 2.4 | 20.2                                  | 33.4 | 3.3 | NA                                 | NA   | NA  | 16.8                                 | 51.2 | 4.0 |
| Other Drugs         | Ever took prescription meds w/o doctor order               | 19.2   | 35.1 | 2.6 | 24.3                                  | 31.3 | 3.3 | NA                                 | NA   | NA  | 21.0                                 | 41.4 | 3.5 |
|                     | Ever used cocaine  | NA   | NA   | NA  | NA                                    | NA   | NA  | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Ever used heroin   | NA   | NA   | NA  | NA                                    | NA   | NA  | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Ever used meth   | NA   | NA   | NA  | NA                                    | NA   | NA  | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Ever used ecstasy  | NA   | NA   | NA  | NA                                    | NA   | NA  | NA                                 | NA   | NA  | NA                                   | NA   | NA  |
|                     | Drank alcohol or used drugs before last sexual intercourse | NA   | NA   | NA  | NA                                    | NA   | NA  | NA                                 | NA   | NA  | NA                                   | NA   | NA  |

SUB = substance use item prevalence = weighted % of (100)(# self-reported yes to both substance use and violence)/(# self-reported yes to substance use)  
VIO = violence item prevalence = weighted % of (100)(# self-reported yes to both substance use and violence)/(# self-reported yes to violence)  
ALL = comorbid prevalence between substance use item and violence item = weighted % of (100)(# self-reported yes to both substance use and violence)/(total sample size)  
NA = not applicable (too few occurrences for a cross-tabulation); Five substance use items are not included in this table because there were no comorbidity prevalence rates with violence for these items: (1) "Currently smoke cigarettes daily," "Currently smoked frequently," "Usually got their own vapor products at store," "Usually got alcohol by someone giving to them," and "Ever injected illegal drugs."

| Table 2. Risk and Protective Factors for Youth Substance Use, by Social Ecological Domain  |  |
|--|--|
| Domain & Category  | Elaboration  |
| <b>Interpersonal Domain</b><br><i>Family and home</i> <ul style="list-style-type: none"> <li>• Parent-child relationships and family conflict</li> <li>• Structure and stability</li> <li>• Well-being, involvement with substance use and/or justice system</li> </ul>  | Positive family functioning (eg, active parental presence, lack of parental hostility) and family well-being have been found to be associated with and impact youth behavior with lower rates of youth engaging in substance use (eg, polysubstance use) and anti-social behaviors (eg, recidivism). <sup>31-33</sup> Among youth incarcerated in Hawai'i, 91% had significant disruption to the family structure (ie, negative impact on relationship with child's primary caregiver), <sup>24</sup> 16% reported substance abuse among family members, 47% indicated parental mental health needs, and 66% reported parental justice system involvement. <sup>24</sup>   |
| <b>Interpersonal Domain</b><br><i>Peers</i> <ul style="list-style-type: none"> <li>• Relationships and attitudes</li> <li>• Behaviors, including friends offering drugs and/or alcohol</li> </ul>  | A robust finding is the association between youth with peers who are involved with substance use and the youth justice system. <sup>31,34</sup> Research in Hawai'i aligns with national findings on increased adolescent substance use associated with negative peer behavior, such as youth whose friends have offered them marijuana or alcohol or whose close friends have been suspended from school.   |
| <b>Community, Institutional, Societal Domain</b><br><i>Social support vs social stigmatization</i> <ul style="list-style-type: none"> <li>• Disparities resulting from discrimination and/or victimization on the basis of race, ethnicity, and/or gender identity</li> <li>• Social isolation</li> <li>• Interpersonal support</li> </ul> | Youth of color, both nationally and in Hawai'i, are substantially over-represented in arrests, detention, probation revocation, and/or incarceration. <sup>35-41</sup> In Hawai'i, Native Hawaiian, Samoan, and other Pacific Islander youth faced perceptions by decision-makers that manifested a consistent and cumulative pattern of negative outcomes <sup>21,42</sup> when compared to European American or East Asian youth. In addition, perceptions of differential treatment on the basis of ethnicity and race have been expressed by youth interviewed on their experiences in the state system of care for substance use. <sup>43</sup> Nationally, there is over-representation of gender-diverse youth (ie, gay, lesbian, bisexual, or other sexual orientations) in the youth justice system. <sup>44-46</sup> Within this context, researchers have advocated for a developmental approach to youth justice, whereby youth of color and gender-diverse youth would be viewed and treated with the same understanding of adolescent exploration and boundary-testing that is commonly extended to European American youth. <sup>47-50</sup> Protective factors include positive social support to mitigate the negative effects of discrimination on youth in the justice system, including substance dependency, <sup>51</sup> and addressing adolescents' need for belonging and contributing to pro-social and supportive community life. <sup>52</sup> |
| <b>Community, Institutional, Societal Domain</b><br><i>Trauma and marginalization</i> <ul style="list-style-type: none"> <li>• Adverse childhood experiences</li> <li>• Multigenerational and historical trauma</li> <li>• Multiple marginality</li> </ul>   | Studies of trauma have established links between adverse childhood experiences and increased risk of physical, mental, and behavioral health concerns, including problematic substance use. <sup>53,54</sup> The relationship of marginalization and multigenerational transmission of trauma has been well-documented among African American, Indigenous, and other communities of color. <sup>55-58</sup> Vigil and Moore <sup>59</sup> coined the term "multiple marginality" to explain the intersection of social and economic forces faced by some low-income youth of color, manifested in "inadequate living conditions, stressful personal and family changes, and racism and cultural repression in schools." <sup>59-61</sup> Histories of trauma and runaway were present in case files of over 90% of youth incarcerated in Hawai'i. <sup>24</sup>  |

Risk and protective factor data by ecological domain were collected and synthesized via literature review.

| Table 3. Youth Justice Process in Hawai'i and the Supports and Substance Use Services for Youth  |   |
|--|---|
| Stage and Services Available   | Elaboration   |
| <p><i>Prevention &amp; Arrest / Diversion</i><br/>(voluntary services)</p> <ul style="list-style-type: none"> <li>• School-based programs</li> <li>• Community-based activities: cultural, arts, sports and recreation, mentoring</li> <li>• Public health programs/services</li> <li>• Mental health programs/services</li> <li>• Self-referral for community-based substance use assessment</li> <li>• Assessment Center (geographically limited) screening for risks + needs</li> <li>• Family primarily responsible for costs</li> </ul> | <p>Prevention activities may include positive youth development and family strengthening programs offered on a wide, but inconsistent basis by a range of school and community stakeholders: grassroots volunteers, nonprofit youth-serving organizations, local government (eg, Parks &amp; Recreation) programs, state contracted substance use providers, Native Hawaiian trusts, and culture-based organizations for different populations. The state department of health Child &amp; Adolescent Mental Health Division (CAMHD) provides integrated substance use treatment for youth with qualifying mental health diagnoses.</p> <p>At the point of contact with law enforcement, a young person can be counseled and released or arrested. Arrest records are forwarded to the Prosecutor's office (for law violations) or Family Court (for status offenses). In jurisdictions with resources for formal diversion from court involvement, a police officer can refer youth to an assessment center for screening in a therapeutic, family-friendly setting. Voluntary referrals for formal substance use assessment or other resources can occur.</p> |
| <p><i>Detention</i><br/>(mandatory services)</p> <ul style="list-style-type: none"> <li>• Department of Health, CAMHD Family Court Liaison Branch services</li> <li>• Substance use assessment if determined warranted; time-limited services while youth is detained</li> <li>• State responsible for costs</li> </ul>  | <p>The State Judiciary operates a sole juvenile detention facility on O'ahu with capacity for short-term secured placement prior to a youth being seen by a judge for charges. Police officers may transport a young person who has been arrested on suspicion of a serious law violation directly to the detention facility for immediate court intake. A youth can be detained awaiting a hearing within 48-72 hours. Following the detention hearing, a young person could be released or remain in secure custody for as long as several months awaiting the completion of the hearing process or until another appropriate placement can be made. Youth in detention receive a mandatory clinical screening for substance use and mental health needs, completed upon intake, and corresponding time-limited services while detained are provided, based on the assessment. Aftercare upon release is neither required nor well-coordinated.</p>   |
| <p><i>Court Referral/Diversion</i><br/>(voluntary services)</p> <ul style="list-style-type: none"> <li>• Optional referral for mental health services</li> <li>• Optional referral for community-based substance use assessment</li> <li>• Optional referral to positive youth development programs</li> <li>• Family primarily responsible for costs</li> </ul>   | <p>A young person referred to court can be "diverted" if a court officer closes the case after a phone call or meeting with the child's guardian, or even after an unsuccessful attempt at contacting the guardian. Voluntary participation in substance use services can be recommended. Completion of selected programs can be offered as an incentive to avoid court processing in certain jurisdictions.</p>  |
| <p><i>Adjudication: Probation</i><br/>(mandatory services)</p> <ul style="list-style-type: none"> <li>• Supervision by Probation Officer</li> <li>• Conditions of probation may include substance use assessment, monitoring (drug testing), and if diagnosed, treatment</li> <li>• Selective specialty court services</li> <li>• State or family responsible for costs</li> </ul>   | <p>Placement on court supervision (probation for law violation or protective supervision for status offense) is one possible consequence for youth whose case is adjudicated by a juvenile judge. Youth are not referred for substance use assessment unless substance use is determined to contribute to "criminal behavior" at the Probation Officer's discretion. If assessed, corresponding time-limited services while on probation may be provided, based on the assessment. Conditions of probation may include curfew, electronic monitoring, and drug testing. In certain jurisdictions, youth may be admitted to a "boutique court" program (eg, Juvenile Drug or Girls Court) with added supports. For youth with a qualifying diagnosis for mental health services, integrated substance use treatment is available through CAMHD contracted services such as Multi-Systemic Therapy.</p>   |
| <p><i>Adjudication: Out-of-Home Placement</i><br/>(mandatory services)</p> <ul style="list-style-type: none"> <li>• Residential rehabilitation (geographically limited)</li> <li>• Cultural wellness (limited funding)</li> <li>• Incarceration with substance use and mental services, positive youth development supports and optional family services</li> <li>• State responsible for costs</li> </ul>   | <p>Out-of-home placement may range from incarceration in the secured HYCF located on O'ahu to court-ordered participation in a residential program, such as a mental health facility or substance abuse treatment program (decreasing options in the state), group home/safe house, or life skills training program. For youth with a qualifying diagnosis for mental health services, integrated substance use treatment is available through CAMHD contracted residential programs. Youth may be placed in the juvenile detention facility pending an opening in an appropriate out-of-home placement because availability is frequently limited. Substance use services for incarcerated youth in Hawai'i include mandatory clinical services based on formal substance use assessments.</p>   |

Data on the Hawai'i youth justice system process and substance use services and supports for youth were collected and synthesized via informal interviews with justice system stakeholders and substance use service providers, and authors' professional and personal knowledge and observation as a result of working in the field locally for over 10 years.



Center), albeit with limited bed space. Smaller residential SU programs that integrate life skills and local cultural values, such as the now-closed ocean-based Kailana Program operated by the Marimed Foundation, have struggled to maintain sufficient funding. The Hawai‘i Youth Correctional Facility (HYCF) has been termed a “provider of last resort” where adjudicated youth are able to access intensive mental health and/or SU services that are otherwise in short supply in the community.<sup>12,21</sup> If youth are incarcerated, then they undergo mandated mental health evaluations, SU histories are recorded, and formal diagnosis of a substance use disorder (SUD) may result from a full psychiatric evaluation. For youth who are diagnosed with a SUD, service plans include compulsory treatment provided by the state while confined.

Between the 2 extremes of prevention and incarceration, a missed opportunity presents itself for screening and early intervention among youth who may be arrested and diverted or are awaiting court processing. Even among youth who are adjudicated and placed on probation, current practices allow most to continue at elevated risk of SU without a formal assessment or referral to services. In a recent statewide youth needs assessment, local youth frequently described “getting in trouble” at school or with the law as their primary entry point to SU treatment.<sup>43</sup>

However, efforts to transform Hawai‘i’s youth justice system have gained traction, most significantly since the state’s entry into the Juvenile Detention Alternatives Initiative (JDAI) in 2008. Leaders of key youth-serving agencies (Office of Youth Services, Child & Adolescent Mental Health Division [CAMHD] of the Hawai‘i Department of Health, Family Court, Prosecutor, and the Public Defender) and community-based organizations (Hale Kipa, Hawai‘i Families as Allies, and various culturally grounded programs) committed to collaboration through the JDAI Executive Committee have participated in training and national learning exchanges for justice system reform. Family Court made marked improvements in data collection and reporting among youth in detention and probation. Substantial decreases in the number of youth detained and incarcerated have been sustained with youth commitments to HYCF reduced by 84% between Fiscal Years 2009-2021.<sup>63</sup> This consortium of leaders played a key role in collaborating with the Pew Research Institute to introduce comprehensive legislation (Juvenile Justice Transformation Act 201) to improve probation training, practice, and accountability for Family Court and to reduce youth commitments and implement transition planning for HYCF. That groundbreaking legislation opened the door to rename and redevelop the HYCF campus as the Kawaiiloa Youth and Family Wellness Center, allowing co-location of community-based programs to serve vulnerable youth.

## **Recommendations for System Transformation: Reframing Policy and Practice Responses to Care for Vulnerable Youth**

Through the synthesis of the literature, Hawai‘i relevant data, and input from youth-serving stakeholder organizations, the 2 sets of recommendations offered here reinforce lessons learned over the decades-long journey to improve the Hawai‘i SoC for SU and transform the youth justice system. The aim is to address the primary obstacles to sustaining collaborative and community-based alternatives that emphasize promising or evidence-based healing, trauma-informed, culture-based, and family-centered approaches. This entails shifting resources from punitive responses to a comprehensive array of community-based services, focusing on youth substance use as a public health issue rather than a criminal justice issue. Sustaining this shift requires sustained leadership, training to shift the paradigm of the youth justice profession towards a more culturally appropriate and developmental approach, and continual succession planning.

The first set of recommendations is to legislate Justice Reinvestment in order to shift resources from carceral measures to a broad range of community-based interventions to promote prevention and well-being. The number of youths processed by the courts and incarcerated at HYCF has continued to decrease since Act 204 was passed in 2014. By capturing the Family Court and Office of Youth Services cost-savings and investing them in front-end community outreach and services, the state can implement a public health approach to increase early identification of needs and expand access to prevention, intervention, treatment, and other supports for youth. Commitment to continual evaluation should accompany implementation, to provide monitoring and feedback to inform modifications. The following programs are needed to fill gaps in the current continuum of care and aid the shift towards restorative approaches.

1. Restorative Justice - Restorative justice programs (1) take a holistic view towards the interrelationships between multiple domains of individual, family, community, and society; and (2) illuminate the need to address place-based, family-centered, and spiritually appropriate methods of healing. Restorative justice program types include family group conferences, victim-impact panels, victim-offender mediation, circle sentencing, and community reparative boards. Residential alternatives include home confinement, shelter care, group homes, intensive supervision, and specialized foster care.<sup>64</sup> Restorative justice approaches in “after care” can support transition from intensive programs as youth return home to their families and communities

2. Culturally grounded healing programs - Two prototype programs developed on the island of Moloka'i address youth and family with SU utilizing a framework of Native Hawaiian cultural practices for healing and wholeness.<sup>65,66</sup> Puni Ke Ola promotes culture as health, strengthening protective factors through cultural practices and learning. Kahua Ola Hou has served as a diversion site for youth at various stages of the Hawai'i youth justice system and cross-trains youth justice staff and community partners in a cultural curriculum that has gained traction with local youth of diverse backgrounds.<sup>67</sup> Youth learn the practices of self-reflection and *ho'oponopono ho'oponopono* (a traditional Hawaiian practice of reconciliation and forgiveness) to address root causes of health concerns like SU and to heal family relationships. In addition, culturally responsive evaluation is vital to build an evidence base that takes into account the unique social-cultural context of youth in Hawai'i. The Kukulu Kumuhana framework<sup>68</sup> for Native Hawaiian well-being is 1 example of a collaborative local evaluation design created by Lili'uokalani Trust, Office of Hawaiian Affairs, Kamehameha Schools, and Consuelo Foundation to build an evidence base for place- and culturally based interventions that are relevant for Hawai'i.

3. Family-based interventions - Family-based interventions have been associated with decreases in SU and increases in protection against risk factors for other delinquent behaviors.<sup>69,70</sup> Among clinically referred youth, Multi-Dimensional Family Therapy and Multi-Systemic Therapy have demonstrated reductions in SU and other risky behaviors for youth.<sup>71</sup> Local research findings identify family protective factors as contributing to reduced likelihood of youth substance use.<sup>72</sup> Increasing access to high-commitment programs that require parent involvement such as Juvenile Drug Court can be addressed through culturally-informed approaches to family engagement. Recognizing that youth vulnerable to justice system involvement and substance use may have parents who are not present or able to play an active role, the Native Hawaiian concept of *'ohana* (family) can expand the network of supportive adults involved in a young person's care to include extended and non-blood relationships.

4. School-based interventions - For students at risk for justice-system involvement and SU, effective school-based interventions should address: (1) cultivating meaningful relationships and learning environments for students who feel disconnected from school to help to prevent early SU; (2) providing universal screening to identify students with SU needs for referral<sup>73</sup>; and (3) through screening, identifying and making warm hand-offs to services for students with co-occurring mental health and SU needs and/or students who have experienced trauma.

5. Workforce development - Invest in workforce capacity and professional development of providers to effectively address SU among justice system-involved youth. The Alcohol and Drug Abuse Division of the Hawai'i State Department of Health and higher educational institutions in Hawai'i have the opportunity to formalize an educational and training pipeline for Community-based Prevention Specialists, a federally recognized prevention position that is equivalent to the certified substance abuse counselor position. Community-based trainers with lived experience could facilitate self-reflective and interactive training curricula to address trauma, bias awareness, cross-cultural competency, and adolescent brain development.<sup>21</sup> Providing specialized training on SU screening and scoring to assessment center and other youth-serving program staff could improve early assessment of behavioral health concerns and treatment needs.<sup>74</sup>

6. Housing or residential programs - Restorative justice residential alternatives include home confinement, shelter care, group homes, intensive supervision, and specialized foster care.<sup>64</sup> Social stigma as well as zero tolerance policies for substance use or criminal convictions in public and some subsidized housing communities can create additional obstacles for vulnerable youth and young people on their healing journey.<sup>75</sup> From a harm reduction perspective, access to stable housing and other basic needs can serve as a foundation from which young people can more effectively identify and pursue their strengths while working to address areas of vulnerability such as substance use.<sup>76,77</sup>

The second set of recommendations focuses on developing dedicated and visionary leadership building upon the successes of youth justice system transformation thus far in Hawai'i. Intentional development of and succession planning for collaborative leadership is needed to sustain commitment to the public health approach described in the first recommendation. Recognizing the tension between good will shared by many state stakeholders to "work together to care for our kids" and the heavy bureaucracy that is a core characteristic of the state apparatus, an ethic of change agency is needed in leadership across the state SoC. Specific recommendations include support for the following.

1. Youth leadership in system transformation - Integrating youth's voice into leadership and decision-making is a priority of philanthropic support for system change.<sup>78,79</sup> Examples include: (1) partnership between the Hawai'i State Department of Human Services-Child Welfare Services Branch and EPIC 'Ohana, Inc.'s Hawai'i Helping Our People Envision Success Youth Leadership Board; and (2) the youth committee of the Hawai'i Juvenile Justice State Advisory Council.

2. Collaboration and coordination of services - Several small-scale collaborative initiatives to divert youth from the justice system offer examples of the potential for coordination to identify needs, strengthen protective factors, and connect to supports at early stages for behavioral health problems. The Positive Outreach and Intervention Project operates a values-based mentoring model that aims to divert youth from court involvement at the point of arrest and increase connections to supportive adults and cultural practices. Community-based practitioners bring together police officers, youth, and family members to learn about cultural sites and help with restoration efforts. Ho'opono Mamo, the Big Island Juvenile Intake and Assessment Center, and District 8 Mobile Assessment Center were designed to take a culturally based approach to assessing immediate needs by greeting youth and caregivers in a relational setting and making connections with the child's natural supports and the broader community network through direct, in-person referrals. Similarly, greater collaborative support for school-based services can lighten the burden placed on school staff so that student well-being becomes a shared focus. Reentry and aftercare are other critical decision points for justice system-involved youth. The Hawai'i State Department of Health Alcohol and Drug Abuse Division and Office of Youth Services could institutionalize policies that allow collaboration to improve treatment referrals and connections to care for youth upon community reentry.

## Conflict of Interest

None of the authors identify a conflict of interest.

## Notice of Duplicate Publication

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# Strategies to Help CWS-Involved Parents Complete Substance Use Treatment and Protect their Children in Hawai'i

Yoko Toyama Calistro MSW; Karen Worthington JD

## Abstract

Each year in Hawai'i, an estimated 500–650 children (about half of confirmed cases of child abuse or neglect) are at high risk of entering foster care because of their parent's substance use disorder (SUD). Children in foster care because of parental SUD are less likely to be reunified with their parents. Experiences in foster care may cause long-term negative health consequences for the children. Early identification and engagement of parents in SUD treatment can improve outcomes for parents and children. The child welfare and SUD treatment systems in Hawai'i are not set up to work together to maximize the likelihood that parents will complete treatment and families will stay together. This article recommends evidence-based interventions including recovery coaches, peer partners, and Family Drug Courts (FDCs). Recovery coaches and peer partners support parents in early engagement and completion of SUD treatment. FDCs provide an interdisciplinary approach that successfully serves parents involved with Child Welfare Services (CWS) who have complex needs. Effectively implementing these interventions in Hawai'i requires an improved infrastructure to collect and analyze data about parents with SUD and their children, parents' SUD needs and status in treatment, and families' level of CWS involvement. Data about the availability and delivery of services for CWS-involved parents with SUD are also needed to understand service efficiency and effectiveness. These suggested interventions would help more parents in Hawai'i complete treatment and keep their children safely with them, thereby protecting children's current and long-term health.

## Keywords

child abuse and neglect, substance use, child welfare, family reunification, substance use treatment

## Abbreviations and Acronyms

ADAD = Hawai'i State Department of Health Alcohol and Drug Abuse Division  
 AOD = Alcohol and Other Drugs  
 CAN = Child Abuse and Neglect  
 CARES = Coordinated Access Resource Entry System  
 CWS = Child Welfare Services  
 FDC = Family Drug Court  
 SA-FTS = Salvation Army Family Treatment Services  
 START = Sobriety Treatment and Recovery Teams  
 SUD = Substance Use Disorder

## Background & Introduction

Parental use of alcohol and other drugs (AOD) is one of the most common circumstances associated with child abuse and neglect (CAN).<sup>1,2</sup> Many studies examine the percentage and number of CAN victims for whom parental substance use disorder (SUD) contributed to CAN, but the statistics are inconsistent.<sup>3,4</sup> A 2007 meta-analysis of research studies revealed the wide range of estimated CAN cases with parental SUD; depending

on the sample used, the estimates ranged from 11% to 79%.<sup>3</sup> In Hawai'i, AOD abuse are precipitating factors for about half of the confirmed CAN victims (**Table 1**). This paper highlights the key points focusing on CAN and the Child Welfare Services (CWS) system which stem from a chapter of the Hawai'i Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan which examines the broader topic of the intersection of substance use and family violence. For more background and context around the overall State Plan project, readers are referred to the introductory article of this special supplement.

Every state has its own definition of CAN based on federal law. In general, CAN includes any of the following: physical, sexual, and emotional abuse of a person under the age of 18, and failing to meet the child's basic physical, medical, educational, and emotional needs.<sup>5</sup> Hawai'i Revised Statute §350-1 lists circumstances that constitute CAN. Parental substance use or SUD does not by itself constitute CAN. Instead, CAN occurs when substance use negatively impacts parenting, such as when children's needs are not met because of the parent's use of substances. In addition, in several states exposing children to the possession or distribution of illegal drugs is a crime and constitutes child endangerment, but not in Hawai'i.<sup>6</sup> In Hawai'i, manufacturing drugs in the presence of a child is a crime, and providing drugs to a child is CAN.<sup>7,8</sup>

This article uses the term “mothers” depending on the context and research on which the discussion is based. The majority of parents in CWS<sup>9</sup> or in Family Drug Courts due to CAN<sup>10,11</sup> are

Table 1. Factors Precipitating Incidents for Confirmed Child Abuse and Neglect (CAN) Victims Among Hawai'i Children Birth to 18 Years, 2016 to 2020.<sup>a</sup>

|                                     | 2016  | 2017  | 2018  | 2019  | 2020  |
|-------------------------------------|-------|-------|-------|-------|-------|
| <b>Confirmed Individual Victims</b> | 1351  | 1274  | 1267  | 1348  | 1198  |
| <b>Drug Abuse Involvement</b>       | 40.8% | 46.0% | 42.0% | 41.5% | 42.1% |
| <b>Alcohol Abuse Involvement</b>    | 8.4%  | 8.9%  | 8.3%  | 7.5%  | 9.7%  |

<sup>a</sup> Source: Annual statistical reports on child abuse and neglect (CAN) in Hawai'i (Hawai'i State Department of Human Services Audit, Quality Control and Research Office. Child Abuse and Neglect Reports. Published 2021. Accessed December 30, 2021. <https://humanservices.hawaii.gov/reports/child-abuse-and-neglect-reports/>

### Notes:

- One incident could involve both drugs and alcohol and would be included in both categories.
- Precipitating factors are identified by child welfare service (CWS) and are not documented for every confirmed victim. Families who receive services through the CWS Differential Response System are not included in these numbers.

mothers. When only 1 parent is identified as a CAN perpetrator, mothers are twice as likely as fathers to be the identified perpetrator.<sup>12,13</sup> Consequently, most research about parental SUD and involvement with CWS focuses on mothers. When research or data do not differentiate between “mother” or “father,” “parent” is used in the discussion. Following the terms used by systems that care for and support children who are harmed by CAN, the term “victim” is used when referring to children.

### **Parental SUD and CAN**

As in most states, publicly available information about CAN due to parental SUD is limited and incomplete in Hawai‘i. As **Table 1** shows, CWS reports factors precipitating an incident of CAN, but only for confirmed CAN cases. Approximately 45% of families who receive a voluntary intervention after being reported to CWS do not have a confirmed incident of CAN.<sup>14</sup> Data about whether parental SUD is a factor in these unconfirmed cases is not publicly available. Also, parental SUD may not always be successfully identified and recorded during an initial assessment phase by CWS. In addition to the lack of complete data about the incidence of CAN due to parental SUD, publicly available data does not include details such as sex of parents with SUD, child victim’s age, the level of CWS involvement, and treatment status and needs, all of which would help identify appropriate interventions.

### **Child Welfare Services Involvement**

As **Table 1** shows, CWS identifies hundreds of Hawai‘i children at high risk of negative long-term harms due to parental SUD each year. Most of these children spend at least some time in foster care. Placement in foster care starts a legal clock that limits the amount of time parents have to regain custody. If a child has been in foster care for 15 of the most recent 22 months, Hawai‘i law requires CWS to terminate parental rights unless there is a compelling reason or failure to provide services for the parents.<sup>15</sup> Thus, parents have about a year to complete SUD treatment, abstain from substance use, and demonstrate safe parenting. If parents continue to use substances and do not successfully complete treatment, they could lose their children permanently.<sup>16</sup>

Separation from parents places children at high risk for psychological distress, mental and physical health issues,<sup>17,18</sup> and revictimization.<sup>16,19-21</sup> Children who grow up in foster care have elevated risks of being homeless, abusing substances, experiencing long-term negative physical and mental health consequences, criminal justice involvement, early childbearing, and having their children placed into foster care.<sup>19,21-25</sup> Furthermore, mothers who are involved with CWS and do not complete SUD treatment are likely to have subsequent births, and those infants are likely to be exposed to AOD in utero, increasing the number of CAN victims.<sup>26</sup> Therefore, when children can be kept safely with or reunified with parents who successfully complete SUD

treatment, that is usually better for their mental and physical well-being than out-of-home placement.<sup>9,21,25</sup>

Despite the importance of parents’ completing SUD treatment for child well-being and family reunification, less than 25% of mothers in the child welfare system successfully complete treatment,<sup>20</sup> primarily because these mothers have more complex needs than other mothers with SUD.<sup>9</sup> Mothers with SUD in the child welfare system are more likely to have co-occurring mental health disorders and trauma backgrounds, and struggle with poverty, unstable housing, employment, parenting, relationships, and life skills/household management.<sup>9,27</sup> Unfortunately, in Hawai‘i and across the United States (US), sufficient services do not exist to support them and meet their complex needs.<sup>27</sup>

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

The Hawai‘i child welfare and SUD treatment systems are both state-administered systems utilizing federal funds and bound by federal and state laws. The systems are described in many publicly available documents, including state applications for and reports on federal funding to support these systems, such as the Department of Human Services Child Welfare Services Branch FFY 2021 Annual Progress and Services Report<sup>14</sup> and the Department of Health Alcohol and Drug Abuse Division Substance Abuse Prevention and Treatment Block Grant applications. Descriptions of these Hawai‘i systems draw from official documents as well as from the expertise of professionals working with and in these systems.

#### **Child Welfare System**

The child welfare system includes CWS of the Hawai‘i Department of Human Services, private providers who are contracted to provide services for families who have been reported to CWS, the Family Court System, and a large network of other government and non-governmental agencies working with families served by CWS. Families usually become involved with CWS because of a CAN report made to the state CWS intake hotline. CWS has several options for protecting children and supporting families reported for CAN, regardless of whether CWS confirms CAN. To determine which option is best for a family, CWS assesses the safety of the children, risk factors such as parental SUD, and family strengths that might mitigate the risks. Each decision is individualized, so substance use in 1 family may lead to foster care placement while substance use in another family might lead to voluntary in-home services. Each family CWS serves has a Family Service Plan identifying the problems resulting in CWS involvement along with the steps that the parents must take to exit the system. If a family is receiving services that are tracked by CWS (with or without a confirmed CAN case), that family is considered “CWS-involved.” For parents with SUD, the CWS involvement usually lasts until the parent completes treatment, tests negative for drugs for several consecutive months, and completes other case plan requirements related to parenting.

## SUD Treatment System

The SUD treatment system in Hawai'i includes the ADAD Coordinated Access Resource Entry System (CARES), private insurance providers, a statewide network of SUD treatment providers (many of whom are contracted through CARES), Drug Courts, and other government and non-governmental organizations that provide services to clients who participate in SUD treatment. The SUD treatment system has many entry points, although ADAD's goal is for CARES to be the main access point. CARES "provides a Continuum of Care [...] that includes] the following services for ADAD funded clients: screening, intake, assessment (as needed), care coordination, and referral and placement determination resulting in linkages to appropriate service modalities and resources."<sup>28</sup>

Among the statewide network of independent SUD treatment providers with administrative, regulatory, and funding connections to the state Department of Health are 3 providers widely known to work with CWS-involved mothers: Women's Way on O'ahu (a program of Salvation Army Family Treatment Services (SA-FTS), Big Island Substance Abuse Council Moms and Babies Program, and Malama Family Recovery Center on Maui. These organizations provide a continuum of comprehensive gender-specific and trauma-informed services to women and their children, and many of the clients are involved with CWS. Through these programs, mothers can participate in residential SUD treatment and have their children live with them. Similar residential services for fathers do not exist in Hawai'i.

## Interventions

This section discusses 2 evidence-based interventions that have been used or are being introduced in Hawai'i: recovery coaches/peer partners, and Family Drug Courts (FDCs). Both have been extensively examined for their effectiveness on these outcomes: increase in the likelihood of a parent's engagement in SUD treatment, faster and successful completion of SUD treatment, higher rates of reunification, and less time in out-of-home-placements for children.<sup>2,16,29-32</sup> Findings from research studies conducted in other states indicate that these interventions are a good fit for the needs and infrastructure in the Hawai'i child welfare and SUD treatment systems. Furthermore, Hawai'i government and private agencies have demonstrated a readiness to implement them.

### Recovery Coaches and Peer Partners

A recovery coach is a paid professional with training and/or certifications in SUD treatment and recovery who may work for CWS, FDC, or another organization, and who is individually assigned to a parent.<sup>30</sup> A peer partner is a parent who was involved with CWS because of SUD, completed treatment, abstains from substance use, and successfully parents their children.<sup>30</sup>

Recovery coaches and peer partners play a substantial role in helping parents access services early. A randomized control study showed a statistically significant difference in the reunification rate when families were assigned to a recovery coach and also had early access to assessment and services (22% of families with a recovery coach and early access reunified within 3 years vs. 14% of counterparts with delayed access).<sup>2</sup> The group that only had early access and no recovery coach experienced no impact on the reunification rate.<sup>2</sup> Recovery coaches and peer partners also identify supports and services to meet parents' complex needs.<sup>30</sup> Needs, which contribute to lower reunification rates, include readiness to participate in treatment; availability of a spot in an appropriate treatment program; practical needs related to transportation, managing schedules, childcare, and money; managing the logistics of participating in treatment while completing other requirements in their CWS case plan; overcoming the stigma of addiction, being involved with CWS, and receiving SUD treatment; and learning safe and nurturing parenting without using substances.<sup>30</sup> Recovery coaches and peer partners are strong advocates for CWS-involved parents and give them hope that recovery is possible.<sup>30</sup>

Recovery coaches and peer partners are active in many programs in the continental US. They usually exist within a structured SUD treatment program or as ancillary support. Their services may be reimbursable through Medicaid.<sup>33</sup> The peer partner program called Sobriety Treatment and Recovery Teams (START) is used in at least 7 states<sup>34</sup> and aims to keep children in the home and provide rapid access to both SUD and mental health services. The program aspires to assess and enroll parents in SUD treatment within 5 days from the first family meeting. START has been rated as a promising model in the Title IV-E Prevention Services Clearinghouse that rates interventions based on the evidence supporting the model.<sup>30</sup> A quasi-experimental study to evaluate outcomes found higher rates of sustained recovery from SUD for START participants than non-START counterparts (66% vs 36%), less use of foster care (50% less likely to be placed out-of-home compared to the children of non-START participating parents), faster achievement of sobriety (1.8 times faster than non-START participants), a significant reduction in recurrence of CAN, and cost savings to CWS (for every \$1 spent on START, \$2.22 is saved by Kentucky CWS).<sup>30,35</sup>

### Family Drug Courts

While the child welfare and SUD treatment systems collaborate at some levels to help clients reunify with their children, complete SUD treatment, and abstain from using substances, they operate independently of each other with separate goals and entryways. Their operations are guided or mandated by different federal laws and funding streams, and their focus, service delivery mechanisms, and desired outcomes are seemingly unrelated. Therefore, services, timelines, and treatment or family service plan goals are often not coordinated between the 2 systems, leaving clients to concurrently navigate 2 systems.

One place where the 2 systems deliberately coordinate is FDC. The FDC's objectives are "a safe and permanent placement for children through parent sobriety and the development of the skills and knowledge needed to become mature, responsible parents who can meet their children's developmental needs."<sup>12</sup> As previously mentioned, CWS-involved mothers with SUD have complex needs that cannot be addressed by 1 system or 1 approach.<sup>9</sup> FDCs provide an interdisciplinary framework in which CWS and SUD treatment providers better collaborate to provide families holistic services and support.

Multiple reports summarize the many studies examining the effectiveness of FDC.<sup>16,31,32</sup> For example, 1 study described the increase in success in parental SUD treatment by 25 to 35%, reduction in children's time in foster care, and increase in the likelihood of reunification by 15 to 40%.<sup>16</sup> Effective FDCs emphasize coordination between CWS and SUD treatment services; utilize intensive case management and judicial monitoring through the FDC; require frequent drug testing; and hold weekly or biweekly court hearings about treatment progress where a FDC judge can give incentives for positive behavior and negative consequences for drug use or CAN.<sup>16,31,32</sup>

Currently, hundreds of FDCs operate across the country, including at least 1 in Hawai'i. Despite the proven effectiveness of FDCs overall, no studies have been conducted on the Hawai'i FDCs. In fact, little information is available about the details of operations, outcomes, and assessment results of Hawai'i's FDC. Publicly available information includes only a brief description on the Judiciary website and a paragraph in the Hawai'i Fiscal Year 2020/2021 Substance Abuse Prevention and Treatment Block Grant Plan submitted by ADAD.<sup>36</sup> According to the paragraph, the State Judiciary Family Court of the First Circuit on O'ahu operates a FDC that "provides services for pregnant women and women with dependent children whose children are placed at risk by their parents' involvement in substance abuse and who have open cases with CWS. The FDC provides intensive family case management services through substance abuse treatment matching and coordination of the entire system of care between treatment and the Family Court."<sup>36</sup> The Hawai'i State Judiciary Annual Reports for 2019 and 2020 do not mention FDCs; however, they both include a section on regular drug courts.

It is difficult to measure effectiveness of the Hawai'i FDC in the absence of publicly available detailed information. However, in 2021, the Hawai'i Department of Health commissioned a research project in the FDC. The project found that CWS was referring very few cases to FDC because of staff shortages and high turnover at CWS.<sup>37</sup> High turnover results in a limited number of CWS workers who understand the benefits of FDC and how to refer families there.<sup>37</sup>

## **Observations & Recommendations**

The following observations and recommendations were generated from the authors' viewpoints informed by Hawai'i research and pilot programs as well as conversations with system stakeholders.

### **Use Recovery Coaches and Peer Partners**

Hawai'i CWS does not currently use recovery coaches or peer partners; however, these interventions should be explored. Some efforts exist to develop these interventions in Hawai'i. For example, in mid-2020, the Hawai'i Maternal Infant Health Collaborative convened partners to develop a peer partner concept and apply for funding for a pilot program to support parents with SUD who are pregnant or involved with CWS. The Hawai'i Department of Health funded the research by the Association for Infant Mental Health Hawai'i that led to the proposal. The peer partner pilot was funded and began in spring 2022 at the PATH Clinic, a women's health services clinic located on the SA-FTS campus.

Many SUD treatment programs in Hawai'i use recovery coaches or peer partners, but they do not necessarily follow a specific evidence-based model. Programs designed for mothers, like Women's Way, Moms and Babies, and Malama Family Recovery Center, should consider exploring using an evidence-based model for recovery coaches and peer partners for mothers involved with CWS. Any such interventions should be implemented in consultation with CWS.

### **Expand Family Drug Courts**

The demonstrated success of FDCs in increasing parents' completion of treatment and reducing children's time in foster care elsewhere indicates that improving utilization of the O'ahu FDC and creating effective FDCs on the other islands should help to mitigate the heavy burden on the Hawai'i child welfare system because of SUD. Achieving consistently successful FDC outcomes in Hawai'i would require some changes. For example, the systems would need to develop a streamlined referral pathway from CWS to FDC and to SUD treatment, and an effective way to evaluate the impact of FDC on CWS-involved parents with SUD. Additionally, every island needs at least 1 FDC to ensure access to services. On Maui, the Second Circuit had a FDC from 2005 until spring 2021, when funding was eliminated and the program was discontinued.<sup>38</sup>

### **Collect Information to Provide Efficient Interventions and Evaluation**

Recovery coaches, peer partners, and FDCs are well-researched interventions that are likely to improve outcomes for hundreds of children in Hawai'i. However, implementing them in the most beneficial manner requires additional information. Currently,



minimal disaggregated data exist about parents with SUD and their children, including parents' needs regarding support, level, and type of treatment. Data about the availability, capacity, and quality of services for CWS-involved families because of SUD are not widely available either. Collecting such information would inform decision-making about interventions most likely to improve outcomes for CWS-involved parents with SUD, such as where the interventions are most needed and how many parents need the services. This information would also provide baseline data for evaluating interventions. Additionally, it would be helpful to learn what interventions have been implemented and/or discontinued, such as the closure of the Maui Family Drug Court. **Table 2** lists information that would be particularly helpful to collect.

Examining the current referral pathway from CWS to SUD treatment is especially important. An efficient referral process helps parents with SUD to quickly engage in and complete treatment, which keeps their children out of foster care or reduces their time in foster care. Currently, there are no publicly available data that provide insight into the referral pathway, such as how long it takes for Hawai'i parents to engage in treatment and what alternative services are provided if there is a delay in accessing treatment.

## Conclusion

Each year, CWS intervenes in the lives of hundreds of Hawai'i children because of their parents' SUD. Children of parents with SUD face a lifetime of risk factors. While CWS involvement can increase child safety and start families on a path to SUD recovery and safe and nurturing parenting, the current system can also cause additional trauma to parents and children. To minimize the adverse effects of SUD and keep parents and

children together safely, the systems serving these families could better collaborate and utilize evidence-based interventions that will help parents quickly access and complete SUD treatment and successfully exit the child welfare system. Introducing recovery coaches and peer partners in more programs and expanding FDCs on all islands in Hawai'i are 2 suggested measures. Implementing strategies to increase the number of CWS-involved parents who remain in recovery would protect multiple generations of children from negative effects on their well-being.

## Conflict of Interest

None of the authors identify a conflict of interest.

## Notice of Duplicate Publication

This article is based on the draft version of a chapter from the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>). While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article's publication.

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| Table 2. Information Needed to Inform the Selection and Implementation of Appropriate Interventions for CWS-Involved Parents with SUD  |  |
|--|--|
| Information Needed   | Purpose  |
| Number of mothers, fathers, other caregivers with SUD (each category listed separately)  | Understand the demand for SUD treatment services   |
| Disaggregated data about children whose parents have SUD including children's ages, which caregiver has SUD, and children's ages at foster care entries and exits                                    | Determine needs related to parents keeping children with them during residential treatment and understanding which ages are most impacted by SUD   |
| Types of SUD treatment CWS-involved parents were referred to and/or participated in (inpatient, outpatient, etc.)  | Understand the demand for and utilization of SUD treatment services  |
| Referral pathway from CWS identifying SUD to parents participating in treatment, including timeframes, types of services parents are referred to, frequency of drug screens, other supports provided | Identify what is and is not working in current process; identify where recovery coaches or peer partners could fit into the process; better understand demand for SUD treatment and time frames for completion; better understand other supports offered to families; identify strengths, needs and gaps |
| Number of CWS-involved families who participate in Family Drug Court, the referral pathway, and the short- and long-term outcomes for those families   | Understand how families currently access Family Drug Court services and where barriers exist; understand the effectiveness of Family Drug Court to improve the process and outcomes; identify gaps such as aftercare supports  |
| Available slots, locations, and eligibility requirements for comprehensive, holistic treatment that addresses SUD and parenting  | Understand the supply of specialized SUD treatment services and educate courts and CWS about appropriate services  |
| Number of CWS-involved parents who complete treatment; number of parents who maintain sobriety over time; outcomes of their CWS cases  | Understand treatment retention and completion rates; understand the effectiveness of treatment; look for connections between treatment and positive CWS case outcomes; identify gaps such as housing, financial support and aftercare supports   |

CWS = child welfare services; SUD = substance use disorder

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# Conceptualizing a New System of Care in Hawai'i for Native Hawaiians and Substance Use

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## Abstract

*Native Hawaiians of all age groups tend to show a higher prevalence of substance use than other ethnic groups in the state. Research shows that this inequitable health status results from several complex and interconnected social determinants of health, including historical trauma, discrimination, and lifestyle changes.*

*Before European contact, Native Hawaiians understood that balanced nutrition, physical activity, social relationships, and spirituality were fundamental to maintaining optimal health. Western influences triggered an imbalance in Native Hawaiian society, shifting the paradigm of Native Hawaiian family systems.*

*Historical and cultural trauma affect multiple generations and are linked to Native Hawaiian health disparities. Cultural trauma is defined as “the loss of identity and meaning that negatively affects group consciousness. It marks and changes them in fundamental and irreversible ways, often resulting in the loss of language, lifestyles, and values.” The remedy for cultural trauma is cultural reclamation. Historical trauma is defined as psychosocial trauma experienced by Indigenous groups as a result of colonization, war, genocide, or cultural, social, and political subjugation. These historical and cultural aspects have impacted and reached across generations of Native Hawaiians. The outcomes of these traumas are reflected in higher rates of health disparities, including mental health and addiction, which have affected the social determinants of health.*

*Current access to treatment and recovery is limited for Native Hawaiian residents with substance use problems. This article will look at a system of care that would reduce silos and incorporate cultural aspects to improve outcomes for Native Hawaiians receiving services. This article will also introduce an ‘āina- (land-) based model for creating healthy, thriving Native Hawaiian individuals, ‘ohana (family), communities, and care systems.*

## Keywords

*Native Hawaiian, treatment modalities, cultural support*

## Abbreviations and Acronyms

ADAD = Hawai'i State Department of Health Alcohol and Drug Abuse Division  
DSM-5 = Diagnostic and Statistical Manual of Mental Disorders 5th Edition  
RREM = Recovery Ready Ecosystems Model

## Background and Introduction

Native Hawaiians historically sought healing within their ‘ohana (family) systems. Prior to European contact, Native Hawaiians understood that *lōkahi* (harmony), which included balanced nutrition, physical activity, social relationships, and spirituality were fundamental to maintaining optimal health.<sup>1-3</sup> Native

Hawaiian health has been illustrated in a *Lōkahi* Triangle<sup>1-3</sup> as an equilateral triangle, with the apex labeled as *Nā Akua* (Gods/Goddesses/spirituality), and the base on one end labeled as *kānaka* (person) and the other as ‘*āina* (land).

Historical trauma is defined as psychosocial trauma experienced by Indigenous groups as a result of colonization, war, genocide, or cultural, social, and political subjugation.<sup>4</sup> From the first European arrival in 1778, colonization, systematic oppression, and Western imperialism have led to a loss of traditional healing practices, and our [This article includes the first person voice from the lens of the Native Hawaiian authors and to acknowledge Indigenous ways of knowledge.] Native peoples were forced into Western treatment frameworks for matters that were historically addressed within the ‘*ohana*. Today, Native Hawaiians suffer from health disparities in chronic diseases<sup>5</sup> and overrepresentation across all social services, including addiction services,<sup>6</sup> incarceration for drug offenses, and offenses due to addiction diseases.<sup>7</sup> Intergenerational substance use and incarceration impact individual, ‘*ohana*, *keiki* (children), and community health.

Disproportionate numbers of our Native population have been consistently overrepresented among those who are seeking or thrust into Western treatment for substance use disorders.<sup>6</sup> Existing systems of care continue to assign treatment within the same Western frameworks leading to this consistent overrepresentation. In the present paper, we highlight key points from a chapter of the Hawai'i Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan which examines the roots of disparities in the intersections of Native Hawaiians and substance use and reimagines a system of care that would reduce silos and incorporate cultural aspects to improve outcomes for Native Hawaiians receiving services. For more background and context around the overall State Plan project, readers are referred to the introductory article of this special supplement.

## Observations and Rationale

Cultural trauma is defined as “the loss of identity and meaning that negatively affects group consciousness. It marks and changes them in fundamental and irreversible ways, often resulting in the loss of language, lifestyles, and values.”<sup>8</sup> Our Native ‘*ohana* have become disconnected from their cultural heritage throughout generations. Many of these ‘*ohana* carry intergenerational trauma created by oppression and criminalization of the Native

identity at the hands of those who colonized our island home. Further layers of complexity are added through the loss of land and abrupt lifestyle changes from subsistence living into a capitalistic environment, the ramifications of which created stark socioeconomic differences between Native Hawaiians and their Western counterparts. These differences have led to generations of poverty, houselessness, and mental health issues for Native Hawaiians that continue today.

The Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5) recognizes the unique nature and importance of cultural concepts of distress.<sup>9</sup> However, a Native Hawaiian worldview has not yet been included in those listed. The Cultural Formulation Interview and supplemental modules in the DSM-5 provide a framework for assessment and a first step in approaching these areas through a broader lens. However, when in distress, seeking medical, behavioral/mental health, or substance use services, our Native people are treated by clinicians trained in predominantly Western ways. Therefore, clinicians working with Native individuals and families must be educated on our history, historical injustices, traumas, the impacts of colonization, traditional beliefs and practices, and understanding of the Hawaiian worldview.<sup>10</sup>

Paglinawan and colleagues maintain that the remedy for cultural trauma is cultural reclamation.<sup>11</sup> To develop effective, culturally focused approaches for working with Native Hawaiians, we must look *i ka wā kahiko* (to ancient times), to our *kūpuna* (elders), and to respected healers within our community to understand how *ma'i* (sickness) was approached during ancestral times. Hawaiian *ma'i*, Hawaiian illnesses, or *ma'i kama'aina*, call for Hawaiian assessment, diagnosis, and treatment which is an ancient concept with deep roots in Hawaiian healing. *Ma'i malihini* or illnesses that stem from Western influence, such as infectious or chronic disease, could be treated through Western medicinal pathways. However, they are still best coupled with traditional *kānaka* health and well-being approaches to heal the spirit. For substance use, the root of this kind of *ma'i* is much deeper, and it could be understood almost as an amalgamation of *ma'i i kama'aina* and *ma'i malihini*. Understanding these concepts requires deep reflection and study (with practitioners of Hawaiian healing) of *ma'i* that contributes to an unhealthy *kānaka* environment, such as historical/intergenerational trauma and the loss of connection. Also, by understanding the root causes of *ma'i kama'aina*, as well as the manifestation of addiction as a symptom of this deeper trauma<sup>12</sup> practitioners can be better prepared to provide culturally focused interventions.

Loea Ho'oponopono Auntie Lynette Paglinawan, a revered *haku ho'oponopono* (cultural practitioner in the Native Hawaiian practice of healing families through forgiveness) and social worker who studied under Auntie Mary Puku'i (a revered cultural practitioner), offers us some of the most valuable insight into assessing Native Hawaiian individuals and 'ohana.

Assessment and intake from a Western approach can be off-putting and invasive for some Native Hawaiians. Culturally, we must take a more Indigenous approach by "talking story" with the 'ohana or individuals. Caseworkers must voice intentions, explaining "why questions may be asked and how they will be applied to the problem at hand."<sup>13</sup> During the intake or assessment process, it is also important to determine the best approach for our Native people to determine whether a culturally grounded healing would be most beneficial.

Similarly, there exists a gap in the development of culturally-focused interventions. Okamoto provides an assessment of the strengths and limitations of developing culturally focused interventions (Table 1).<sup>14</sup> In summary, culturally grounded interventions provide a "ground-up" approach from a foundation of culture. Non-adaptation, surface-structure cultural adaptation interventions provide a "top-down" approach, altering the original model to add cultural components. Finally, deep-structure cultural adaptations use a "sprinkling in" approach of integrating culture into the intervention, providing "changes to images or phrases throughout its content or lessons, to align the program with familiar concepts or references of a specific cultural group." Providers who utilize culturally-based treatment focusing on Native Hawaiians provide interventions in alignment with Okamoto's categories. However, most providers lack the capacity to develop an evidence base that meets Western requirements, as illustrated in the limitations set by Okamoto et al.<sup>14</sup>

Indigenous ways of knowing provide evidence that predates any semblance of Western evidence, yet the Western way is somehow dominant today. An Indigenous evidence base has been established orally by passing down the knowledge of our people through traditional practices, storytelling, song, and much more. The Indigenous-based evidence, coupled with evidence from community-based participatory action research approaches, should be used to develop and measure the efficacy of culturally resonant/attuned interventions.

### Current System of Care in Hawai'i

According to ADAD, Native Hawaiians were admitted to treatment 1358 times in 2017, which is 42.3% of the state total and the most of any ethnic group.<sup>15</sup> This overrepresentation has been reflected throughout the past decade.<sup>6</sup> In that same year, over 30% of Native Hawaiian admissions to ADAD treatment were referred via the criminal justice system, increasing to over 40% in 2020.<sup>16</sup> Of those Native Hawaiians accessing services, over 40% indicated methamphetamine addiction as their primary substance of issue.<sup>16</sup> This consistent overrepresentation further illustrates the ineffective nature of the Western treatment of Native peoples.

ADAD collects, uses, and develops fund allocations based on ethnicity data. Due to those efforts, ADAD can identify the

| Table 1. Strengths and Limitations of Approaches in Developing Culturally Focused Interventions <sup>a</sup>                             |   |  |  |  |  |
|--|---|--|--|--|--|
| Culturally grounded prevention intervention  |   | Deep-structure cultural adaptation intervention  |  | Non-adaptation/surface intervention  |  |
| Strengths  | Limitations   | Strengths  | Limitations  | Strengths  | Limitations  |
| Community is engaged and invested in the development of the program  | Time Consuming  | Based on empirically supported intervention principles   | Assumes the core components of an evidence-based program are applicable across cultural groups | Tests the applicability of generic/ universal prevention principles to unique groups | Often unacceptable to or disconnected from the community |
| Directly addresses core cultural constructs  | Expensive   | Balances length of time and costs to develop curriculum with the ability to bring the program to scale | Need to specify and retain the core prevention components for fidelities                       | Faster to develop, implement, and bring to scale                                     | Can potentially avoid core cultural components           |
| Core prevention components are derived organically (from the “ground up”) and can therefore be intertwined with core cultural components | Difficult to evaluate and replicate in similar settings | Engages the community, but within the parameters of a specific evidence-based program                  | May inadvertently alter core components and decrease their effectiveness                       | Based on empirically supported interventions, but with questionable “fit.”           |  |

<sup>a</sup> Used with permission from Okamoto et al.<sup>14</sup>

disproportionate representation of Native Hawaiians receiving services for substance use in the state. Current policies allow for flexibility for treatment providers in set activities tailored to Native Hawaiians, thus allowing for the offering and inclusion of alternative treatment methods. However, the current gap exists in providers, cultural practitioners, and ADAD discussing and agreeing upon culturally resonant documentation and reporting of cultural services in clinical notes on how their treatment improves protective factors or reduces risk factors. This gap can be addressed by developing a culturally responsive system of care that uplifts and values Indigenous knowledge and cultural healing pathways.

The current system of care in Hawai‘i does include some providers who use varying degrees of culturally based or culturally adapted treatment and prevention programs. Treatment providers who contract with the ADAD adhere to the 5 Levels Of Care model established by the American Society of Addiction Medicine,<sup>17</sup> which includes early intervention, outpatient, intensive outpatient, residential, and medically managed services.<sup>18</sup> Most providers utilize Western interventions such as cognitive-behavioral therapy, dialectical behavior therapy, or 12-step programs (a model used for Alcoholics Anonymous/ Narcotics Anonymous).

Treatment providers who employ utilization of culturally based treatment with a specific focus on Native Hawaiian values continue to find difficulty in billing for cultural services to ADAD, as well as including cultural services in treatment plans to accurately capture the successive impact that cultural reclamation can have on the individual, the *‘ohana*, and the community. For *Kānaka Maoli* (Native Hawaiians), cultural reclamation can be defined as a spiritual/cultural healing process of a reawakening within the *na‘au* (visceral mind) to deeper learning and understanding of the underlying reasons for their cultural beliefs, cultural practices, and their true identity as *Kānaka Maoli*.<sup>19</sup> Learning

about one’s history and cultural heritage, genealogy, and cultural morals and values, making ancestral connections, engaging in cultural practices (eg, working in the *lo‘i* (taro field), dancing the hula) and learning to speak one’s language facilitates healing and cultivates cultural pride, which nurtures the development of a positive cultural identity and overall self-image.<sup>19</sup> Most providers are dependent on outside funding to cover the costs of cultural practitioners to provide culturally-based healing, which only further silos culturally-based approaches from Western treatment constructs and places a burden on the provider to maintain 2 separate pathways of healing.

The State also supports school and community-based youth prevention programs.<sup>18</sup> Given the reliance on nationally endorsed evidence-based practices, the majority of youth substance use programs implemented in Hawai‘i have not been designed to support Native Hawaiian youth and communities specifically.<sup>20</sup> Two exceptions are the school-based Ho‘ouana Pono middle school drug prevention curriculum<sup>21</sup> and the Hawaiian Homestead-based Puni Ke Ola adolescent substance use program.<sup>22</sup> The National Institute on Drug Abuse funded Ho‘ouana Pono Program which has been evaluated in a set of studies<sup>23</sup> and is currently working with their state partners to develop a sustainability strategy.<sup>24</sup> The Puni Ke Ola program has been supported through a variety of local and national sources in the intervention development<sup>25</sup> and feasibility phases,<sup>26</sup> aligns with a Culture-as-Health Framework,<sup>27</sup> and currently is funded by ADAD and Papa Ola Lōkahi in preparation for multi-community implementation.

## Interventions (Re-imagined)

Re-envisioning a culturally responsive system of care first requires us to identify parallel strengths and potentially detrimental differences that form the existing colonized/Western system’s foundation through the examination of 3 key areas: (1)

Cultural perceptions of self; (2) Shifting to a cyclical continuum, and (3) the *Ahupua'a* model. Recent research indicates that re-envisioning treatment for the Native population, utilizing cultural reconnection, and methodologies that speak to Native perspectives, are more influential in creating positive health outcomes for Native peoples.<sup>5</sup>

Native Hawaiians need a sense of place to anchor values and balance life. Beyond Western practices, Native Hawaiians need to care for the *'āina*, which they understand to deeply care for them. Native Hawaiians need the resiliency and protection that culture provides through language, traditions, and ceremonies, allowing ways to reconnect to ancestral knowledge and spirituality. Native Hawaiians need not become Western to heal.<sup>5</sup>

According to Papa Ola Lōkahi and a Native Hawaiian Partnership, 'Imi Ke Ola Mau (a community collaboration Co-Occurring State Incentive Grant [COSIG]), for Native Hawaiians to heal, “[They] need a sense of self, retrieved from our past through ancestors, present through purpose, and future through descendants. [They] need our language, traditions, and ceremonies, which provide ways to reconnect to our spirituality and the concept of our source. [They] need the resiliency and protection our culture provides, in order to prevent relapse and redefine ourselves away from pathological diagnoses.”<sup>28</sup>

### Cultural Perceptions of Self

Current care systems addressing substance use are rooted in historically colonized systems, centered on Western approaches to individualistic care.<sup>29</sup> This individualistic and egocentric concept of the person can be contrasted with more sociocentric, ecocentric, or cosmocentric views, which understand the person in relation to the social world, the environment, and the cosmos.<sup>29</sup> The collective vs individual mindset within the Hawaiian worldview is dramatically different from Western approaches that are highly individualistic, and often do not account for historical and cultural trauma.

However, personal boundaries and understanding of self are not identical in every culture. The same methods used to treat and heal cultures rooted in individualism can be harmful to those rooted in various other cultural configurations of the self, such as Indigenous cultures. Ignoring the self's internalized concept can leave the client with no way to reconcile their internal self-healing within the larger society's connective tissue, those social interactions that sustain the self within the community, and their collective healing.<sup>29</sup> Each categorical perception of self varies in the ways the self is defined; the values underpin and characterize a healthy perception of the ideal self, the understanding of one's role in specific actions or events, and associated healing systems.<sup>29</sup>

### Shifting to a Cyclical Continuum

On a traditional continuum of care, recovery is viewed as the phase after treatment. These individual areas can frequently become siloed, only concentrating on their specific prevention, treatment, or recovery areas. The depth of the recovery field often overlaps within the treatment area, as there are many pathways toward healing and recovery, and not all individuals in recovery have followed a path that involves clinical treatment. Recovery and healing are lifelong processes. Therefore, we must begin to re-envision the existing continuum of care, embrace culturally grounded approaches, and begin to see the entire continuum as cyclical rather than linear, with each area of focus informing the next.

The linkages between recovery and prevention lie in using one to inform the other through the feedback of successful outcomes, promoting *mauli ola* (well-being), and educating clients about making healthy, informed choices.<sup>28</sup> We can approach this shift toward a cyclical continuum through systems thinking as a way to see the phases along the continuum as interrelationships rather than as siloed components. This shift allows us to look for patterns of change rather than accepting static snapshots or defaulting to how it has always been.<sup>30</sup> From a culturally informed or holistic perspective, systems thinking can help us understand whether the purpose of the existing system is being accomplished and look for ways to create more equitable and resonating systems of care, thereby achieving better results with fewer resources in lasting ways.<sup>30</sup> Keeping this cyclical nature in mind, we can move toward a resiliency- and recovery-oriented care system where each phase informs one another, as seen in **Figure 1** which spans the entire continuum of care.

At the center of **Figure 1**, the *piko*, we can see the depiction of self, *'ohana*, and community: 3 interrelated, interconnected healing targets. You cannot heal just one; all must be healthy for each to flourish. The Substance Abuse and Mental Health Services Administration explains that the resiliency- and recovery-oriented care system “is a coordinated network of community-based services and supports that is person-centered and builds on the strengths and resiliencies of individuals, families, and communities to achieve improved health and wellness outcomes for those at risk or experiencing issues with substance misuse.”<sup>31</sup>

The Recovery Ready Ecosystems Model (RREM) provides a model to increase recovery prevalence and focus on supporting and building recovery-informed infrastructure within communities.<sup>32</sup> Collective healing of our communities is needed to combat intergenerational traumas that lead to stigma and NIMBYism (“not in my backyard”), which inhibit the healing of our Native people and their communities. The recovery-

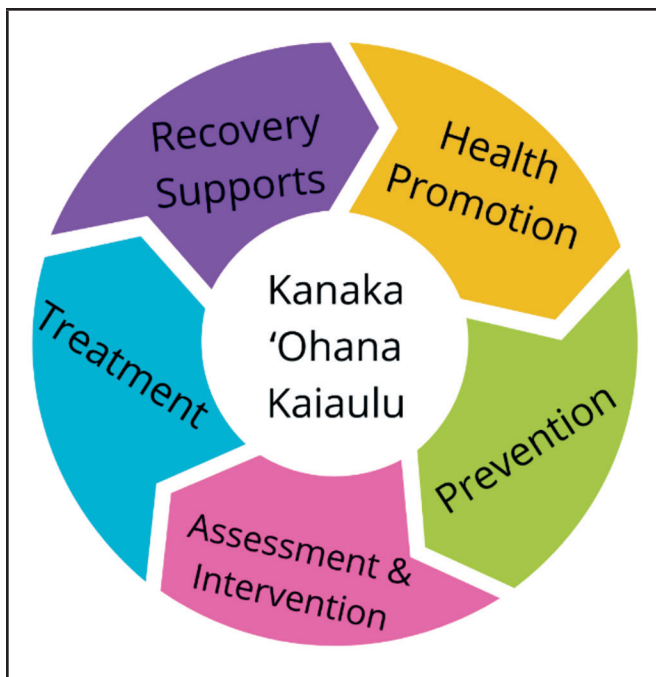


Figure 1. Kanaka (person) 'Ohana (family) Kaiaulu (community)<sup>a</sup>

<sup>a</sup> Original unpublished figure created by the authors/Lilinoe Kauahikaua of Papa Ola Lōkahi, and duplicated with permission 2021

informed infrastructure allows for a backward mapping approach to building a culturally resonant system, beginning with what is working. Recovery through an RREM lens encompasses the many pathways to healing, including harm reduction, behavioral/mental health, reentry, peer recovery services, diversion courts, and many more. RREM provides an avenue of alignment with Indigenous, collective healing approaches.

Another way to acknowledge, value, and uplift the Indigenous experience is through culturally grounded peer support. Peer support can only be provided by someone with lived experience and provides a layer of support, empathy, and understanding unparalleled by other clinical support. Peer recovery specialists can be invaluable for our Native people, who often struggle with Western recovery spaces and language. Culturally grounded peer support services help address that dichotomy of individualism on the Western spectrum, with a more collectivist or holistic approach toward healing, *ola*, and the well-being of the whole environment. Recovery for many may even take the place of clinical treatment. We must support these services with the same vigor and intent as the areas of promotion, prevention, and treatment. A newly conceptualized healing journey for Native Hawaiians should utilize and uplift stories of resilience to resonate with, inform, educate, and empower those impacted, those who help navigate these systems, and those who choose to walk alongside the healing journey.

## Ahupua'a Model

Our Native people thrived in Hawai'i for centuries before Western contact. Native Hawaiians developed a complex resource management system through the *ahupua'a* system, a land division of interconnected systems stretching from the mountain to the sea. The *ahupua'a* model provides a framework to implement cultural interventions at various places within the *ahupua'a* to effectively provide healing that impacts not only the individual but their *'ohana* and community as well. Interventions within the metaphorical framework would aim to effectively decrease the intergenerational transmission of risk factors (intergenerational/historical/cultural trauma, colonization, poverty, oppression, loss of traditional healing practices, criminalization of Native identity, loss of land, and family/community history of use/incarceration) and increase the intergenerational transmission of protective/resiliency factors (*'ohana* relationships, cultural wisdom, traditional healing, community connection, *mo'okū'auhau* [genealogy], *'āina*, respect for *kupuna*, and culture). The model draws from Dr. Keawe Kaholokula's model of the social and cultural determinants of health and their relation to *Mauli Ola* (health).<sup>33</sup> Our *ahupua'a* stretched *ma uka a i kai* (mountain to sea), connected through *wai* (water), which flowed through each system section to bring life. *Wai* ran through our *lo'i* (*kalo* patch), and *loko i'a* (fishponds), and down into the ocean, where it evaporates and becomes *ua* (rain) to once again fall from the *lani* (sky), run through our *nāhele* (forests), and down throughout the rest of the *ahupua'a*. No one system functioned independently. *Kānaka*, our people, tended these systems knowing that resources were finite and the land must flourish for us to survive. *He ali'i ka 'āina, he kawa ke kānaka*,<sup>34</sup> the land is chief, and us its servant.

Looking at the *lo'i* system, within our *ahupua'a* system, *I ka wa kahiko* (ancient times), if these systems were not functioning correctly, or not healthy, and if those who *mālama* (to take care of) these spaces were not *ma'a* (accustomed, used to, familiar) to this understanding, no one would be fed. *Lo'i* is the Native Hawaiian's agricultural system using terraces along the hillsides. They developed complex systems, similar to water paddies, to grow their staple food of *kalo* (taro) along the valleys. We should understand the external impact on this substantive system. We can understand *kalo* as a reflection of ourselves, of *hāloa*, our ancestor, our root, both metaphorically and physically. We conceptualize this new system of care, one where Native people can thrive and pursue healing pathways that embrace, empower, and value an Indigenous worldview. We achieve this by recognizing interconnections within systems and understanding how feedback from each area along the continuum of care impacts and informs other system areas as a whole, much like the *ahupua'a*.

As we visualize the system through this culturally informed and holistic lens, we must also acknowledge that current data often aggregates ethnicities, is disparity-focused, and has a history of portraying Native/Indigenous populations by showing what is wrong. Therefore, the *ahupua'a* model (**Figure 2**) provides a metaphorical model to understand collective healing through a Native lens and embraces a recovery perspective that recognizes substance use as a symptom of a larger trauma. The *ahupua'a* is a living, breathing example of a thriving, healthy Native system. Through this model, practitioners can identify the root causes of trauma, and develop effective culturally informed interventions to engage in collective healing from trauma and celebrate resiliency outcomes.

With the help of our Indigenous cousins, we continue to explore the manifestations of deeper trauma within ourselves, 'ohana, and communities through the model of a Healing *Ahupua'a*, inspired by the Healing Forest model created by White Bison.<sup>35,36</sup>

Pre-contact, our *ahupua'a* were healthy and existed in a harmonious relationship, tended by *kānaka* (Native people) who understood that each interconnected system within the *ahupua'a* must be healthy for all to thrive. However, **Figure 2** outlines the impacts of colonization, racial/cultural traumas, negative socio-economic impact, the criminalization, and subsequent loss of the Native identity has had on Native Hawaiian individuals, 'ohana, and communities. These impacts are carried through the *ahupua'a* system as risk factors impacting generations.

We visualize these risk factors entering our *ahupua'a* through the *ua* or rain. This 'eha, or pain/trauma, is passed down from generation to generation and compounded by unresolved grief. All of this 'eha creates layers of *huhū* (anger), *hewa* (guilt), *hilahila* (shame), and *maka'u* (fear), which enter into our *ahupua'a* just as the metaphorical rain feeds into the soil. We look at the systems and visualize the 'eha (pain/trauma) impacting the soil to understand the pollution and other toxins that have found their way into our environment and continue to impact our systems through the environmental water cycle cyclically. The potentially unhealthy/impacted soil would then run off into the *kahawai* (river) and be carried downstream, impacting the rest of our interconnected systems. But, just as trauma is passed down generationally, our ancestors pass down the strengths and resilience (as seen in the *ua*).

We can understand the interconnected *ahupua'a* systems as our care systems, our 'ohana, and our communities. In understanding care systems and approaches to healing within the larger continuum, we focus on the *lo'i* as an 'āina-based model to visualize the internal and external impacts of trauma and the manifesting symptom of substance use on our *lāhui* ecosystem. As the unhealthy soil enters into our *lo'i*, it becomes that which feeds the next generation of *kalo* or *hāloa* that emerges from it.

Today, we may have generations of people born with internal 'eha buried deep within them. If the 'eha begins to bubble up to the surface, it can manifest in many different ways in our *kalo*; anger, violence, substance use, etc, giving way to an unhealthy *ahupua'a*. However, we can remember that our strengths and cultural resilience are also contained in the *ua* and soil. In that case, we see a path forward in cleaning our water of the risk factors to improve and increase our protective/resilience factors for generations to come.

We can imagine that, while working in the *lo'i* one day, we find a *kalo* that is sick (manifesting trauma as addiction). First, we must look around to the other *kalo* to find the source of the sickness. Are the other *kalo* sick? Is the whole *lo'i* sick? How could this sickness be getting in? We must look up the interconnected 'auwai (canal) and the *kahawai* for the source of this sickness, this pollution, this 'eha. If we cannot find the source of this *ma'i*, this sickness, and we instead decide we will just take that one *kalo* out, heal it, and then put it back into that potentially unhealthy environment, it will only get sick again.

This metaphor illustrates we will face the same result we began with if we decide to solve the problem on the surface that we see. We need to put in the work to address the root of the problem, look far enough up the system, and dig deep enough to find the source that creates the unhealthy environment.

Recognizing how Native Hawaiians experience the self through ecocentric, cosmocentric, and sociocentric definitions provides a lens for understanding and developing more impactful and effective interactions for Native people are implemented through the *ahupua'a* framework. Thereby cleaning our *wai* as it traverses throughout our interconnected systems and is reborn through the water cycle to fall as *ua* once again, reducing risk factors and increasing protective factors. This increase in protective factors will contribute to the healthy *lo'i* and *ahupua'a* through the soil *waiwai* (rich) with *lōkahi* (balance), *mauli ola* (health), *mana* (spiritual energy), and *pilina* (connection/bonds), foundational values for a thriving *lāhui kānaka* (Native Hawaiian people), as seen on the right side of the image (**Figure 2**). The *ahupua'a* conceptual framework is intended to develop and grow as the framework is embraced and actualized across systems and care spaces.

Embracing a more culturally grounded approach would effectively provide a paradigm shift in how society and individuals see themselves. Imagine the empowerment of nurturing and uplifting these unique gifts contained within Native Hawaiian protective/resiliency factors and the impact or effect they would have on someone's life, how they grew up, and how they perceive themselves. By understanding the multiple threads impacting their lives, a more robust, comprehensive (holistic) approach that incorporates (blends) the interventions used will have more value for this Native person.



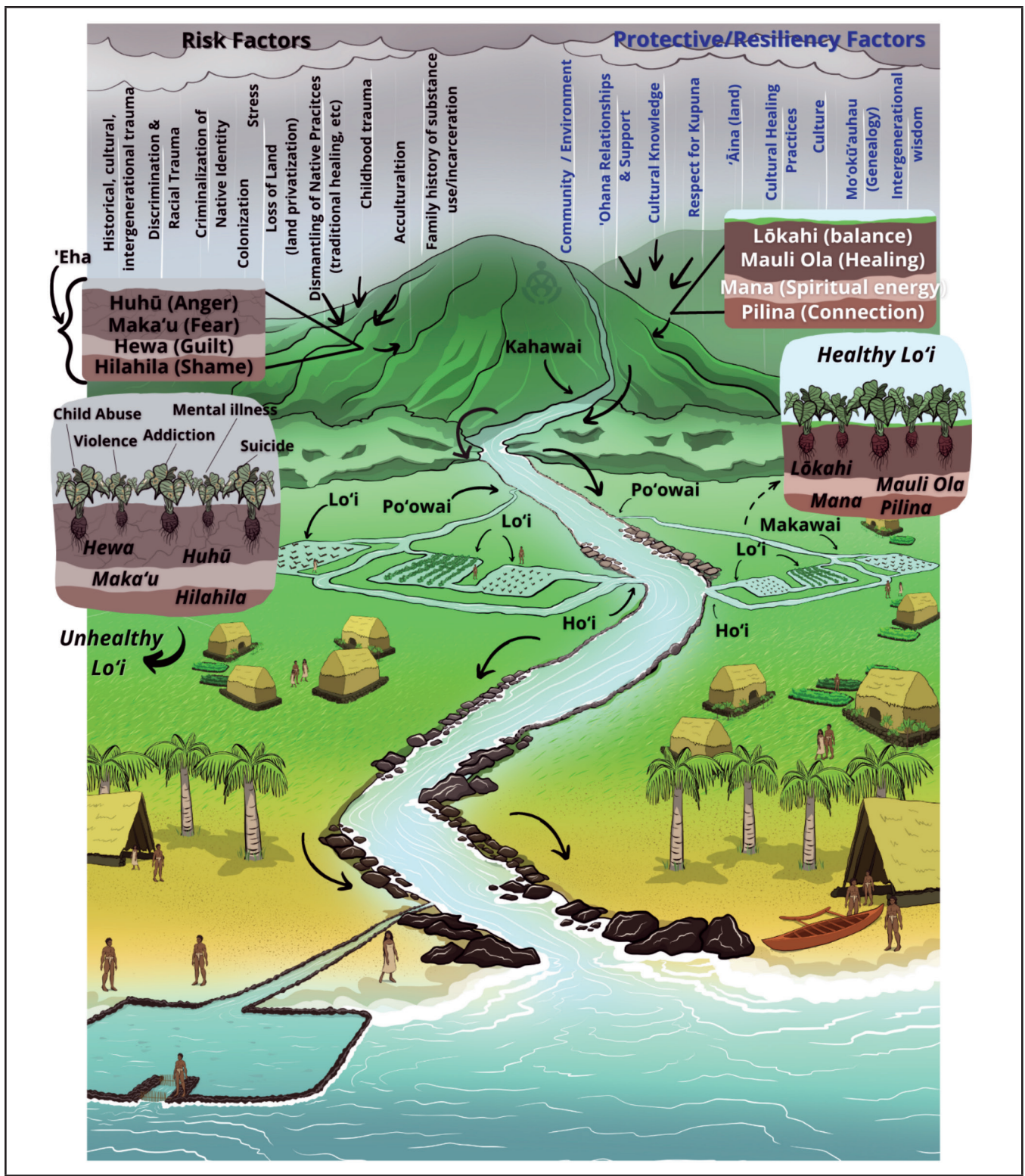


Figure 2. The Impacts of Colonization on Ahupua'a. Conceptualization by Lilinoe Kauahikaua and Papa Ola Lōkahi V3.0<sup>a</sup>

<sup>a</sup> Original Copyrighted Unpublished figure created by Kimo Apaka and edited by the authors and duplicated with permission 2022.

## Recommendations

**Table 2** displays proposed recommendations to guide the initial steps toward implementing of a newly conceptualized system. These recommendations were based on the synthesis of the existing literature and available data, but also Indigenous knowledge and feedback from our stakeholder groups.

## Conclusion

Current culturally grounded interventions have struggled for some time to meet the requirements for evidence-based interventions and assessments required by Requests for Proposals (RFP's) and Grant applications. These methods often do not align with culturally grounded intervention programs which tend to be more fluid in approach as each intervention is tailored to the individual and family. It is also impractical to assess the successive impact of cultural interventions through standard Western assessment.

The current Western definition of evidence-based interventions<sup>37,38</sup> are practices or programs with peer-reviewed, documented empirical evidence of effectiveness. But what does this mean for culturally grounded interventions? The current Western dominant paradigm of evidence base prioritizes research, peer

review, and randomized controlled trials. However, we cannot continue to adhere to this Western dominant paradigm, which heavily bases itself on the assumption that research in the social sciences is essentially the same as natural sciences.<sup>37</sup>

Western research looks for themes formulated together to produce “laws” or one size fits all, blanket approaches to social issues.<sup>38</sup> “This way of understanding people and their struggles has become dominant in a very particular economic and cultural milieu, one that, despite the forces of globalization, is alien to many communities around the world. Its materialist and individualist focus means that it is often a specifically inappropriate vehicle to use with Indigenous communities.”<sup>39</sup>

A newly conceptualized journey of healing for Native Hawaiians should utilize and uplift stories of resilience to resonate with, inform, educate, and empower those impacted, those who help navigate these systems, and those who choose to walk alongside the healing journey.

Therefore, our recommended approach is centered around healing the *ahupua'a* system through culturally grounded programs that allow for tailored interventions that meet the specific needs of individuals and families living within the healthy, thriving *ahupua'a* system.

| Table 2. Recommendations to Guide the Initial Steps toward Implementation of a Newly Conceptualized System <sup>a</sup> |  |
|---|--|
| <b>1. Infrastructure Development</b>  | <p><b>Reporting Standards</b></p> <ul style="list-style-type: none"> <li>- Create a network within Native Hawaiian communities across the State to increase engagement capacity (accountability and ongoing feedback loop).</li> </ul> <p><b>Inter-agency</b></p> <ul style="list-style-type: none"> <li>- With other State departments, develop a cross-discipline group to focus on creating inter-agency engagement strategies (protocols) and outcomes (procedures) (i.e., specialty cultural court).</li> <li>- Identify areas where language and processes can be updated to shift the narrative and create a more inclusive space for integrating Native Hawaiian values and beliefs.</li> </ul> <p><b>Peer Support</b></p> <ul style="list-style-type: none"> <li>- Value and uplift lived experience</li> <li>- Develop culturally grounded, resonant, inclusive, and supportive peer spaces for Indigenous people on their healing journey from substance use.</li> <li>- Create reimbursement pathways for care systems employing peers.</li> </ul> |
| <b>2. Data Collection &amp; Disaggregation</b>  | <p><b>Data Disaggregation</b></p> <ul style="list-style-type: none"> <li>- Address the need for data sovereignty that allows Native Hawaiians to develop data collected for, by, and about us.</li> <li>- Create mechanisms that identify culturally relevant data collection.</li> <li>- Develop culturally anchored evaluation tools that state-funded treatment programs use related to the efficacy of programming specific to Native Hawaiians.</li> </ul>  |
| <b>3. Funding &amp; Monitoring/Oversight</b>  | <p><b>Funding</b></p> <ul style="list-style-type: none"> <li>- Track federal dollars that are sought after and awarded to the State of Hawai'i where Native Hawaiians (and or other marginalized groups indicated on request for proposal) are targeted, and create a clear plan for accountability and meaningfulness of programming.</li> <li>- Analyze spending on Native Hawaiian programs throughout the department.</li> <li>- Create a policy oversight position to develop criteria and monitor cultural adherence.</li> </ul> <p><b>Advisory Council</b></p> <ul style="list-style-type: none"> <li>- Establish a council of relevant partners (providers, government, stakeholders) to monitor compliance and review accountability of funds and programming related to Native Hawaiians.</li> <li>- Convene a group of Native Hawaiian health and well-being specialists from across the state to provide feedback and guidance on the process of funding.</li> </ul>   |

<sup>a</sup> Dr. Sheri Daniels, Papa Ola Lōkahi (2021)

## Conflict of Interest

None of the authors identify a conflict of interest.

## Notice of Duplicate Publication

This article is based on the draft version of a chapter from the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>). While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article's publication.

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# Systems of Care Implications in Hawai'i: Sexual and Gender Minorities

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## Abstract

*Sexual and gender minorities (SGM) are diverse groups of people who do not identify as heterosexual or cisgender. SGM communities include Lesbian, Gay, Bisexual, and Transgender (LGBT) individuals as well as people of other sexual orientations and gender identities. SGM communities are disproportionately affected by substance use disorders, with differential use of specific substances among persons based on sexual or gender identity. As understood through the minority stress model, substance use and misuse among SGM people are tied to risk and resiliency factors at all levels of the social ecological paradigm. Despite the disproportionate burden of substance use disorders on SGM people in Hawai'i, very few resources or programs exist to ameliorate the impact of substance use on this community. Although some models of care could be useful for SGM people, community-specific interventions are scarce, especially in Hawai'i. To successfully meet the needs of SGM people in Hawai'i, multi-level transformation of the substance use prevention and treatment landscape must address: culturally appropriate service delivery; workforce recruitment and development; nimble and adequate financing; consistent data collection and reporting; and systems-level policy updates.*

## Keywords

LGBTQ, substance use, Hawai'i, drugs, policy

## Abbreviations and Acronyms

ADAD = Hawai'i State Department of Health Alcohol and Drug Abuse Division  
DOH = Hawai'i State Department of Health  
LG = lesbian and gay  
LGB = lesbian, gay, and bisexual  
LGBT = lesbian, gay, bisexual, and transgender  
NSDUH = National Survey on Drug Use and Health  
SAMHSA = Substance Abuse and Mental Health Services Administration  
SGM = sexual and gender minorities  
SUD = substance use disorder

## Background and Introduction

Sexual and gender minorities (SGM) are people that do not identify as heterosexual or cisgender, respectively. SGM can be considered to be more inclusive than Lesbian, Gay, Bisexual, and Transgender (LGBT) because it captures those who identify with additional sexual orientations (eg, asexual, aromantic, queer, and pansexual) and gender identities (eg, agender, gender non-conforming, and gender non-binary). SGM communities are diverse and not monolithic. Although intersectional factors (eg, race, class, geography) and individual lived experience impact SGM people, the scope of this paper discusses broad considerations for this community. Individuals

in these underprivileged communities have reported elevated rates of substance use-related issues, both nationally and locally in Hawai'i. In the present paper, the authors highlight key points from a chapter of the Hawai'i Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan which examines substance use disparities between SGM and heterosexual/cisgender individuals, theories related to these disparities, and intervention strategies to address the issues that the SGM communities of Hawai'i face. For more background and context around the overall State Plan project, readers are referred to the introductory article of this special supplement.

## Substance Use Disparities

Substance use and probable substance use disorders disproportionately affect SGM communities across the United States.<sup>1,2</sup> The disproportion compared to the heterosexual/cisgender population has been described in the studies of various substances including, but not limited to, tobacco,<sup>3-7</sup> alcohol,<sup>8-10</sup> marijuana,<sup>9</sup> and opiates.<sup>11-13</sup> The prevalence of substance use has also been studied among the SGM subgroups<sup>14-16</sup> and by intersecting groups between sexual orientation, gender identities, and demographic characteristics such as age<sup>17,18</sup> and ethnicity.<sup>19</sup>

In Hawai'i, SGM adults and youth are more likely to use substances than their non-SGM counterparts.<sup>20,21</sup> While it may be easier to generalize the SGM community, there are many identities that are encapsulated within the term SGM. Thus, it is important to further delineate between each sexual orientation and gender identity because each group has its own strengths and needs. **Table 1** breaks down use of selected substances among persons 12 and older in Hawai'i by sexual orientation from the National Survey on Drug Use and Health (NSDUH). **Table 2** details Hawai'i data from the Youth Risk Behavior Survey by sexual orientation and alcohol use, marijuana use, and electronic and combustible cigarette use.

Substance use rates among SGM individuals (**Table 1**) are generally higher than their non-SGM counterparts. Lesbian and Gay (LG) individuals are more likely than other groups to have a methamphetamine dependence,<sup>22</sup> while bisexual individuals are more likely than other groups to be marijuana, alcohol, or pain reliever dependent.<sup>22</sup> While **Table 1** shows substance use amongst individuals ages 12 and older, **Table 2** shows substance use rates for high school students in Hawai'i. Overall, Lesbian, Gay, and Bisexual (LGB) students have elevated rates of al-

cohol, marijuana, or tobacco use, compared to their non-LGB counterparts. LG youth are more likely to use cigarettes and e-cigarettes daily, but less likely to use alcohol and marijuana than bisexual youth.<sup>23</sup>

NSDUH data indicates transgender and gender non-conforming individuals aged 12 and older in Hawai‘i are more likely than their cisgender counterparts to have a probable substance use disorder.<sup>22</sup> The 2019-2020 Hawai‘i Student Alcohol, Tobacco, and Other Drug Use Survey (**Table 3**) found that transgender and other gender minority students were more likely to have a probable substance use disorder than cisgender boy or cisgender girl students.<sup>24</sup>

**Table 1. Proportion of Past-Month Substance Use among Lesbian, Gay, Bisexual and Heterosexual Individual (aged 12 and above) in Hawai‘i between 2015-2018<sup>a</sup>**

|                 | Lesbian/Gay      |                | Bisexual         |                | Heterosexual     |                |
|-----------------|------------------|----------------|------------------|----------------|------------------|----------------|
|                 | % (95%CI)        | Weighted Count | % (95% CI)       | Weighted Count | % (95% CI)       | Weighted Count |
| Tobacco         | 32.3 (20.5,46.9) | 8000           | 29.0 (18.9,41.6) | 10 000         | 18.0 (16.2,19.9) | 170 000        |
| Methamphetamine | 4.0 (1.0,13.6)   | 1000           | 2.4 (0.8,7.0)    | 1000           | 0.7 (0.4,1.3)    | 7000           |
| Alcohol         | 44.5 (29.9,60.1) | 11 000         | 62.5 (52.2,71.8) | 22 000         | 48.3 (45.8,50.9) | 458 000        |
| Marijuana       | 8.0 (3.3,18.1)   | 2000           | 21.4 (12.8,33.6) | 8000           | 9.4 (7.8,11.4)   | 89 000         |
| Cocaine         | C.S.             | C.S.           | 2.2 (0.7,7.2)    | 1000           | 1.0 (0.7,1.6)    | 10 000         |
| Opioids         | C.S.             | C.S.           | 6.5 (2.9,14.0)   | 2000           | 1.0 (0.6,1.6)    | 9000           |
| Pain Relievers  | C.S.             | C.S.           | 6.5 (2.9,14.0)   | 2000           | 1.0 (0.6,1.5)    | 9000           |
| Tranquilizers   | C.S.             | C.S.           | 2.5 (0.6,9.5)    | 1000           | 0.4 (0.2,0.8)    | 4000           |
| Stimulants      | C.S.             | C.S.           | 2.4 (0.8,7.1)    | 1000           | 0.4 (0.2,0.7)    | 3000           |

<sup>a</sup> Source: Hawai‘i Behavioral Health Dashboard: National Survey on Drug Use and Health Substance Use Dashboard. University of Hawai‘i at Mānoa, Pacific Health Analytics Collaborative. Accessed June 28, 2021. <https://www.hawaii.edu/aging/hbhd/index.html>.<sup>22</sup> This dashboard is now defunct; however, the data can be replicated at Substance Abuse and Mental Health Services Administration (SAMHSA)’s restricted online data analysis system (<https://rdas.samhsa.gov/#/survey/NSDUH-2015-2018-RD04YR>).

Notes: (C.S. = cell suppressions due to low cell counts)

**Table 2. Proportion of Substance Use among Lesbian, Gay, Bisexual, and Heterosexual Public High School Students in Hawai‘i in 2019<sup>a</sup>**

|                                      | Lesbian/Gay      |                                  | Bisexual         |                                  | Heterosexual     |                                  |
|--------------------------------------|------------------|----------------------------------|------------------|----------------------------------|------------------|----------------------------------|
|                                      | % (95%CI)        | # of respondents for survey item | % (95%CI)        | # of respondents for survey item | % (95%CI)        | # of respondents for survey item |
| Alcohol – Current Use                | 24.2 (14.6,37.5) | 131                              | 31.3 (24.4,38.8) | 382                              | 19.7 (17.5,22.1) | 4441                             |
| Alcohol – Current Binge Drinking     | 11.0 (7.2,16.5)  | 140                              | 16.2 (10.6,23.8) | 404                              | 10.3 (8.7,12.1)  | 4609                             |
| Marijuana – Current Use              | 14.9 (9.6,22.4)  | 147                              | 21.4 (14.1,31.2) | 416                              | 16.9 (15.0,19.1) | 4658                             |
| Cigarettes-Combustible – Current Use | 8.7 (3.7,19.0)   | 153                              | 9.9 (4.8,19.4)   | 424                              | 4.1 (3.0,5.7)    | 4794                             |
| Cigarettes-Electronic – Current Use  | 23.8 (15.6,34.5) | 135                              | 34.2 (27.0,42.3) | 402                              | 31.2 (28.2,34.3) | 4512                             |
| Cigarettes- Combustible Daily Use    | 2.3 (0.8,6.7)    | 153                              | 0.8 (0.1,5.0)    | 424                              | 0.5 (0.3,0.9)    | 4794                             |
| Cigarettes - Electronic Daily Use    | 13.2 (7.2,23.0)  | 135                              | 5.8 (2.6,12.5)   | 402                              | 8.0 (6.8,9.3)    | 4512                             |

<sup>a</sup> Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data. Accessed June 28, 2021. <https://nccd.cdc.gov/youthonline/>

| Table 3. Probable Substance Use Disorder (SUD) by Gender based on Self-Administered CRAFFT <sup>25</sup> Screener <sup>a</sup> |                   |                |                   |                |
|--|-------------------|----------------|-------------------|----------------|
| Gender <sup>b</sup>  | No (Score 0-3)    |                | Yes (Score 4+)    |                |
|  | % (95% CI)        | Weighted Count | % (95% CI)        | Weighted Count |
| Cisgender Girl   | 86.9 (85.8, 88.0) | 3116           | 13.1 (12.0, 14.2) | 471            |
| Cisgender Boy  | 91.2 (90.4, 92.0) | 3902           | 8.8 (8.0, 9.6)    | 377            |
| Transgender and Other Gender Minority  | 75.6 (69.3, 81.9) | 133            | 24.4 (18.1, 30.7) | 43             |

<sup>a</sup> CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble) substance use screening tool<sup>24,25</sup>

<sup>b</sup> Gender was defined using the question asking students their current gender; other than female (Cisgender Girl) or male (Cisgender Boy), all other or transgender (self-reported or if current gender differed from sex assigned at birth) responses were combined into the category of Transgender and Other Gender Minority.

## Risk and Protective Factors

The social-ecological model of health is a tiered framework that approaches health risk from a holistic approach.<sup>26</sup> It theorizes that an individual's health conditions are the result of many factors including individual, interpersonal, communal, and societal levels of impact. This conceptual framework is useful for understanding and mapping the various risk and protective factors that affect a person's health and can then be applied to tailor health interventions at various levels of the social-ecological model.

*Individual level.* The individual level of the social-ecological model considers how a person's biological conditions and internalized beliefs affect behavior. SGM individuals have unique stressors that can influence their health behaviors. Internalized cis/hetero normativity and trans/homo negativity are the internalized beliefs that heterosexual and cisgender identities are of the norm and that deviations from the norm are wrong or immoral. These negative internalized beliefs have been found to be associated with a variety of mental health concerns, including substance use related issues.<sup>27-31</sup> In addition to internalized stigma, identity uncertainty has been associated with elevated substance use in many SGM identity groups.<sup>32,33</sup>

SGM individuals are more likely to have multiple mental health diagnoses including depression and anxiety, both of which increase the likelihood of substance use.<sup>30,34</sup> Furthermore, the role that mental health (specifically trauma<sup>35</sup>) plays in seeking and maintaining care is still under contention. An individual's traumatic experiences and their mental health can affect their likelihood of using and becoming dependent upon substances.<sup>34</sup>

*Interpersonal level.* The interpersonal level of the social-ecological model consists of the close relationships that a person has with others and how those relationships impact behavior. SGM individuals are at elevated risk for family rejection after

disclosing their sexual or gender identity.<sup>31</sup> SGM people are also more likely to experience peer- and family-related victimization and adverse childhood experiences than non-SGM people.<sup>32,36-39</sup> Rejection, victimization, and concealment of identity have been associated with elevated rates of substance use and dependence in SGM populations.<sup>37,40-43</sup> Beyond risk factors, researchers have found that a perceived connectedness to parents was a protective factor linked to lower rates of substance use.<sup>40,41,44</sup>

*Communal level.* The communal level of the social-ecological model relates to stressors that are present in the community or at institutions and organizations, such as government, school, and work. Institutional policies that prevent harassment and bullying are associated with lower risk for substance use in SGM individuals who benefit from such policies.<sup>12,40,41,44,45</sup> Additionally, healthcare protections for SGM individuals like changes to gender inclusive language and facilities are both associated with better outcomes for SGM patients and the likelihood for care retention.<sup>46</sup>

*Societal level.* The societal level of the social-ecological model explores health, occupational, educational, economic, and social policies; social and political climate; and social and cultural norms. For example, discriminatory SGM policies and feelings of "living in a predominantly hetero world" were found to be related to increased substance use.<sup>47</sup> Conversely, SGM youth were less likely to binge drink in states that adopted progressive SGM-related policies.<sup>48</sup> In school settings, school-based supports were found to be related to fewer experiences of victimization and better academic outcomes.

*Minority stress model: multi-level impact.* The minority stress model posits that minority individuals experience discrimination, stigma, and prejudice (on every level of the social-ecological model), and that there are unique stressors that can affect SGM people.<sup>49-51</sup> SGM individuals may experience both non-SGM related (eg, race) and SGM-related stigma,<sup>52,53</sup> which may lead to mental health problems and maladaptive coping strategies including substance use.<sup>32,52-56</sup> Importantly, this model also highlights SGM-specific factors (eg, community support, identity pride) that promote resiliency and mitigate the effects of minority stress. The minority stress model is a predominantly used model and provides a starting point to identify resiliency factors to promote, stressors to prevent, and treat resulting distress.

## Systems of Care

To discuss systems of substance use disorder (SUD) care, Rhode Island's cascade of care provides a helpful theoretical cyclical framework that breaks SUD treatment into 5 different stages.<sup>57</sup> The first stage of care focuses on people who are at risk for substance use disorders or dependence, also known as "secondary prevention." Preventative care and screening are key intervention strategies at this stage. The second stage is for people who have been diagnosed with SUDs; treatment

options should shift to a focus on information and encouragement to seek help. The third stage is initiation of care, in which people are entering treatment for SUD. The focus of this stage is to have people feel comfortable with treatment options and guide them to the next stage of the system of care. The fourth stage of care is retention, aimed at people who have stayed with their treatment plan and are on track for the fifth stage of care, recovery. At any stage of care, people may fall back to an earlier stage or out of the cycle of care system.

While current literature notes the effectiveness of affirming sexually diverse, transgender and gender non-conforming identities, the existing literature does not specifically explore substance use interventions in SGM communities.<sup>58,59</sup> The main findings in academic literature are the need for more grounded SGM-affirming care techniques and preventative measures that can be customized for individual SUD treatment plans.<sup>60,61</sup> SGM-specific SUD treatments should be able to work additively with culturally sensitive interventions for individuals' varying intersecting identities. Interventions for intersecting cultural identities include those for people who are Asian American or Pacific Islander,<sup>58</sup> Native Hawaiian,<sup>62,63</sup> living with a disability,<sup>64</sup> military veterans,<sup>65</sup> and others.

In Hawai'i, there are notable insufficiencies in the SUD behavioral health workforce, especially for the SGM population. Among over 3500 mental health practitioners holding a license in mental health counseling, marriage and family therapy, clinical social work,<sup>66</sup> or psychology in the State of Hawai'i in 2020,<sup>67</sup> no data were collected on the number of the specialists that directly provide substance use services for SGM individuals. Separately, certified substance abuse counselors (CSACs) and certified drug prevention specialists are regulated by ADAD, but SGM training is not required for either occupational certification. Information on the number of registered CSACs in the State of Hawaii is not readily available to the public or by request to the Department of Health (DOH). Data sharing between the Professional and Vocational Licensing Office and ADAD's Professional Certification Office is needed to quantify the substance use treatment providing workforce.

## Interventions

### SGM General Health Guidance

Guidelines for developing health and well-being interventions with SGM communities recommend multi-level components that reflect the unique and diverse experiences of SGM communities. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides one such framework for developing SGM interventions and supporting SGM individuals in general programs.<sup>68</sup> At the individual level, assessing provider knowledge, attitudes, and beliefs around SGM individuals is a starting point for professional development that supports these communities. At the interpersonal level, providers should use

correct pronouns, never assume an identity (gender or sexual orientation), and provide empathetic, supportive care. At the organizational level, it is critical to provide an outwardly welcoming environment for the SGM community, which includes: having options for choosing pronouns on intake forms; including a broad range of options for gender and sexual orientation on documentation (including an option for "other identity not listed"); having inclusive representation in the waiting area and health promotion materials; displaying signs like the rainbow flag or pink triangle that indicate a safe space for SGM individuals; and having organizational policies and procedures that protect and promote SGM communities. Community-level components include: having a way for SGM individuals to share their voices (and subsequently impact programs); ensuring inclusive programming, where appropriate, with family and non-family support; and helping SGM individuals access additional support as requested.<sup>68</sup> Societal-level components include state and national policies that support access and appropriate healthcare for SGM communities.

### SGM SUD Interventions in the Literature

Much of the research on SGM substance use behaviors focuses on risk and protective factors, as well as mental and physical health outcomes related to substance use.<sup>1,2,38</sup> A broad literature review was conducted between March 2020 and June 2020 using APA PsychNet, EBSCO Host, and PubMed finding a total of 8459 articles related to substance use risk and protective factors. After duplicate articles were removed and limited to those that took place within the United States between March 2015 and March 2020, there were 343 articles that focused on SGM individuals. From the subset of 343 articles, 87 were assessed as relevant including promising peer-reviewed studies of substance use interventions. Of those that used quantitative evaluation methods, 10 were subsequently selected to illustrate interventions for SGM individuals that had published datasets (**Table 4**). Due to insufficient research data on other SGM sub-populations, interventions in **Table 4** focus on behavior change among gay and bisexual men. Major gaps in the literature around substance use interventions for SGM populations include: research for some sub-groups of SGM (eg, lesbian and bisexual women; transgender and gender non-conforming people); and Hawai'i-/culture-based interventions for SGM communities. In the context of the Rhode Island cascade of care reference above, interventions that specifically target SGM individuals are also needed at levels 1, 2, and 5 of the systems of care (prevention, education post-diagnosis, and recovery).

Regarding substance use interventions, research shows that having specific programmatic components for SGM communities is more effective than traditional models for the general population.<sup>62</sup> Promising studies including specific components for the SGM community include recovery housing options, individual and group therapy, and preventive measures in drinking venues such as offering non-alcoholic options at gay

| Table 4. Description and Impact of Selected Substance Use Interventions for Gay and Bisexual SGM People        |   |   |  |
|--|---|---|--|
| Intervention   | Description   | Impact  | Source   |
| Outpatient Counseling<br>Focus: gay, bisexual men  | 12-month outpatient individual and group counseling program   | Inconsistent reduction in methamphetamine and/or crack/cocaine use  | Ezard et al 2015 <sup>69</sup>   |
| Psychosocial Interventions<br>Focus: gay, bisexual man   | LGBTI-specific alcohol and other drug treatment, including structured intake interview, standard clinical assessment, psychosocial interventions (up to 12 sessions) with a focus on harm reduction principles. | Reduction in methamphetamine use and dependence; Improvement in psychosocial functioning scores   | Lea et al, 2017 <sup>70</sup>  |
| Esteem Program<br>Focus: young gay, bisexual men   | Cognitive Behavioral Therapy (CBT) targeting minority stress  | Some reduction in alcohol intake and depressive symptoms, anxiety; no improvements in suicidality   | Pachankis et al 2020 <sup>71</sup> ; Feinstein et al 2019 <sup>72</sup> ; Pachankis et al.2015 <sup>73</sup> |
| CBT + Motivational Interviewing<br>Focus: men who have sex with men and are HIV-positive                       | Motivational Interviewing and Cognitive Behavioral Therapy sessions with supplemental education sessions  | Significant reduction in methamphetamine use at the 3-month follow up, with subsequent reductions not being significant (at 6, 9, and 12 months)                            | Parsons et al 2018 <sup>74</sup>   |
| Recovery Housing<br>Focus: men who have sex with men   | Provides housing for, regular coaching, and access to treatment services via linkage to an intensive outpatient program; requires regular urine testing   | Reduction in recent substance use, post-completion; significant reduction in dysfunctional coping; 35% completion rate  | Mericle et al 2018 <sup>75</sup>   |
| Project Pride<br>Focus: gay, bisexual men  | Small group session interventions aimed at reducing negative mental and behavioral health from minority stress  | Large increase in self-esteem; small decreases in loneliness and alcohol frequency; moderate decreases in marijuana frequency, cocaine frequency, and amphetamine frequency | Smith et al 2017 <sup>76</sup>   |
| Contingency Management<br>Focus: lesbian, gay, bisexual people; men who have sex with men and are HIV-positive | Contingency management (voucher/ payments for achieving sobriety or other benchmarks) combined with/without intensive outpatient program (eg, ARTEMIS positive reinforcement)                                   | No significant reduction in substance use in one study; Some positive effect and reduction in methamphetamine use in others   | Zajac et al 2020 <sup>77</sup> ; Allara et al 2019 <sup>78</sup> ; Carrico et al 2018 <sup>79</sup>          |
| Project Impact<br>Focus: men who have sex with men   | Behavioral activation (BA) and sexual risk reduction (SRR) intervention models  | No significant reduction in methamphetamine use   | Mimiaga et al 2019 <sup>80</sup>   |
| PACE Bar Study<br>Focus: patrons of gay bars   | Providing free water at gay bars  | Significantly more bar patrons in the intervention group remained within the alcohol legal limit when leaving   | Charlebois et al, 2017 <sup>81</sup>   |

Peer-reviewed articles published between March 2015 and March 2020 on potentially replicable substance abuse/dependence interventions in the US, which used quantitative evaluation methods and focused on SGM individuals, were included in this table.

bars.<sup>74,76,81,82</sup> See **Table 4** for more details on study populations and outcomes. The common theme among the active interventions was the provision of comprehensive programming focused on recovery, reintegration, and motivational changes, with a focus on the unique experience of those in SGM communities. Recovery housing programs showed significant reductions in substance use-related behaviors among participants who had various SUDs, with a 35% completion rate; this was also the most intensive program because linkage to care and employment opportunities were provided.<sup>82</sup> Other effective models focused on behavior changes and multiple therapy models.<sup>70</sup> For example, the Project Pride program, used group sessions to address causal factors that influence negative coping mechanisms, and showed a moderate decrease in marijuana, cocaine, and amphetamine use.<sup>76</sup> Patients who participated in cognitive behavioral therapy combined with motivational interviewing also demonstrated significant reductions in methamphetamine use at a 3-month follow-up. These were accomplished through a robust program that included one-on-one interventions and educational programs.<sup>74</sup>

### SUD Interventions in Hawai‘i

One major gap in the literature review is the lack of studies of Hawai‘i-specific SGM substance use programs. Informal feedback from local service providers and SGM clients throughout the state were obtained by the DOH SGM Workgroup, through an online, anonymous survey, direct email conversations, and scheduled group meetings with self-selected stakeholders. The authors organized the feedback verbatim into themes (see **Table 5**). According to the respondents, while there are many programs which implement SAMHSA recommendations and serve the SGM community, they are insufficient to address current needs statewide, especially for Neighbor Islands. These include, but are not limited to, health care facilities like the Hawai‘i Health and Harm Reduction Center, Waikiki Health, Lavender Clinic, and Transcend Maui as well as substance use-specific organizations, such as Over the Rainbow Alcoholics/Narcotics Anonymous and Big Island Substance Abuse Center. For example, in 2020, the Hawai‘i Health and Harm Reduction Center received more than 200 referrals for cases of substance use disorder and had a total



16 providers on staff who were trained to provide services for SGM populations. Although there are providers for SGM care services, their caseload may vary at any given time; caseload varies as a dimension of factors such as complexity of cases assigned, if a collaborative care model is used, involvement in patient-facing care vs intake and charting, etc. There is no quantified optimal number of caseloads available as it varies by agency demands, however, an adequate SGM serving workforce is required to balance the demands of administrators in service metrics and the medical effectiveness of treatment. Although an increase in telehealth capacity may address barriers such as waiting lists or transportation, no data or feedback from stakeholders was available at the time of writing.

## Observations and Recommendations

**Table 6** lists observations, recommendations, and opportunities for ADAD and its partners to improve the SUD system of care for SGM communities in Hawai‘i based on data findings, literature scan, and stakeholder feedback above. These recommendations were shared with the DOH SGM Workgroup for feedback through an online presentation to self-selected workgroup members. Below is a brief summary of recommendations for such improvements.

### Service Delivery: Increase Prevention and Treatment Access and Integration

Although SGM-specific interventions can improve substance use treatment outcomes, limited resources and programs exist in Hawai‘i to address the specific needs of local SGM com-

munities. Therefore, ADAD should spearhead policy changes that expand the current substance use prevention and treatment infrastructure to include SGM-specific services and resiliency-building.

*Workforce development: recruit community and enhance current capacity.* To improve service delivery to adequately meet the needs of SGM people in Hawai‘i, the substance use prevention and treatment workforce must be expanded and appropriately trained. Thus, ADAD should focus on the professional development of existing providers, the recruitment of SGM people into the workforce, and the development of policies to ensure worker accountability to quality SGM care (eg, correct use of pronouns).

*Nimble financing: allocate funding and resources effectively and appropriately.* Since service delivery and workforce development can be constrained by funding limitations, ADAD will need to identify and secure sustainable, adequate financing for SGM substance use prevention and treatment. Although categorical funds are useful, ADAD should also consider flexible financing streams (eg, unrestricted grants) that can more easily meet community needs.

*Data to action: improve data collection, evaluation, and research.* An important finding from the literature review is the lack of sufficient data to measure the effectiveness of interventions for SGM communities in Hawai‘i. As such, ADAD should develop a plan for intentional integration of SGM data collection, analyses, and reporting into existing health and social service data systems related to the SUD system of care.

| Table 5. Stakeholder-Identified Gaps in Substance Use Resources for SGM People in Hawai‘i |   |
|---|---|
| Gaps in Service   | Stakeholder Comments  |
| Gender-Affirming Resources  | <p>"Po‘ailani is the only treatment facility that I know of that will house TG [transgender] patients with the appropriate gender."</p> <p>"I do not know of any Transgender specific inpatient care options at this point. I would like to see spiritual resources that are competent to support this population also."</p> <p>"Often patients are not accepted for residential SUD treatment as the "gender issue" becomes "insurmountable" and they are denied an opportunity to have this level of intervention."</p> <p>"Transgender specific meetings. Elder services for seniors unable to get around"</p>   |
| SGM-Affirming Resources   | <p>"As a lesbian who is in recovery, there's not a ton of resources/providers identified as being LGBTQ friendly...I went out of State for IP [inpatient] treatment for that reason."</p> <p>"LGBT in-patient detox/rehab, more variety in groups (i.e. not only 12 step/ non-secular), [LGBT] culturally sensitive family support, a clear list of [LGBT] mental health counselors and physicians"</p> <p>"There are no SGM "clean and sober" or recovery homes, no residential treatment (although Hina Mauka and Salvation Army allow trans folks to identify which side to stay in) and there are no IOP (intensive outpatient) that is specific to SGM"</p> <p>"LGBTQ specific treatments centers and Intensive outpatient programs"</p> |
| Workforce Development   | <p>"I see [doctor's name] and he's going to retire soon. He's been a great ally but supportive addiction specialty psychiatrists are few and far between in the state."</p> <p>"I wish there was more training on how to understand the mindset of substance abuse. As a transgender individual who has not turned to illicit drugs and has had perhaps a mild alcohol addiction at most to which was able to reframe from addictive behavior for 10years."</p>   |
| Data Collection and Utilization   | "Data collected on SGM demographics on intake forms, SGM specific services for youth"   |
| Organizational Capacity-Building  | "SGM training/certification for substance misuse/prevention organizations treating all youth"   |
| Neighbor-Island Resources   | "Specific individual therapists in [K]ona and [H]ilo to refer SGM folks to"   |

Informal feedback from local service providers and SGM clients throughout the state were obtained by the Hawai‘i Department of Health's SGM Workgroup through an online, anonymous survey, direct email conversations, and scheduled group meetings with self-selected stakeholders. The authors organized the feedback verbatim into themes. Written comments from stakeholders are presented verbatim with permission. Changes made for grammar or clarity are indicated by brackets.

**Table 6. Observations and Recommendations to Improve the Systems of Care for Substance Prevention and Treatment among SGM People in Hawai'i**

|  |
|--|
| <p><b>Service Delivery: Increase Prevention and Treatment Access and Integration</b></p> <ul style="list-style-type: none"> <li>● Require policy among state-funded agencies providing residential or inpatient treatment to allow self-attestation of gender identity</li> <li>● Create residential and inpatient treatment opportunities specific for SGM people (eg, housing staffed by and dedicated to serving transgender and/or gender non-conforming people)</li> <li>● Diversify outpatient support programs to include SGM-affirming and SGM-specific options</li> <li>● Diversify spousal/family support programs to include SGM-affirming and SGM-specific options (eg, Family Acceptance Project <a href="https://familyproject.sfsu.edu/">https://familyproject.sfsu.edu/</a>)</li> <li>● Provide more programs to build resiliency and support for SGM people in Hawai'i to prevent initiation of substance use</li> <li>● Create social hubs/areas that consolidate resources and also promote safety and support (eg, gay straight alliances in schools)</li> <li>● Establish mechanisms to coordinate service delivery between substance use disorder treatment and mental health services</li> <li>● Streamline intake processes to reduce redundancies and improve timely linkage to services.</li> </ul>  |
| <p><b>Workforce Development: Recruit Community and Enhance Current Capacity</b></p> <ul style="list-style-type: none"> <li>● Promote hiring of people from SGM communities at all system of care levels (including ADAD and its contracted entities)</li> <li>● Provide professional development for new and existing substance use treatment providers, allied health professionals, social workers, case managers, administrative intake staff, and other relevant workers to provide competent care for SGM people in Hawai'i</li> <li>● Mandate annual SGM cultural trainings for relevant workers (eg, Center of Excellence on LGBTQ+ Behavioral Health Equity <a href="https://lgbtquequity.org/">https://lgbtquequity.org/</a>)</li> <li>● Integrate workforce development activities for schools, Department of Education, and other youth-oriented programs</li> <li>● Communicate and enforce protections for SGM staff, clients, and others through clear and actionable policies at all levels</li> </ul>  |
| <p><b>Nimble Financing: Allocate Funding and Resources Effectively and Appropriately</b></p> <ul style="list-style-type: none"> <li>● Develop incentive programs to recruit new and experienced providers for SGM-specific care and treatment</li> <li>● Fund workforce development through ongoing evidence-led trainings and mentorship opportunities</li> <li>● Fund SGM-specific treatment options in all island counties for both urban and rural settings</li> <li>● Establish and maintain an SGM Coordinator position within ADAD to solicit community feedback and coordinate systems-level services to improve care and treatment</li> <li>● Fund SGM-specific innovation grants to reflect cultural and community needs and particularities</li> <li>● Fund SGM-specific health promotion materials and stigma reduction campaigns to promote increased engagement with substance use prevention and treatment</li> </ul>   |
| <p><b>Data to Action: Improve Data Collection, Evaluation, and Research</b></p> <ul style="list-style-type: none"> <li>● Conduct needs assessment through focus groups to determine specific needs of SGM communities, which will direct and inform proposed recommendations throughout this chapter</li> <li>● Integrate sexual orientation, gender identity, and sex assigned at birth as separate demographic fields in Web Infrastructure for Treatment Services (WITS), the shared treatment record portal for ADAD Recommended language can be found at <a href="https://www.cdc.gov/hiv/clinicians/transforming-health/health-care-providers/collecting-sexual-orientation.html">https://www.cdc.gov/hiv/clinicians/transforming-health/health-care-providers/collecting-sexual-orientation.html</a></li> <li>● Improve data collection to align electronic health records and similar health-related systems with guidelines from the National Institutes of Health (<a href="https://dpcpsi.nih.gov/sgmro/measurement/questions">https://dpcpsi.nih.gov/sgmro/measurement/questions</a>)</li> <li>● Collect and report qualitative data (eg, photovoice project) on SGM communities to provide better contextual grounding of quantitative data</li> <li>● Mandate the collection and report of the three metrics above in WITS, or any other reporting system for all contracted ADAD services</li> <li>● Develop an annual special report on SGM data among ADAD contracted entities to highlight impact of programs, gaps in service, and recommendations for program improvement</li> <li>● Expand mandated integration, collection, and reporting of the three metrics above into all non-ADAD entities providing substance use treatment services (eg, hospitals, FQHCs, MedQuest providers/clinics, insurance payers) through ADAD technical assistance</li> <li>● Develop and implement mechanisms for staff and participant feedback (qualitative and quantitative) on ADAD contracted entities, with intentional inclusivity for SGM people and SGM-specific issues</li> <li>● Develop and implement an internal ADAD workgroup (in partnership with the DOH Sexual and Gender Minority Workgroup) that seeks SGM community input to identify and implement culturally-based evaluation approaches and practices (eg, the Aloha Framework from Culturally Relevant Evaluation and Assessment in Hawai'i: <a href="https://www.creahawaii.com/resources">https://www.creahawaii.com/resources</a>).</li> </ul> |
| <p><b>Policy at All Levels: Transform Systems and Organizational Processes</b></p> <ul style="list-style-type: none"> <li>● Update workflow to include culturally appropriate assessment for SGM people, including preferred name, pronouns, and other identities (see recommendations on SGM metrics in Evaluation and Research section)</li> <li>● Update or implement a mechanism for actionable, safe, and accessible reporting of SGM discrimination in ADAD-contracted entities</li> <li>● Develop and implement ADAD protocol for quickly responding to SGM discrimination reports, including funding or program sanctions</li> <li>● Require inclusive language for SGM people in health practice settings</li> <li>● Require the collection and reporting of SGM data in health practice and substance use treatment settings</li> <li>● Support legislation or policy that promotes inclusiveness for SGM people in all settings, such as: Protection of transgender athletes in school teams and coverage of transgender healthcare services by insurance payers</li> <li>● Establish and fund a State Executive Office to address the needs of sexual and gender minorities (similar to the Hawai'i State Commission on Status of Women)</li> <li>● Develop legislation or policy changes to ensure that the above recommendations are mandated and implemented in all substance use treatment settings, regardless of ADAD funding</li> </ul>   |

Based on data findings, literature scan, and stakeholder feedback findings, the authors compiled this list of observations, recommendations, and opportunities for ADAD and its partners to improve the SUD system of care for SGM communities in Hawai'i. These recommendations were shared with the DOH SGM Workgroup for feedback through an online presentation to self-selected workgroup members.

Data should include both quantitative and qualitative findings. Research findings should seek to expand study populations beyond cisgender gay and bisexual men.

*Policy at all levels: transform systems and organizational processes.* Effective and meaningful implementation of the recommendations in **Table 6** requires policy change at multiple levels, from direct service agencies to the health department to Hawai'i statutes. Ultimately, policy and process transformation will be an important driver for all other recommendations.

## Conclusion

SGM populations are disproportionately affected by substance use disorders, with differential use of specific substances among persons based on sexual or gender identity, compared to non-SGM counterparts. Substance use and misuse among SGM people are tied to risk and resiliency factors at all levels of the social ecological paradigm. The minority stress theory suggests that the collective stressors experienced by those in marginalized communities due to their minority status (eg, discrimination, micro-aggressions) can lead to coping mechanisms that include substance use. An important component of the minority stress model to emphasize is resiliency, which highlights the existing and developed strengths of SGM individuals that can be leveraged to promote quality of life and well-being.

Despite the disproportionate burden of substance use disorders on SGM people in Hawai'i, very few resources or programs exist to ameliorate the impact of substance use on this community. Existing resources rarely focus on enhancing strengths evidenced by many SGM individuals. Although some models of care could be useful for SGM people, community-specific interventions in Hawai'i are scarce, especially for gender non-conforming people as well as cisgender lesbian and bisexual women, among others. Meaningful changes must address culturally appropriate service delivery; workforce recruitment and development; nimble and adequate financing; consistent data collection and reporting; and systems-level policy updates. To successfully meet the needs of SGM people in Hawai'i, multi-level transformation of the substance use prevention and treatment landscape, with a particular focus on resiliency-building, is needed.

## Conflict of Interest

None of the authors identify a conflict of interest.

## Notice of Duplicate Publication

This article is based on the draft version of a chapter from the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>).

While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article's publication.

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# Implications for a System of Care in Hawai'i: Primary Care Integration of Substance Use Disorder Treatment

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## Abstract

Primary care physicians (PCPs) in Hawai'i face many challenges in treating patients with substance use disorders (SUD) who tend to have higher medical complexity and thus require more resources. PCPs play a vital role in identifying early misuse, integrating and coordinating care for patients with SUD including office-based interventions like medication-assisted treatment, and connecting patients to community treatment programs. In addition to enormous burdens to care for and increasingly complex patient panels, the challenges include lack of education on addiction medicine, insufficient resources and SUD treatment programs in the office and community, low reimbursement for the complexity of care provided, and an overall physician shortage which drives higher patient volume and less time for any given physician. This article suggests responses to address these challenges such as providing more training and continuing education in SUD for PCPs and trainees, enhancing team-based care to better support PCPs, and funding more SUD treatment programs. More funding should widen accessibility to treatment and reduce the overall burden on the health care system by preventing or treating the disease early, which is a core principle of primary care. Additionally, incentives to practice in Hawai'i in primary care, and especially to treat patients with SUD, need to be improved. Such steps must be taken to address the overall physician shortage that limits patients' access to SUD treatment. A collaborative care model between PCPs, care managers, and addiction specialists is an example of an integrated care system that may address many of these challenges in the short term. To truly improve care for all in Hawai'i, however, system wide interventions are essential to increase the incentive for PCPs to remain and practice in Hawai'i to take care of its unique population, including those dealing with SUD.

## Keywords

primary care, primary care physicians, substance use disorder, medication assisted treatment, Hawai'i

## Abbreviations and Acronyms

CC = Collaborative Care  
CoCM = Collaborative Care Model  
CM = Care Manager  
DEA = Drug Enforcement Agency  
ED = emergency department  
HMO = health maintenance organization  
HMSA = Hawai'i Medical Service Association  
MAT = medication assisted treatment  
MI = motivational interviewing  
PCP = primary care physician  
PMPM = per member per month  
QCIPN = Queen's Clinically Integrated Physician Network  
SBIRT = screening, brief intervention, and referral to treatment  
SoC = system of care  
SUD = substance use disorder

## Background & Introduction

Substance use is a pervasive public health issue in the United States and in Hawai'i, where substance use disorders (SUD), especially for methamphetamine, have been prevalent for decades.<sup>1</sup> According to the National Survey on Drug Use and Health 2018-2019, 68.2% of individuals ages 12 and older in Hawai'i used illicit drugs, tobacco products, or alcohol in the past year, with 5.2% (estimated 60 000 people) having alcohol abuse/dependence, and 2.4% (estimated 28 000 people) having an illicit drug abuse/dependence, in the past year.<sup>2</sup> Due in part to its geographic isolation, Hawai'i faces many challenges including shortages in primary care physicians (PCPs) and addiction treatment resources which make it difficult to provide adequate care for patients with SUD. Since substance use is common and can lead to a multitude of health issues, PCPs, as the first entry point to health care for most people, play a vital role to assist patients with SUD. By identifying and managing problematic substance use early, PCPs can make a significant impact on health care outcomes. As part of the larger Hawai'i Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan Systems of Care Implications project, this article will focus on the challenges PCPs face and recommendations to alleviate the situation. For more background and context around the overall State Plan project, readers are referred to the introductory article. Although challenges discussed in this manuscript are primarily physician focused, many of these also apply to other health care providers who practice in the primary care setting, such as advanced practice providers. Primary care-based interventions such as early screening and medication assisted treatment (MAT) will be emphasized since these are available tools for PCPs. A collaborative care model between PCPs, care managers and addiction specialists, is also described as an example of an integrated care system that would address many of the current system's challenges.

## Challenges in the Current System of Care in Hawai'i

In order to better understand the current system of care (SoC) and needs related to substance use, a literature review was conducted, and input and feedback was obtained from stakeholder groups which included community PCPs, representatives from the administrative aspects of the system (ie, pharmacy, billing and coding), behavioral health providers, resident training programs, and ADAD. These sources were incorporated into determining the scope of the issues and describing the needs in the SoC.

## Overall Primary Care Physician Shortages

According to the 2020 Hawai‘i Physician Workforce Report, more than 400 additional PCPs are needed across Hawai‘i to meet the demand,<sup>3</sup> resulting in enormous burdens on existing PCPs to care for large and increasingly complex patient panels. The ideal PCP panel size is difficult to estimate, but according to Altschuler et al, in a non-delegated model (eg, physician completes majority of tasks instead of delegating work to non-physician staff) a manageable volume is 983.<sup>4,5</sup> HMSA (Hawai‘i Medical Service Association), the largest medical insurance company with more than half of Hawai‘i population as members,<sup>6</sup> currently sets an ideal number of patients for each PCP as 1500. In addition to current shortages, Hawai‘i’s pool of physicians is aging with 46% being 55 years or older, and many are expected to retire in the next 10-15 years. Hawai‘i has its own medical school and several primary care residency programs and, on average 35% of Hawai‘i residency/fellowship graduates practice as PCPs in Hawai‘i. However, from 2010-2020 the retention rate has varied greatly from 11.8% to 64.8%, depending on the program and specialty.<sup>7</sup> While physician shortages persist, PCPs are increasingly tasked to identify early substance misuse, to treat patients with substance use disorders (SUDs), and to integrate and coordinate care for complex patients with SUD.

## Challenges in Use of SBIRT in Primary Care

The United States Preventive Services Task Force recommends universal screening for substance use for anyone age 18 and over and the American Academy of Pediatrics recommends a universal screening for adolescents.<sup>8,9</sup> Primary care offices are the ideal setting to provide this screening service for early detection and intervention. Screening alone, however, is insufficient.<sup>10</sup> Several different models exist for acting on positive screening results. Screening, brief intervention, and referral to treatment (SBIRT) has been extensively studied, proven to improve patient outcomes, and has the flexibility and feasibility for implementation in the primary care setting.<sup>11-14</sup> Motivational interviewing (MI) is another evidence-based tool that can help to elicit change in a patient’s risky behavior and lead to healthier lifestyles. Practicing SBIRT and MI enables PCPs to detect and intervene with patients with mild to moderate SUD symptoms, preventing conditions from developing or worsening.<sup>15-17</sup>

There are many reasons cited why SBIRT or other interventions are not routinely conducted in the primary care setting, including workload, lack of training and low reimbursement for the time spent.<sup>18,19</sup> According to a survey of PCPs in New Mexico, only 25% of primary care offices from a predominantly minority serving southwest regional practice-based research network conducted universal screening for alcohol and illicit drug use.<sup>16</sup> Yoast et al<sup>20</sup> report that “reimbursement has been a commonly identified barrier to physicians’ ability to address SUD concerns with their patients.”

The Hawai‘i SBIRT Project progress report identified several common challenges among PCPs in Hawai‘i related to lack of infrastructure and support. One challenge included difficulty securing buy-in from small private offices to train staff to provide SBIRT, with time needed for training and capacity to have in-house behavioral services cited as primary barriers. For neighbor island PCPs, the fewer number of outpatient and inpatient treatment services to refer to was a significant limitation. Another systems level challenge was the lack of standardization among electronic health record programs, since modifying electronic health records to enable implementation of SBIRT requires significant financial and IT resources.<sup>15</sup>

To unify care for its more than 720 000 members state wide,<sup>6</sup> HMSA, launched its “Māhie 2020”<sup>6</sup> initiative in 2015 and, as part of this initiative, launched “Payment Transformation” which pays a fixed amount upfront on a per-member per-month (PMPM) basis. Hawai‘i providers participating in HMSA’s Payment Transformation receive average \$24 PMPM (range \$8-\$70 PMPM)<sup>6</sup> with higher rates for patients who have complex medical conditions, or who are at higher risk based on disease burden and certain social determinants of health. However, documenting the codes for medical complexity correctly is a highly onerous task for physicians, and the exact increase in PMPM based on the codes is often not transparent.<sup>21</sup> These direct payments are insufficient to keep smaller, independent, and younger providers’ practices open. This high administrative burden combined with taking on more patients to meet growing overhead costs with insufficient compensation has contributed to high rates of burnout among PCPs and is associated with an overall decrease in quality of care.<sup>6</sup> More than 80% of Hawai‘i providers surveyed felt that Payment Transformation has worsened the PCP shortage in Hawai‘i and said they would not recommend that someone entering the field of medicine come to Hawai‘i to practice medicine as a PCP.<sup>6</sup> Incorporating screening and treatment of SUD in addition to routine preventive care and other health needs into a 15-minute office visit is a constant struggle for PCPs.

## Continuing Care for SUD

Among those who had illicit drug/alcohol dependence or abuse in the past year in Hawai‘i, 30.1% had Medicaid/QUEST plans.<sup>2</sup> Follow-up rates for these patients are lower for a variety of reasons, including factors related to social determinants of health such as transportation barriers and decreased access from clinicians who accept Medicaid. Patients with SUD need frequent follow-ups, especially those who are on MAT, with studies showing increased primary care visits coupled with decreased overall health care costs due to less acute care utilization.<sup>22</sup> An external quality review of QUEST Integration Health Plans showed that follow up care after emergency department (ED) visits for alcohol or drug abuse/dependency within 7 days for their patients was poor, with scores between 2-3 stars (highest, 5 stars) compared to national standards.<sup>23</sup> Per

the National Committee for Quality Assurance, the majority of QUEST Integration Health Plans in Hawai‘i are rated 1-2 stars by their members under items “Getting Needed Care” and “Getting Care Quickly”.<sup>24</sup>

### **Gaps in Physician Education and Support to Manage Patients with SUD**

Training for physicians to motivate behavioral change and address addictions is historically lacking. Medical schools often do not provide adequate education in SBIRT, MI, and substance use education. According to a report from the Surgeon General, only 8% of medical schools had a separate required course on addiction medicine and 36% had an elective course.<sup>25</sup> More recently, medical schools have started to implement curricula for appropriate opioid management and treatment for opioid use disorder, but lack of faculty expertise continues to be a major obstacle. The average required hours for postgraduate substance use training during a 3-year residency for family medicine, internal medicine, and pediatrics was only 12 hours, 5 hours, and 4 hours respectively.<sup>26</sup> This limitation in training is reflected locally in the number of clinicians licensed to prescribe buprenorphine: there are currently 167 health care providers (primarily physicians, but also nurse, and physician associate practitioners who consented to release their practice information) listed on the Substance Abuse and Mental Health Services Administration Buprenorphine Practitioner Locator for the State of Hawai‘i, compared to 3290 physicians actively practicing in the state.<sup>3,26,27</sup>

Additionally, stigma and discrimination by health care professionals toward patients with SUD is well described in the literature and can result in suboptimal health care. For example, there is an ongoing negative attitude toward evidence-based treatments such as prescribing MAT for SUD among PCPs,<sup>28</sup> especially among those who lack confidence to provide treatment.<sup>29</sup> Moreover, there are no Food and Drug Administration approved MAT options for methamphetamines (one of the most commonly abused substances in Hawai‘i) and successful treatment requires a significant investment of time and behavioral resources not readily available for most PCPs.<sup>30</sup>

## **Interventions**

### **Strengthening SBIRT Implementation**

Screening for SUD is the vital first step to initiating treatment. Locally, ADAD has conducted training for SBIRT implementation among primary care offices throughout the state with promising results. A progress report on the Hawai‘i SBIRT Project showed that providers trained in SBIRT gained skills and increased their capacity for SBIRT use in the community. This report also found that having organizational champions to support leadership, promote use of SBIRT, and obtain resources were key factors in enhancing sustainability of SBIRT.<sup>15</sup>

Education alone however may not be sufficient to implement SBIRT and other screening tools in the PCP office. Palmer et al,<sup>31</sup> discussed various barriers for PCPs such as time constraints to perform SBIRT. Referral to treatment programs was frequently perceived as a challenge by PCPs, in part due to a local shortage of such programs especially outside of O‘ahu.<sup>32</sup> To alleviate time constraints, an increased reimbursement rate may improve screening rates by increasing the incentive to screen. Adequate financial support for physicians to have dedicated staff and time would support workflow enhancements to implement SBIRT and improve the consistency of its procedures.<sup>31</sup>

### **Use of Telehealth to Reduce Stigma**

Telehealth or telephone visits are useful methods to decrease stigma and increase access to care for all patients, especially those in rural/underserved areas.<sup>33</sup> Patients with SUD often report feeling discrimination in PCP offices,<sup>34</sup> which can discourage them from seeking medical help; telemedicine can help to reduce potentially stigmatizing interactions that would occur in a physical waiting room.<sup>35</sup> Studies show that telemedicine is an effective method to manage SUD patients by improving follow-up rates and treatment completion leading to overall improved outcomes.<sup>36-38</sup> Since the COVID-19 pandemic, reimbursement for telemedicine has improved. The authors strongly advocate this should continue indefinitely.<sup>39</sup> PCPs can implement brief interventions and refer patients to behavioral health specialists for ongoing therapy.<sup>40</sup>

## **MAT**

As stated above, SUD treatment program shortage is a serious problem in Hawai‘i.<sup>32</sup> To increase accessibility for proven SUD treatment such as MAT, the Drug Enforcement Agency (DEA) recently waived the requirement of a separate registration for mobile components of registrants approved to dispense narcotic drugs in schedules II-V (includes methadone) at remote location(s) for the purpose of maintenance or detoxification treatment. These revisions to the regulations are intended to make MAT treatments more widely available,<sup>41</sup> thereby providing additional referral sites for PCPs. MAT is shown to decrease substance use, overdose death, criminal activity, and infectious disease transmission.<sup>42</sup> Although, receiving MAT treatment in PCP office may be most ideal, mobile MAT providers can provide additional referral sites for PCPs who may feel uncomfortable dealing with MAT or too busy to provide MAT themselves.

### **Collaborative Care Model**

A collaborative care model integrating PCPs, recovery coaches and addiction specialists can help address the issues of education/training, physician shortages and limited MAT/SUD treatment program availability.<sup>43</sup> A 2019 study by Wakeman et al<sup>43</sup> showed that an intervention linking PCPs and patients with



recovery coaches and addiction specialists led to significantly more primary care visits during the 9 month follow up period, along with fewer ED visits and fewer total inpatient bed days.<sup>43</sup> For the intervention group in the study, interdisciplinary teams were organized into groups including PCPs, nurses, administrative staff and recovery coaches. This team met twice a month to discuss care plans of complex SUD patients where an addiction specialist provided input about the patients as well as support and education for the team. Recovery coaches played a major role in supporting patients and facilitating referrals to treatment. The control group did not have recovery coaches or integrated addiction treatment within the practice. The study suggested that the collaborative care for 1000 SUD patients would result in 98 fewer hospital days, 90 fewer ED visits, and an additional 627 primary care visits in a year. The study also showed an increase in MAT when an addiction specialist provided education and support.<sup>43</sup>

The Substance Use Motivation and Medication Integrated Treatment study, a randomized trial conducted by Watkins et al,<sup>44</sup> clearly showed that collaborative care (CC) for opioid and alcohol use disorder increased treatment use and self-reported abstinence compared to traditional primary care. In the CC group, all treatment progress was tracked and reviewed during the team meetings. The patients in CC groups received a prompt by coordinators reaching out to them when appointments were missed. Participants in traditional care were only given a phone number for making appointments and a list of community/clinic treatment referrals. CC integrated into primary care for substance use treatment resulted in improved patient outcomes.<sup>44</sup>

Hawai'i has already implemented similar integration systems between PCPs and mental health providers. Queen's Clinically Integrated Physician Network (QCIPN) Collaborative Care Model (CoCM) is one such system. Being part of QCIPN allows PCPs to participate in team-based mental health care. The team has 3 full time care managers (CMs) and 2 social work assistants. When PCPs refer patients for psychiatric consultation, a CM initially interviews the patient, typically via Webex or phone. The CM then presents the case to the psychiatrist at the weekly meeting. Based on the CM report, the psychiatrist gives their diagnostic impression and treatment recommendations. Phone calls are made directly to the PCP as needed. The CM regularly follows up with the patient by phone, which includes providing counseling to keep the patient engaged in treatment and tracking progress using anxiety and depression scales as applicable.

The team-based approach supports PCPs to work more efficiently while also focusing on higher complexity patients, enables CMs to address the social determinants of health that are crucial to recovery, and empowers all team members to work at the highest level of their licensure. Extending this care model to patients with SUD through the involvement of addiction specialists would address many of the challenges listed previously.

A panel for 1 full time CM is estimated to be up to 50 SUD patients at any given time. Estimating that these patients require an average of 6 months follow up, 1 full time CM is capable of serving 100 patients per year.<sup>45</sup> Preliminary data by QCIPN shows encouraging results including a decrease in ED visits, hospital admissions and readmissions among those who are under the care of CoCM, resulting in significant cost savings for the entire health care system.<sup>46</sup>

## **Recommendations**

The following recommendations are proposed as part of a larger group working on SoC Integration for Substance Use in Hawai'i. These recommendations were based on the synthesis of the existing literature, interventions, feedback from members of the Hawai'i Academy of Family Physicians and from the Hawai'i Addictions Conference. In particular, discussions with the QCIPN (behavioral health provider network) were important in arriving at recommendations involving the collaborative care model. These recommendations were also reviewed and vetted by key stakeholder groups which provided information around the existing challenges.

### **Improve Clinician Education to Optimally Manage Patients with SUD**

Education is essential to treat patients with SUD because it leads to less stigma and more confidence in substance abuse treatments.<sup>47,48</sup> PCPs are more likely to offer addiction treatment after receiving education and support from initiatives that promote increasing access to SUD treatment.<sup>49</sup> Education and additional resources for PCPs to take care of patients with SUD may include: establishing a website where busy PCPs can obtain information to prescribe MAT at the point of care; and offering short webinars with useful tools to treat SUD. Offering continuing medical education credits may further incentivize providers to utilize these educational resources. Collaborating with the current free weekly Hawai'i State Rural Health Care Association project ECHO (Extension for Community Healthcare Outcomes) may be ideal. Training sessions can also be offered as live in-person workshops at the annual Hawai'i Addictions Conference. Hawai'i primary care residency programs should incorporate mandatory trainings on substance use, MAT, and DEA X-waiver training for buprenorphine, so that all new physicians are optimally prepared to manage SUD at the start of their careers. Medical schools should incorporate more substance use education and training into the standard curriculum for students to get earlier exposure. Further methods to support PCPs could include a non-emergent email/phone line to access advice from an addiction team such as the Hawai'i Society of Addiction Medicine. One of the major obstacles to provide this education/support however is financial; keeping the course modules up to date, providing a help desk function, organizing courses, and contacting speakers puts a high burden on all involved.<sup>50</sup>

## Expand MAT

To expand the availability of treatment programs, funding mobile clinics is proposed so that MAT, especially methadone will be available for all islands. Unlike other forms of MAT, patients must go to the clinic daily to obtain methadone (federal law),<sup>51</sup> therefore having clinics at a reasonable distance is essential. As of writing this article, there is no clinic that can dispense methadone for opioid use disorder on Kaua'i, Moloka'i or Lana'i.<sup>52</sup> Moreover, clinics are only available in limited locations on the other islands (in Honolulu, Hilo, and Wailuku). Methadone is a full opioid agonist and studies have shown better retention rate as compared to buprenorphine, a partial opioid agonist which can be filled as a regular prescription.<sup>53</sup> Increasing accessibility of MAT will provide additional sites and support PCPs can refer their patients to for treatment.

## Incentivize Care for Patients with SUD

The authors recommend a more comprehensive SoC, including better reimbursement rates and more resources for wraparound care provided by CMs or patient navigators to screen and provide brief intervention to patients with SUD or at risk for SUD. As suggested by the current literature, increasing reimbursement would allow PCPs to have additional support staff for administrative tasks and to address social determinants of health. This would free up more PCP time for counseling and treating higher complexity SUD patients. As for HMSA HMO patients, an increase in base PMPM as well as transparency in payment increases may improve motivation for PCPs to spend more time and schedule frequent follow up visits with their more vulnerable patients. The authors also propose higher PMPM for all complex patients, including those who on MAT since they

typically require more office visits, counseling, and coordination of care. Payers should provide additional incentives and reward physicians who care for medically and socially complex patients, such as those with SUD, as high-quality primary care for these individuals leads to decreased costs for the system as a whole.<sup>54</sup>

## Collaborative Care between Primary Care and Addiction Specialists

Adapting the existing QCIPN CoCM model by substituting psychiatrists for addiction specialists could increase access to addiction care (**Figure 1**). It is uncertain at this time how many full-time primary care practices can be covered by 1 full time CM. Due to lack of education and training to take care of SUD patients among PCPs, the numbers of referrals may be higher initially. Such collaboration would expand the use of MAT for opioid use and alcohol use disorders among PCPs and improve access for patients.

This model can be implemented first on O'ahu within the major health systems and their affiliated PCPs who use the same electronic medical record system. Addiction specialists eventually can also serve the other islands via virtual meeting platforms.

Another recommendation is an integration of PCPs and addiction specialists at methadone clinics that serve opioid use disorder patients. In a recent study, methadone patients who had a designated PCP were associated with a roughly 50% reduced risk of having 2 or more ED visits in a year.<sup>55</sup> Having a co-located PCP within methadone clinics would also likely lead to more consolidated and coordinated care for patients' SUD and primary care needs.

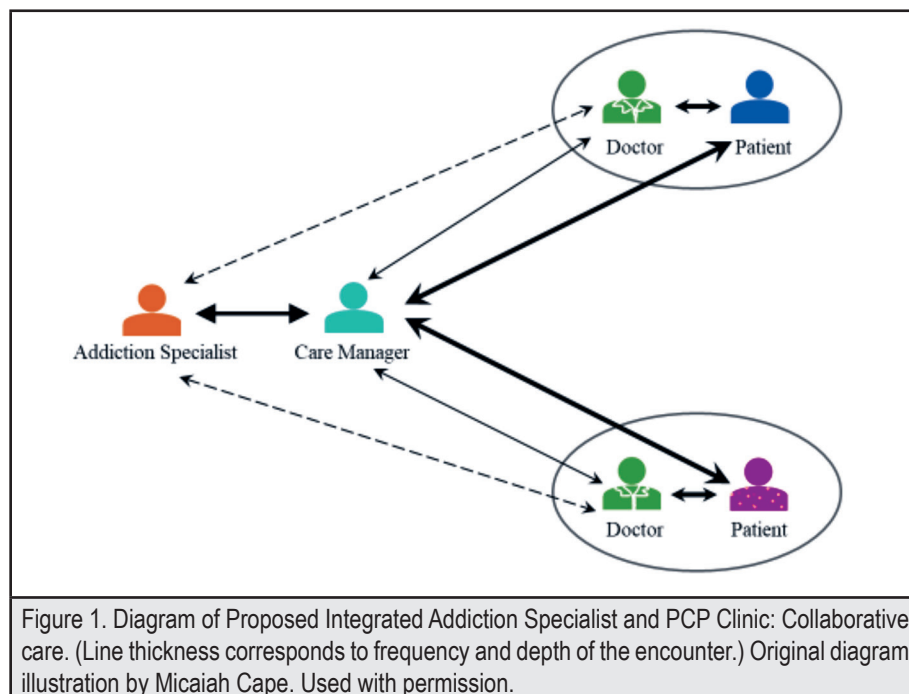


Figure 1. Diagram of Proposed Integrated Addiction Specialist and PCP Clinic: Collaborative care. (Line thickness corresponds to frequency and depth of the encounter.) Original diagram illustration by Micaiah Cape. Used with permission.

## Increase Interest, Incentives, and Funding to Build Primary Care Workforce

A full discussion on increasing physician retention and compensation, especially for PCPs, is outside the scope of this article. However, it is impossible to discuss improving primary care integration for substance use treatment without fully understanding the current state of primary care and the health care environment in Hawai‘i. Nationally, medical students are less interested in going into primary care for a variety of reasons including low income compared to specialist peers and high administrative burden.<sup>56</sup> Hawai‘i has one of the highest costs of living nationally, yet simultaneously is one of the worst states for physicians in terms of pay, ranking 5<sup>th</sup> worst in the nation for lowest average annual wage for physicians in 2021.<sup>57,58</sup> New physicians with accumulated debt from medical school and residency training are more likely to move to more affordable, higher paying states to enable faster payment of debt. Increasing incentives, such as loan repayment programs may play a role in physicians’ choice of practice location.<sup>59</sup> Rourke<sup>60</sup> suggests some factors for increasing the number of physicians includes increasing numbers of medical students from the area, stable practices with appropriate facilities and health care teams, functional referral networks, and improved financial incentives for practicing in the area. Increasing incentives for PCPs to work in Hawai‘i by expanding loan repayment, scholarships, or other incentive programs, and higher reimbursements, would lead more students to pursue primary care fields and more residents to stay local after completing training.<sup>61,62</sup>

## Conclusion

PCPs in Hawai‘i face many challenges in managing patients with SUD to prevent adverse health and social outcomes. Issues outlined include: a need for better training in SUD, inadequate resources to support physicians (such as SUD treatment program shortages),<sup>32</sup> disincentives to manage patients with SUD, and a significant physician shortage that is worse among PCPs.<sup>3</sup> These combined challenges place heavy burdens on currently practicing physicians as well as advanced practice providers. Hawai‘i’s access to follow up especially for those with SUD is subpar, and funding SUD programs and telemedicine will provide wider access to SUD treatment. PCPs also need a supportive environment and adequate professional education to take care of patients with SUD early before problems multiply. Collaboration between PCPs and addiction specialists is a model that could address many of local challenges in Hawai‘i including increased access to care for patients and more support for PCPs. To truly improve care for all in Hawai‘i, however, systemic interventions such as adequate reimbursement, loan repayment programs, and rewards to manage complex patients including those with SUD, are essential to increase incentives for PCPs to remain and practice in Hawai‘i.

## Conflict of Interest

None of the authors identify a conflict of interest.

## Notice of Duplicate Publication

This article is based on the draft version of a chapter from the Hawai‘i State Department of Health Alcohol and Drug Abuse Division (ADAD) State Plan, and all or a majority of the contents within will be subsequently also reproduced in the corresponding chapter of the final version of the ADAD State Plan (<https://health.hawaii.gov/substance-abuse/state-plan/>). While the ADAD State Plan may later be modified as a living document following its release, the material and content found in this article represents a snapshot of the highlights of the ADAD State Plan at the time of the article’s publication.

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# Hawai‘i Journal of Health & Social Welfare (HJH&SW)

## Style Guide for the Use of Native Hawaiian Words and Diacritical Markings

The HJH&SW encourages authors to use the appropriate diacritical markings (the ‘okina and the kahakō) for all Hawaiian words. We recommend verifying words with the Hawaiian Language Dictionary (<http://www.wehewehe.org/>) or with the University of Hawai‘i Hawaiian Language Online (<http://www.hawaii.edu/site/info/diacritics.php>).

Authors should also note that Hawaiian refers to people of Native Hawaiian descent. People who live in Hawai‘i are referred to as Hawai‘i residents.

Hawaiian words that are not proper nouns (such as *keiki* and *kūpuna*) should be written in italics throughout the manuscript, and a definition should be provided in parentheses the first time the word is used in the manuscript.

Examples of Hawaiian words that may appear in the HJH&SW:

‘āina  
ali‘i  
Hawai‘i  
kūpuna  
Kaua‘i  
Lāna‘i

Mānoa  
Māori  
Moloka‘i  
O‘ahu  
‘ohana  
Wai‘anae

# Hawai'i Journal of Health & Social Welfare (HJH&SW)

## Guidelines for Publication of HJH&SW Supplements

The Hawai'i Journal of Health & Social Welfare (HJH&SW) partners with organizations, university divisions, and other research units to produce topic-specific issues of the journal known as supplements. Supplements must have educational value, be useful to HJH&SW readers, and contain data not previously published elsewhere. Each supplement must have a sponsor(s) who will work with the HJH&SW staff to coordinate all steps of the process. Please contact the editors at [hjhswhawaii.edu](mailto:hjhswhawaii.edu) for more information if you would like to pursue creating a supplement.

The following are general guidelines for publication of supplements:

1. Organizations, university divisions, and other research units considering publication of a sponsored supplement should consult with the HJH&SW editorial staff to make certain the educational objectives and value of the supplement are optimized during the planning process.

2. Supplements should treat broad topics in an impartial and unbiased manner. They must have educational value, be useful to HJH&SW readership, and contain data not previously published elsewhere.

3. Supplements must have a sponsor who will act as the guest editor of the supplement. The sponsor will be responsible for every step of the publication process including development of the theme/concept, peer review, editing, preliminary copy editing (ie, proof reading and first round of copy editing), and marketing of the publication. HJH&SW staff will only be involved in layout, final copy editing and reviewing final proofs. It is important that the sponsor is aware of all steps to publication. The sponsor will:

- a. Be the point of contact with HJH&SW for all issues pertaining to the supplement.
- b. Solicit and curate articles for the supplement.
- c. Establish and oversee a peer review process that ensures the accuracy and validity of the articles.
- d. Ensure that all articles adhere to the guidelines set forth in journal's [Instructions to Authors page](#), especially the instructions for manuscript preparation and the statistical guidelines.
- e. Obtain a signed [Copyright Transfer Agreement](#) for each article from all authors.

- f. Comply with all federal, state, and local laws, rules, and regulations that may be applicable in connection with the publication, including ensuring that no protected health information appears in any article.
- g. Work with the editorial staff to create and adhere to a timeline for the publication of the supplement.
- h. Communicate any issues or desired changes to the HJH&SW staff in a timely manner.

4. Upon commissioning a supplement, the sponsor will be asked to establish a timeline for the issue which the sponsor and the HJH&SW editor(s) will sign. The following activities will be agreed upon with journal publication to take place no later than 24 months after signing. Extensions past the 24 months will be subject to additional fees based on journal publication rates at that time:

- Final date to submit a list of all articles, with working titles and authors
- Final date for submitting Word documents for copy editing
- Final date for submitting Word documents for layout
- Final date to request changes to page proofs (Please note that changes to page proofs will be made only to fix any errors that were introduced during layout. Other editing changes will incur an additional fee of \$50 per page.)

5. The cost of publication of a HJH&SW supplement is \$5,000 for an 8-article edition with an introduction from the sponsor or guest editor. Additional articles can be purchased for \$500 each with a maximum of 12 articles per supplement. This cost covers one round of copy editing (up to 8 hours), layout, online publication with an accompanying press release, provision of electronic files, and indexing in PubMed Central, SCOPUS, and Embase. The layout editor will email an invoice for 50% of the supplement to the designated editor for payment upon signature of the contract. The remaining will be due at the time of publication. Checks may be made out to UCERA.

6. The sponsor may decide to include advertisements in the supplement in order to defray costs. Please consult with the HJH&SW advertising representative Michael Roth at 808-595-4124 or email [rothcomm@gmail.com](mailto:rothcomm@gmail.com) for assistance.

7. Supplement issues are posted on the HJH&SW website (<http://www.hawaiijournalhealth.org>) as a full-text PDF (both of the whole supplement as well as each article). An announcement of its availability will be made via a press release and through the HJH&SW email distribution list. Full-text versions of the articles will also be available on PubMed Central.

8. It is the responsibility of the sponsor to manage all editorial, marketing, sales, and distribution functions. If you need assistance, please contact the journal production editor. We may be able to help for an additional fee.

9. The editorial board reserves the right of final review and approval of all supplement contents. The HJH&SW will maintain the copyright of all journal contents.

5. *Optional*: During this time, the sponsor can solicit advertisements for the supplement to help defray costs for publication and/or printing. To initiate this process, the sponsor will work the HJH&SW advertising representative Michael Roth at 808-595-4124 or [roth-comm@gmail.com](mailto:roth-comm@gmail.com).

6. The sponsor or their designee will conduct a final review of each article to ensure adherence to HJH&SW guidelines and AMA style.

**Time frame: 2 weeks**

7. For each article, the sponsor will submit the final Word document and Copyright Transfer Agreement to the HJH&SW journal production editor. The journal production editor will send the articles to the copy editor for final journal style review. Copyediting will be 8 hours per edition plus 1 hour per article for additional articles purchased. Any additional hours will be billed at \$100 per hour.

**Time frame: 2 weeks**

8. The sponsor will submit the final articles to the layout editor for formatting. **Time frame: 1 month**

Acting in the role of guest editor, the sponsor will include a column introducing the supplement.

**IMPORTANT:** All articles submitted for layout should be in their finalized form. Page proofs will be returned to the sponsor for their review and approval, but changes will only be made to fix any errors that were introduced during the layout process. Any editing or changes to the text or figures after the initial copy layout will incur a fee of \$50 per page.

9. The sponsor will review the electronic copy from the layout editor and submit any final corrections. **Time frame: 5 working days**

10. The layout editor will make the final corrections and provide a finished electronic copy of the supplement to the sponsoring editors to allow time for printing.

11. The managing editor will work with the sponsor to draft a press release. Sponsors should contact the managing editor at least 30 days prior to the date of publication to plan and script the press release. Sponsors are encouraged to submit 1-2 photos to accompany the press release. Note that obtaining signed photo releases is the responsibility of the sponsor.

12. The supplement will be published online along with the press release. An electronic copy will be sent to our subscribers and circulation lists, and the edition will be forwarded to the National Library of Medicine for indexing and made available for no cost access to the public.

Revised 2/6/20

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### Sample Workflow and Timeline for a Supplement

1. The sponsor contacts the HJH&SW editors ([hjhswhawaii.edu](mailto:hjhswhawaii.edu)) to discuss the supplement topic, estimated timeline, length and cost. HJH&SW staff will review the journal requirements for articles and share our review process with the sponsor. **Time frame: 2 weeks**

2. The sponsor will complete the draft contract and pay a non-refundable deposit of \$2500 or half the contract value. **Time frame: 3 days**

3. The sponsor will solicit articles for the supplement. **Time frame: 3-6 months**

Articles must comply with:

- [Instructions for Manuscript Preparation and Submission of Research Articles](#)
- [Instructions for Manuscript Preparation and Submission of Columns](#)
- [HJH&SW Statistical Guidelines](#)
- [HJH&SW Style Guide for Native Hawaiian Words and Phrases](#) [AMA Manual of Style](#) A free summary can be found [here](#).

4. The sponsor will oversee the article selection, peer review, and editing process. We recommend that time be allowed for at least two rounds of reviews for each article. **Time frame: 3-6 months**

- Ensure that each article includes Institutional Review Board (IRB) review and approval, and a statement disclosing any conflicts of interest.
- Obtain a [Copyright Transfer Agreement](#) signed by all authors for each article.

# Hawai'i Journal of Health & Social Welfare

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## Aim:

The aim of the Hawai'i Journal of Health & Social Welfare is to advance knowledge about health and social welfare, with a focus on the diverse peoples and unique environments of Hawai'i and the Pacific region.

## History:

In 1941, a journal then called The Hawai'i Medical Journal was founded by the Hawai'i Medical Association (HMA). The HMA had been incorporated in 1856 under the Hawaiian monarchy. In 2008, a separate journal called the Hawai'i Journal of Public Health was established by a collaborative effort between the Hawai'i State Department of Health and the University of Hawai'i at Mānoa Office of Public Health Studies. In 2012, these two journals merged to form the Hawai'i Journal of Medicine & Public Health, and this journal continued to be supported by the Hawai'i State Department of Health and the John A. Burns School of Medicine.

In 2018, the number of partners providing financial backing for the journal expanded, and to reflect this expansion the name of the journal was changed in 2019 to the Hawai'i Journal of Health & Social Welfare. The lead academic partners are now the six units of the UH College of Health Sciences and Social Welfare, including the John A. Burns School of Medicine, UH Public Health, the Thompson School of Social Work & Public Health, the Nancy Atmospera-Walch School of Nursing, the UH Cancer Center, and the Daniel K. Inouye College of Pharmacy. Other partners are the Hawai'i State Department of Health and the UH Office of the Vice Chancellor for Research. The journal is fiscally managed by University Health Partners of Hawai'i.

## The HJH&SW Today:

The Hawai'i Journal of Health & Social Welfare is a monthly peer-reviewed journal. Full-text articles are available on PubMed Central. The HJH&SW cannot be held responsible for opinions expressed in papers, discussion, communications, or advertisements. The right is reserved to reject editorial and advertising materials that are submitted. Print subscriptions are available for an annual fee of \$250. Please contact the journal for information about subscriptions for locations outside of the US. ©Copyright 2022 by University Health Partners of Hawai'i (UHP Hawai'i).

The HJH&SW is financially supported by the academic units within the UH College of Health Sciences and Social Welfare, the UH Office of the Vice Chancellor for Research, the Hawai'i State Department of Health, and by advertising. However, the journal's editorial board maintains editorial independence from these entities for the acceptance and publication of research articles. All editorial decisions regarding the selection and editing of research articles are made by the members of the journal's editorial board. The decisions of the editorial board are not influenced by nor subject to the approval of these entities.

The aim of the columns of the HJH&SW is to provide a space for the entities that financially support the HJH&SW to disseminate information regarding their research, programs, goals, or current issues facing their respective fields. Columns are edited by the HJH&SW contributing editors, who are employees of the agencies that support the HJH&SW.

The aim of the Hawai'i Journal Watch is to highlight recent research of the entities that financially support the HJH&SW. The research articles that are covered in the Hawai'i Journal Watch are selected by both the HJH&SW and by researchers in the units that support the HJH&SW. The researchers whose articles are covered in the Hawai'i Journal Watch are given the opportunity to fact check the news brief.

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