

## Comparing Continuity of Care Outcomes: Clinical Care Treatment and Recovery Housing

With over one-hundred thousand drug overdose deaths in 2021, substance use disorder (SUD) is a public health crisis in the United States.<sup>1</sup> This worsening crisis presents a multifaceted challenge due to the combination of risk factors contributing to SUD and ailments often co-occurring with SUD.<sup>2,3</sup> Individuals impacted by SUD often attempt recovery five times on average before resolving their SUD.<sup>4</sup> SUD recovery interventions include outpatient, intensive outpatient, and 30–90-day inpatient detoxification and treatment programs, prescription medications (e.g., buprenorphine, naltrexone, Subutex, etc.) while social recovery models including mutual aid (e.g., 12-step, AA/NA), peer-support, and recovery housing (RH). RH, defined by SAMHSA as “... safe, healthy, family-like substance-free living environments that support individuals in recovery from addiction”, represents an important recovery support service, with an estimated 17,900 nationwide serving over 275,000 people at any given time.<sup>5,6</sup> As RH is an unregulated privately owned and operated recovery support service, the landscape of this service is diverse in terms of availability of resources, service provision, staffing, programming, and size. Consequently, evaluation capacities and measures used to capture program effectiveness across the estimated 18,000 homes are not universal – presenting difficulties in building the evidence for this service model, at large.

**Length of Stay:** As SUD continues to be addressed as an acute illness treated in acute intensive outpatient programs or 30–60-day residential programs, length of stay, or “continuity of care” has been a significant factor for health plans in covering SUD services. This approach does not recognize the progress and stages of recovery defined as: 1) early sobriety (first year); 2) sustained sobriety (1 to 5 years); and 3) stable sobriety (equal to and greater than 5 years).<sup>7,8</sup> Further, addressing SUD via health plan coverage based on acute interventions are not cost-effective given the evidence that supports the association between length of stay in residential RH and sustained, long-term recovery.<sup>9</sup>

Thus, an acute care clinical model with a focus on symptoms and harm reduction does not address recovery capital and is often a short-term solution with poor engagement of the individual in long-term recovery. In a national study less than one-third of individuals prescribed buprenorphine continued with the medication for the 180-day benchmark period.<sup>10</sup> A social recovery model strives to establish long-term recovery through a philosophy for organizing addiction recovery services providing a continuous model of care including the following: 1) pre-recovery identification and engagement, 2) recovery initiation and stabilization, 3) long-term recovery maintenance, and 4) quality-of-life enhancement for individuals and families affected by SUD.<sup>11</sup> The brain can recover from the damaging impacts of drug use. In fact, a 2001 study by Volkow et. al found that dopamine levels and brain cells recovered after fourteen months of abstinence.<sup>12</sup> Ensuring individuals with SUD seeking recovery are provided a stay in RH for up to two years is an important factor supporting long-term recovery. Within this framework, it is important to establish a sustainable financial model in which *recovery housing is included as a service to be covered by health insurance* reflecting both the need to address the chronic health condition and the health-related social needs.

Despite the heterogeneity of RH program outcome capacities, **research conducted among RH residents has pointed to the positive impacts of the model on SUD related outcomes.** In a 2022 mixed methods study, Mericle et al. found that residing in structured sober living was associated with greater likelihood of satisfactory discharge and longer retention with outpatient treatment.<sup>13</sup> Further, in Polcin et al.’s 2010 study examining 18-month outcomes among individuals receiving outpatient treatment while residing in sober living, significant improvements in alcohol and drug use, arrests, and employment, compared to baseline.<sup>14</sup> Lastly, in a 2006 study conducted by Jason et al. among individuals that were randomized

either to Oxford House sober living vs. solely outpatient treatment or self-help groups, individuals in the sober living group experienced significantly lower substance use, higher monthly income, and lower incarceration rates.<sup>15</sup>

Within the SUD clinical realm, higher continuity of care with medication assisted treatment (MAT) has been found to be associated with better SUD outcomes yet, retention with MAT is consistently low and variable by medication type and behavioral therapy factors (Table 1).<sup>16</sup>

**Table 1.** Continuity of Care with Medication Assisted Treatment, from Timko et al. 2015<sup>16</sup>

Time Period	Retention Rates	Number of Randomized Clinical Trials in Review
One Month	72%	1
Three Months	19% - 94%	9
Four Months	46% - 92%	4
Six Months	3% - 88%	13
Twelve Months	37% - 91%	6

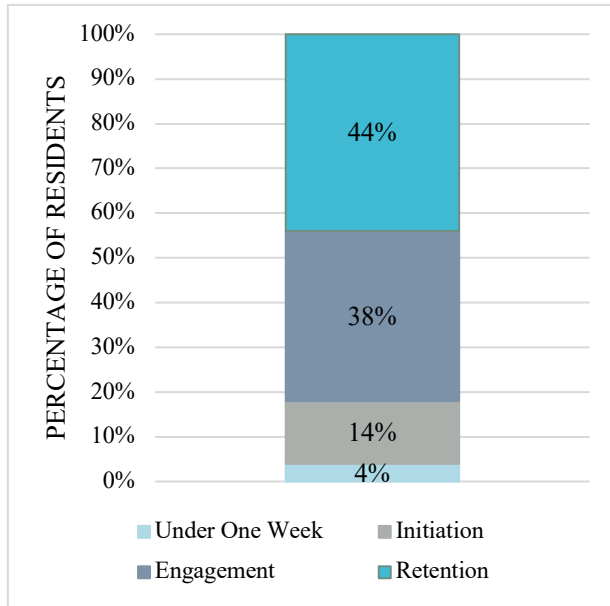
To begin comparing outcomes associated with uptake of the clinical treatment and recovery housing care models, subject matter experts at the Fletcher Group developed a retention framework for the context of RH, modeled and adapted from the medical care continuity retention framework developed by National Committee for Quality Assurance (NCQA) and National Quality Forum (NQF) for initiation, engagement, and retention (Table 2).<sup>17,18</sup>

**Table 2.** Care Continuity Measures for SUD Clinical Treatment Adapted for SUD Recovery Context, “Care Continuity Framework for Recovery Housing”, 2023

Process Measure	Treatment (Clinical Setting)	Recovery (Recovery Housing)
<b>Initiation</b>	Adolescents and adults who initiated treatment through an inpatient alcohol or other drug (AOD) admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or MAT within 14 days of diagnosis.	Residency in recovery housing for at least 7 days.
<b>Engagement</b>	Adolescents and adults who initiated treatment and had two or more additional AOD services or MAT within 34 days of the initiation visit.	Residency in recovery housing for at least 30 days.
<b>Retention</b>	Percentage of adults aged 18 years and older with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment.	Residency in recovery housing for at least 180 days.

The Fletcher Group then applied this adapted framework in a 2023 analysis of data from 566 RH residents residing in a West Virginia RH over a 17-year period (2005-2022) and found that 4% left the home within the first week, 14% left between one week and one month, 38% stayed from 30-179 days, and 44% stayed for 180 days or more reflecting initial longitudinal evidence for RH engagement (Figure 1). In sum, 82% of residents that entered the recovery home from 2005 – 2022 met criteria for engagement in the home. Comparatively, data indicates that measures of care continuity with MAT are low. National data reported by the NCQA indicate that in 2021, among adults and adolescents (13 years or older) with a new episode of alcohol or drug dependence, between 33.1–44.2% met criteria for initiation with medical treatment depending upon payer, and 4.5–13.9% met criteria for engagement with medical treatment depending on payer (Figure 2).<sup>17</sup>

**Figure 1.** Length of Stay among RH Residents in a West Virginia Residence, 2005 – 2022 (N=566)



**Figure 2.** Adults and adolescents (>13) with a new episode of alcohol or drug dependence, 2021, Nationwide,

Care Continuity Level	Percent %
Initiation	33.1 – 44.2%
Engagement	4.5 – 13.9%

As the service landscape of RH evolves, it’s imperative to ensure a minimum standard measure is used for evaluation with comparability potential with healthcare outcomes, like continuity of care. Although evidence for the RH service model is currently viewed as “moderate”, as RH evolves in terms of capacity and quality, stakeholders realize the impact of its provision on addressing a key health related social need and consequent impacts on continuity of care with SUD treatment.<sup>6,19</sup>

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