

# Behavioral Health Workforce Report

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## Foreword

According to the 2019 National Survey on Drug Use and Health (NSDUH), 80% of individuals with a substance use disorder (SUD) do not get needed care; 57% of those with mental illness also do not get needed care and fully one-third of those living with serious mental illness do not get the care they need. Given the Substance Abuse and Mental Health Services Administration's (SAMHSA) mission to reduce the impact of mental illness and substance misuse on America's communities, ensuring that individuals with mental and SUDs have access to evidence-based high-quality care is a critical focus. A major factor in achieving this goal is addressing the training and education needs of practitioners. To facilitate the achievement of this goal, data on the current numbers and trends within practitioner fields is imperative.

The "Behavioral Health Workforce Report" consists of four parts. First, it describes various types of evidence-based models of care. Each description discusses the various staffing models for both mental health and substance use models of care. This report encompasses many but not all treatment settings and includes the providers necessary for operations. States may also have different staffing requirements from those provided in this report. There may be additional provider types, depending on state regulations, working in these settings that are not included in this report. Second, the document estimates the number of providers needed for 13 different mental health care models inclusive of three models of care addressing the needs of children and youth with serious emotional disturbance (SED)/serious mental illness (SMI). Included in the discussion of mental health resource needs for children and youth are school-based mental health services. Third, the report estimates the number of providers needed for three SUD models of care. Fourth, the document enumerates the supply and demand for each behavioral health occupation.

The identified number of behavioral health providers needed in the United States in this report are based on conservative estimates of those requiring access to mental health and substance use disorder services. This report shows the stark contrast between providers that are currently available versus what is needed to address the mental health issues faced by millions of Americans. The goal of this report is to provide information on evidence-based models of care for those with serious mental illness and substance use disorders, practitioner numbers needed to meet the behavioral health needs of the American people, and to offer a foundation on which a model for a mental health system that will address these needs can be established.

## **I. Models of Care for Mental Conditions and/or SUDs**

### **A. Coordinated Specialty Care, Assertive Community Treatment, Assisted Outpatient Treatment**

Coordinated specialty care (CSC), assertive community treatment (ACT), and assisted outpatient treatment (AOT) are related treatment approaches designed to treat people with SMI, particularly those with psychotic and bipolar disorders. CSC was developed to treat young people who experience a first episode of psychosis (FEP) by identifying them as soon as possible and providing comprehensive care. The care should include pharmacological interventions, psychosocial therapy, family intervention, supported education and/or employment, and peer support- an important resources for these programs given their ability to engage and support young people struggling with a psychotic disorder.<sup>1</sup> ACT is a community, team-based, patient-centered treatment available to individuals with SMI. AOT, or compulsory community treatment, provides community-based services similar to ACT, but under court order due to the severity of the mental illness (e.g., frequent hospitalization, criminal infractions related to untreated mental illness). This type of treatment helps to ensure that individuals, who may lack insight regarding the severity of their illness or for other reasons are resistant to necessary care, are engaged in treatment.

*Staffing for each program may include:* a psychiatrist (who leads and supervises the treatment team), case manager, recovery-oriented psychotherapist, medication management specialists geared to individuals with FEP, supported employment and education specialists, peer support specialists, and a general coordinator who facilitates communication between the primary care services, and family education and support.<sup>1, 2</sup>

### **B. Community Mental Health Centers and Certified Community Behavioral Health Clinics**

The Mental Retardation and Community Mental Health Centers Construction Act of 1963 led to the establishment of Community Mental Health Centers (CMHCs) intended to provide community-based treatment with new psychotropic medications, rather than long term residential treatment in psychiatric hospitals. While CMHCs were successful in some respects and provided services for a large number of de-hospitalized patients, federal support was inconsistent and over time they were unable to provide the necessary comprehensive services needed by those with severe and persistent mental illnesses.<sup>3</sup> A challenging result of decreased residential care is significantly increased homelessness for individuals with SMI.

Certified Community Behavioral Health Clinics (CCBHCs) represent an opportunity for states to improve the behavioral health of their citizens by: providing community-based mental and SUD services; advancing integration of behavioral health with physical health care; assimilating and utilizing evidence-based practices on a more consistent basis; and promoting improved access to high quality care. Care coordination is the linchpin holding these aspects of CCBHC care together and ensuring improvement over existing services. Enhanced federal matching funds, made available through the CCBHC demonstration program for services delivered to Medicaid beneficiaries, offer states the opportunity to expand access to care and improve the quality of behavioral health services. CCBHCs provide services to all who seek help, particularly for

individuals with SMI, those with severe SUDs, children and adolescents with serious SED, and those with co-occurring mental, substance use or physical health disorders. Those most in need of coordinated, integrated quality care will receive it from CCBHCs.<sup>4</sup>

*Staffing may include:* a treatment team providing the following services: targeted case management; psychiatric rehabilitation services; peer support and counselor services; crisis mental health services, including 24-hour mobile crisis teams; emergency crisis intervention services, and crisis stabilization; screening, assessment, and diagnosis, including risk assessment; patient-centered treatment planning or similar processes; and outpatient mental health and substance use services inclusive of psychotherapeutic interventions (individual, group, family therapies), psychoeducation, and counseling services.<sup>4,5</sup>

### C. Crisis Services

Crisis services refer to a set of services and supports intended to ameliorate a psychiatric crisis and avoid harm to self and/or others. The nature of these services differs significantly across the country and are often “inconsistent and inadequate”<sup>6</sup> in meeting the needs of the most vulnerable individuals. Typically, crisis services rely on local 911 emergency systems, police response and transport, and the use of hospital emergency departments (EDs) to assess and triage individuals. This often results in individuals experiencing psychiatric crises often to become “entangled” with hospital EDs and/or the judicial system, leading to ED boarding and hospitalization, and/or incarceration. However, there is research and real-world examples of effective and efficient core crisis services that can reduce over-reliance on law enforcement, hospital EDs and inpatient services, and lead to better outcomes for those in a behavioral health crisis. These systems include a core set of services consisting of specialized regional or statewide crisis call centers, twenty-four hours a day seven days a week (24/7) centrally deployed mobile crisis services, and short term “sub-acute” residential crisis stabilization programs. In the most advanced of these systems, individuals in crisis are tracked throughout the crisis to ensure their needs are met appropriately and that services remain immediately available from the inception of the crisis to its resolution and aftercare. This model of crisis services is often referred to as “Crisis Now” and has been effectively implemented in several states and localities including Georgia, Arizona and Colorado.<sup>7</sup>

*Staffing may include:* psychiatrists, clinical psychologists, social workers, nurses, a case manager, peer support services and a consulting physician.<sup>8</sup>

### D. Opioid Treatment Programs

Opioid Treatment Programs (OTPs) provide treatment to individuals with a diagnosed opioid use disorder (OUD) using a combination of Food and Drug Administration (FDA)-approved medications and a comprehensive range of medical and clinical services. OTPs should include recovery support services (RSS) in their patient’s treatment plan. RSS may involve case management (follow-up phone calls, face-to-face meetings, e-mails, connecting patients to peer-to-peer services, 12-step, faith-based, and community groups); supported employment; supported education; supported housing; family reunification; transportation; and, child-care. OTPs can be

located in outpatient settings, inpatient facilities, jails/prisons, hospitals or other settings approved by SAMHSA, the Drug Enforcement Administration, and the states in which they operate. OTPs primarily serve the adult population; exceptions for those under the age of 18 years are outlined in the Code of Federal Regulations 42 Part 8.

*Staffing may include:* All OTP programs must have a medical director, who is a physician licensed to practice medicine in the jurisdiction in which the OTP is located. The medical director assumes responsibility for administering all medical services performed by the program, either by performing them directly or by delegating specific responsibility to authorized program physicians and healthcare professionals who function under the medical director's direct supervision. Other OTP clinical staff include registered nurses, advance practice nurses, pharmacists, physician assistants, social workers, psychologist, peer support specialists, licensed professional counselors and alcohol/drug counselors. Counselors almost always are qualified by education and training to provide counseling, vocational, educational, and other assessment and treatment services.<sup>9</sup>

#### E. Programs Addressing Substance Use and/or Mental Disorders

##### I. Partial Hospitalization Programs (PHPs)

As defined by Congress, partial hospitalization is an outpatient program specifically designed for the diagnosis or active treatment of a serious mental disorder when there is a reasonable expectation for improvement or when it is necessary to maintain a patient's functional level and prevent relapse or full hospitalization. This definition and the service components are endorsed by the National Association of Private Psychiatric Hospitals and the American Association of Partial Hospitalization.<sup>10</sup> It provides a model for health insurers or employers when considering the addition of this specialized program to healthcare benefit plans. PHPs are usually furnished by a hospital as a distinct and organized intensive ambulatory treatment service of less than 24-hour daily care. PHPs are not a substitute for inpatient care. For some patients, the availability of PHPs may shorten the length of stay of full hospitalization or serve as a transition from inpatient to outpatient care. It may allow some patients to avoid hospitalization. Placement in a PHP is a clinical decision that can be made only by a physician thoroughly knowledgeable about the patient's illness, history, environment, and support system. PHP treatment also requires the patient to attend and actively participate in groups.<sup>11</sup> These groups can include peer support services. To note, PHPs standards may also be different across states or regions in the US.

*Staffing may include:* psychiatrists, clinical psychologists, psychiatric nurses, nurse specialists, social workers, peer support specialist, and mental health counselors.<sup>11, 12</sup>

##### II. Intensive Outpatient Treatment (IOP)

IOP is a treatment program providing group-based therapy at least nine hours per week, typically in three 3-hour sessions. IOP emerged in the 1980's as a novel response to stimulant addiction among professionals. SAMHSA's TIP #47 describes the results of a consensus panel that identified 14 principles associated with a successful IOP.<sup>13</sup> IOP is compatible with other treatment approaches and will often

integrate other evidence-based practices. IOP has since expanded to cover mental health and a wide range of behavioral health conditions and is viewed as a means of reducing hospitalization for both children and adults.

Many IOPs hire professionally trained case managers, such as social workers or counselors whose sole function is case management. Other IOPs may expect treatment counselors to assume case management responsibilities as well as counseling duties. In some programs, peer specialists augment the work of professional staff members.

*Staffing may include:* psychiatrists, nurses, case managers, social workers/psychologist, therapists (group/individual), and peer support specialist.<sup>13</sup>

### III. Innovative Models for Linking Patients to Substance Use Disorder Treatment

#### *i. Hub/Spoke or Centers of Excellence Models*

The Hub/Spoke model for OUD treatment was first developed in Vermont and has been replicated in other states. The basic structure of this model includes a “hub” that can provide comprehensive OUD treatment for initial and complex cases, who, once stabilized, can be transferred to a “spoke” or individual buprenorphine provider for office-based opioid treatment (OBOT). Clients who relapse from OBOT can be referred back to the hub for assessment and treatment.

Another example of a treatment program is Pennsylvania’s Centers of Excellence Model (COE) for OUD. Pennsylvania’s Department of Human Services selected 45 centers that included primary care practices, hospitals, Federally Qualified Health Centers, SUD treatment providers, and single county authorities. COEs were designed to engage the community to identify all persons with OUD and ensure they receive evidence-based care for optimal health. COEs take care of the whole person, including OUD treatment, physical health treatment (e.g.: diabetes or hypertension), mental health treatment (e.g.: anxiety or depression), and social needs (e.g.: housing and transportation support, among others).<sup>14</sup>

*Staffing of these facilities may include:* board-certified addiction psychiatrists, addiction medicine physicians, primary care physicians, advanced practice nurses, registered nurses, licensed practical nurses, addiction counselors, case managers, and peer specialists.<sup>15</sup>

#### *ii. Outpatient Day or Evening Treatment Programs*

For outpatient day or evening treatment programs, the client lives at home and attends treatment sessions, once to several times per week, depending on the treatment plan. Other Outpatient program components include case management, crises intervention services, life skills education, transition planning, and group therapy that includes peer support.<sup>16, 17</sup> IOP provides therapy for at least nine hours per week. The client’s preference of day or evening scheduled times reflects

their desire to continue to work and/or ability to attend the session. Outpatient treatment is used for the widest variety of mental health conditions and SUDs, and is appropriate for people who are relatively stable and/or have a good prognosis early in their treatment.

*Staffing may include:* psychiatrists, psychologists, advance practice nurses, social workers, addiction counselors, marriage and family therapists, case managers, vocational trainers, and peer support specialist.<sup>16, 17</sup>

## F. Residential Treatment Settings

Residential treatment settings provide an intensive therapeutic environment. Individuals with SMI or severe SUDs benefit from being in an environment that is closely monitored and provides ongoing support to assist them in developing basic skills to move toward independent living. There are several types of residential treatment facilities designed to address mental health, substance use, and co-occurring issues.

### I. Residential Treatment Settings and supported housing for individuals with mental illness.

Residential Treatment Settings serve as transitional residences for individuals with mental illness who have been discharged from a psychiatric hospital.<sup>18</sup> There are three basic types of residential treatment settings: transitional housing, supportive housing, and supported apartments.

- i. Transitional housing* is one house, building, or center where a specified number of people live together, including both adults with mental illness and staff members. These facilities teach people the skills they need for independent living for them to transition back into society.
- ii. Supportive housing* includes different types of rental apartments existing in one location. Typically, crisis support services are provided on-site 24/7. Some supportive housing operates under the umbrella of group housing because it involves a single, official program within a community that houses many people with mental illness. Supportive housing, however, is also considered individual housing that may be part of a single complex or in individual apartments in different locations throughout the community. The latter is often called *supported*, rather than *supportive*, housing, but other than the location of the homes the services provided are the same.<sup>19</sup>
- iii. Supported apartments* consist of individual apartments that are all part of the same group program but are not situated in the same location. Residents have access to crisis services and other off-site support. In this type of mental health treatment community, residents live in individual or shared apartments while participating in a program of therapeutic activities, supportive relationships, and psychiatric treatment. Clinicians often spend time in residents' homes each day to gain insight that enhances treatment and recovery. For some individuals, this style

of residence minimizes the perceived stigma of living in a mental health facility. Common features provided in supported apartments include: regular visits from mental health clinicians; a location close to a central “therapeutic community” gathering place; and a greater degree of independence not found in other treatment settings.<sup>20</sup>

*Staffing may include:* social workers, mental health counselors, occupational therapists, and peer support specialist.<sup>21</sup>

## II. Residential Treatment Settings and Supported Housing for individuals with Substance Use Disorders.

Residential settings for persons seeking recovery from SUD offer a safe, structured and peer supportive environment. They use a variety of therapeutic approaches and their service and staffing range from clinical to nonclinical. There are two general types of residential settings: Licensed therapeutic communities and non-licensable recovery housing.

- i. Licensed Therapeutic communities (TCs)* are highly structured programs in which patients remain at a residence typically for 6 to 12 months or 24 months. They are licensed by states, because they provide clinical services. The entire community, including treatment staff and those in recovery, act as key agents of change, influencing the patient’s attitudes, understanding, and behaviors associated with drug use.<sup>22</sup> TCs have a recovery orientation, focusing on the whole person and overall lifestyle changes, not simply abstinence from drug use. This orientation acknowledges the chronic, relapsing nature of SUDs and holds the view that lapses are opportunities for learning.<sup>23, 24</sup> Recovery is a gradual, ongoing process of cognitive change through clinical interventions, therefore it is expected that it will take time for program participants to advance through the stages of treatment, while also setting personal objectives along the way. Treatment incorporates evidence-based behavioral treatments, including cognitive behavioral therapy and motivational interviewing to facilitate the process of change.<sup>25</sup>

*Staffing:* Program participants are fully engaged in TC activities that include group discussions with peers, individual counseling, and community-based learning through meetings and seminars. In contrast to other forms of licensed treatment, TCs place an emphasis on resident leadership. TCs have medically trained professionals (e.g.: psychiatrist consultants, psychologists, nurses, and certified addiction counselors) as staff members, and most offer medical services on-site.<sup>26</sup>

- ii. Non licensable Recovery housing* provides supervised, housing for patients, and often follows other types of inpatient or residential treatment. Recovery housing can help people make the transition to an independent life -- for example, helping them learn how to manage finances or seek employment, as well as connecting



them to support services in the community. Recovery houses are safe, healthy, family-like, substance-free living environments that support individuals in recovery from SUD. While recovery residences vary widely in structure, all are centered on peer support and a connection to services that promote recovery. Recovery housing reinforces a substance-free lifestyle and provides direct connections to other peers in recovery, mutual support groups and recovery support services. The requirements of “substance-free” does not prohibit prescribed medications taken as directed by a licensed prescriber, such as pharmacotherapies specifically approved by the FDA for treatment of OUDs and/or for the treatment of co-occurring disorders or medical conditions.<sup>27</sup> Residents in recovery housing should be afforded high-quality, evidence-based care, including outpatient SUD treatment.<sup>28</sup> For many, recovery housing combined with evidenced-based outpatient treatment is an efficacious model of care. For patients with OUD, medication-assisted treatment (MAT) or Medication for OUD can be a lifesaving practice. MAT includes the use of FDA-approved medications for the treatment of OUDs. Medication therapy in conjunction with counseling, behavioral therapies, and community recovery supports provide a whole person approach to the treatment of SUDs. Peers and recovery coaches are other essential components modeling the societal and fellowship aspects of recovery. Both are integral components of recovery houses. Peer Support Recovery Services and recovery coaches have also emerged as an efficacious intervention to help utilize lived experience to assist others in achieving and maintaining recovery.

*Staff:* House Manager, Senior Resident or democratically elected Resident Officers. In some cases, Peer Specialists.

### III. Acute Care Inpatient Settings

There are several types of acute care inpatient settings:

- i. Acute care general hospitals*
- ii. Acute care addiction treatment units located in acute care general hospitals*
- iii. Acute care psychiatric hospitals*
- iv. Other appropriately licensed specialty hospitals for the treatment of SUDs*

These settings share the ready availability of acute care medical and nursing staff, life support equipment, and ready access to the full resources of an acute care general hospital or its psychiatric unit. This level of care provides medically managed intensive inpatient detoxification.<sup>29</sup> Acute inpatient care is an organized service that provides medically managed inpatient medical withdrawal from a substance (detoxification) that is delivered by medical and nursing professionals. Medically supervised evaluation and withdrawal management in a permanent facility with inpatient beds are provided for patients whose withdrawal signs and symptoms are sufficiently severe to require 24-hour inpatient care. Services should be delivered under a set of policies and procedures or clinical protocols designated and approved by a qualified physician.<sup>30</sup> Acute care inpatient detoxification programs are typically

staffed by physicians, who are available 24 hours a day, and are active members of an interdisciplinary team of appropriately trained professionals who medically manage the care of patients. In some states, these duties may be performed by a registered nurse or physician assistant. A registered nurse or licensed nurse is available for primary nursing care and observation 24 hours a day. Ideally, facility-approved addiction counselors or licensed or registered addiction clinicians should be available at least eight hours a day to administer planned interventions according to the assessed needs of the patient.

*Staffing may include:* an interdisciplinary team of appropriately trained clinicians such as physicians, nurses, counselors, peer support specialists, social workers, and psychologists. The team should be available to assess and treat the patient with SUD, or a patient with a co-occurring SUD, as well as biomedical, psychological, or behavioral conditions.<sup>29, 30</sup>

#### IV. Long-Term Acute Care Facilities

Long-term acute care hospitals (LTACHs) are health care facilities that admit complex patients with acute care needs (e.g.: mechanical ventilator weaning, administration of intravenous antibiotics, and complex wound care) for a mean duration of stay of 25 days. LTACHs are different than nursing homes and were initially created in the 1990s in an effort to decrease Medicare costs by facilitating prompt discharge of patients with difficulty weaning from mechanical ventilation from intensive care units. Diagnoses for admission to these facilities, however, are quite broad. Patients admitted to these facilities have multiple co-morbidities.<sup>31</sup> LTACHs may include state facilities which provide long-term services to patients with severe, unremitting mental illness.

*Staffing may include:* physicians, psychiatrists, nurses, mental health counselors, therapists (physical, occupational, speech), social workers, psychologists, and laboratory technicians. Peer support has also been included in the treatment of SUD and mental health conditions.<sup>32</sup>

#### V. Nursing Homes

The treatment of individuals with mental illness has been an important feature of nursing home care since the early days of the deinstitutionalization movement. With the accelerated downsizing and closure of state-run, long-stay psychiatric hospitals during the 1960s and 1970s, spurred on by deinstitutionalization policies, many persons with mental illness were transferred to nursing homes and other residential settings. It is estimated that the number of elderly persons in psychiatric hospitals decreased by approximately 40 percent during that period, while the number of mentally ill in nursing homes increased by over 100 percent.<sup>33</sup>

*Staffing may include:* primary care providers, psychologist, consulting psychiatrists, registered nurses, master's level social workers, home care coordinators, physical and occupational therapists, and peer support coaches or specialists.<sup>34</sup>

## II. Projected Estimate of the Number of Behavioral Health Providers Needed to Treat Individuals Diagnosed with Severe Mental Illness

The second section of this document estimates the number of behavioral health providers needed to treat individuals in the United States diagnosed with moderate to severe SMI that includes schizophrenia, bipolar disorder, and or major depression. Several factors are considered in estimating the number of providers and calculating the number of individuals diagnosed with these illnesses as discussed below.

For example, Schizophrenia is a chronic and severe neurological brain disorder estimated in 2014 to affect 1.1 percent of the population or approximately 2.6 million adults in the United States aged 18 or older.<sup>35</sup> Based on this, calculations were made assuming that 1 million would have schizophrenia severe enough to require specialty mental health services. While not everyone with moderate to severe schizophrenia will need all specialty services continuously, consensus from the scientific literature on this SMI reveals that the course of schizophrenia has fluctuating periods of greater and lesser service need. Furthermore, individuals with other manifestations of SMI (e.g.: severe affective disorders, schizoaffective disorder, eating disorders and other psychotic disorders) will also need these treatment services at various times.

Also, it is well-known that individuals with SMI often have co-morbid SUDs with high rates of nicotine, drug and alcohol. These factors are also taken into account when estimating the unmet treatment needs of individuals with these disorders.

Several treatment modalities described in the first section of this report will be used to project the number of clinical behavioral health providers needed to treat the estimated number of individuals with SMI.

- The first four treatment modalities -- Assertive Community Treatment or Assisted Outpatient Treatment, Partial Hospitalization Program, Intensive Outpatient Treatment, and Mobile Crisis Teams -- *address the number of behavioral health providers needed in those treatment settings to treat one million individuals diagnosed with schizophrenia.*
- The fifth treatment modality -- Coordinated Specialty Care -- *addresses the number of behavioral health providers needed to treat individuals newly diagnosed with schizophrenia each year.*
- The sixth treatment modality -- Community Mental Health Centers and Certified Community Behavioral Health Clinics -- *focuses on the number of behavioral health providers needed to treat individuals with serious mental illnesses including diagnoses of major depression, bipolar disorder, schizophrenia and other psychotic disorders, anxiety disorders, co-occurring substance use disorders and general medical conditions.*
- The seventh treatment modality -- Inpatient Care Hospitals and Psychiatric Hospitals -- *concentrates on the number of providers needed to treat individuals with mental disorders, SUDs, or co-occurring mental and SUD.*

- The eighth and ninth treatment models -- Long-Term Acute Care Hospitals and Supported Living Communities -- *highlight the number of providers needed to treat individuals with SMI in those treatment settings.*
- The tenth, eleventh and twelfth treatment modalities -- Intensive Outpatient Treatment, Inpatient Care Hospitals and Psychiatric Hospitals, and Residential Treatment -- *address the number of providers needed in these settings to treat children diagnosed with a serious emotional disorder (SED).* It is assumed that the modalities for SED may also treat SUD, given that there is very limited information available regarding SUD programs for children and adolescents.
- The thirteenth model -- Children and Youth School-Based Mental Health Services – *focuses on the number of qualified behavioral health staff needed in public schools.*

**1. Assertive Community Treatment (ACT) or Assisted Outpatient Treatment (AOT): *what is the projected number of behavioral health providers needed to treat an estimated 1 million individuals diagnosed with schizophrenia?***

In the ACT model, a team includes a full-time psychiatrist and a nurse who are seen as critical personnel for success. Other needed personnel are listed below under team composition. The staff-to-patient ratio recommended is 10 staff members responsible for 120 patients.

Team Composition<sup>36</sup>

Full Time Employees (FTEs):

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Psychiatrist
- 4 Counselors/Case Managers
- 2 Peer Support Specialists
- 2 Nurses
- 1 Prescriber (Advance Practice Nurse or Psychiatrist, 0.2 FTE)

To provide services to 1 million individuals with schizophrenia, the behavioral health workforce would need 8,333 teams (1 team/120 individuals X 8,333 teams/1 million individuals). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 11,250 Supervisors, 11,250 Psychiatrists, 44,998 Counselors/Case Managers, 22,499 Peer Support Specialists, 22,499 Nurses, and 2,250 Prescribers.

For the purposes of calculating the behavioral health workforce needs, the number of Supervisors calculated, for this treatment model as well as the subsequent exercises, was estimated as follows: 50% psychologists, 25% Counselors and 25% Social Workers. Totals for each profession can be found below in Section IV of the report.

**2. Partial Hospital Program (PHP): *what is the projected number of behavioral health providers needed to treat an estimated 1 million individuals diagnosed with schizophrenia?***

At a minimum, the Centers for Medicare & Medicaid Services' requirements for PHP services include a psychiatrist, at least one social worker, and a therapist or counselor. However, there is no meaningful data available on staff-to-patient ratios. Once admitted, the average patient length of stay in PHPs is typically three to four weeks.<sup>11</sup> However, some patients have been known to stay as long as six to nine months.

Since PHPs are more structured with scheduled programming than are ACT programs, it can be estimated that the staff-to-patient ratio as one team to approximately 75 patients (Psychiatric Physician, OCMO/SAMHSA personal communication, 2019). This is one-half the number of patients compared to ACT.

#### Team Composition<sup>11</sup>

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Psychiatrist
- 1 Nurse (RN experienced in psychiatric care)
- 5 Counselors /Case Managers
- 2.5 Peer Support Specialists
- 1 Social Worker

To provide services to 1 million individuals with schizophrenia, the behavioral health workforce would need 13,333 (1 team/75 individuals X 13,333 teams/1,000,000 individuals). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 18,000 Supervisors, 18,000 Psychiatrists, 18,000 Nurses, 89,998 Counselors/Case Managers, 44,999 Peer Support Specialists, and 18,000 Social Workers.

### **3. Intensive Outpatient Program (IOP): *what is the projected number of behavioral health providers needed to treat an estimated 1 million individuals diagnosed with schizophrenia?***

Intensive case management encompasses a range of service delivery practices that are less intensive and not as standardized as the AOT model.<sup>37</sup> The patient to [alcohol and drug] counselor ratio may not exceed 15 patients to one full-time [alcohol and drug] counselor.<sup>13, 38</sup> (With five counselors, it is estimated that the staff-to-patient ratio as one team to approximately 75 patients.)

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 5 Counselors/Case Managers

- 1 Prescriber (Advance Practice Nurse or Psychiatrist, 0.5 FTE)
- 2.5 Peer Support Specialists

To provide services to 1 million individuals diagnosed with schizophrenia in one year, the behavioral health workforce would need 13,333 teams (1 team/75 individuals X 13,333 teams/1,000,000 individuals). In terms of FTEs per profession and accounting for absenteeism and/or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 18,000 Supervisors, 89,998 Counselors/Case Managers, 9,000 Prescribers, and 44,999 Peer Support Specialists.

**4. Crisis/Mobile Crisis Team: *what is the projected number of behavioral health providers needed to treat an estimated 1 million individuals diagnosed with schizophrenia?***

At a minimum, the mental health/substance use disorder (MH/SUD) team should include at least one person with a master’s degree in social work, psychiatric nursing, or counseling that must regularly provide staff consultation along with a counselor or case manager.<sup>39</sup> Due to severity of conditions encountered in this type of treatment setting, a staff psychologist should have a doctoral degree. There must be at least one mental health treatment staff member for every 10 beds in a crisis stabilizing unit (CSU) or short-term residential treatment. These services must be available 24/7 and the provider numbers reflect that need.

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 2 Supervisors (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Psychiatrist (Two options: 3 Psychiatrists at 0.33 FTE or 2 Psychiatrists at 0.5 FTE to cover all shifts)
- 1 Peer Support Specialist
- 6 Counselors/Case Managers
- 2 Nurses
- 2 Psychiatry Technicians or Medical Assistants

Weekend Coverage:

- 2 Prescribers (Advance Practice Nurses or Psychiatrist, 0.25 FTE each)
- 2 Nurses (0.5 FTE each)
- 2 Counselors/Case Managers (0.5 FTE each)
- 2 Psychiatry Technicians or Medical Assistants, (0.5 FTE each)

To provide services to 1 million individuals with schizophrenia, the behavioral health workforce would need 1,923 teams (1 team/520 beds covered (10 beds in the crisis stabilization unit x 52 weeks/year) X 1,923 teams/1,000,000 individuals). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 5,192 Supervisors, 2,596 Psychiatrists, 2,596 Peer

Support Specialists, 15,576 Counselors/Case Managers, 5,192 Nurses, and 5,192 Psychiatry Technicians or Medical Assistants. For weekend coverage the behavioral health workforce would need 1,298 Prescribers, 2,596 Nurses, 2,596 Counselors, and 2,596 Psychiatric Technicians or Medical Assistants.

**5. Coordinated Specialty Care (CSC) Model: *what is the projected number of behavioral health providers needed to treat an estimated 100,000 individuals diagnosed with schizophrenia?***<sup>40</sup>

Approximately 100,000 people are diagnosed with schizophrenia annually in the United States and onset of illness is typically late adolescence/early adulthood.<sup>40</sup> Early intervention and treatment are critical to minimize the severity of this illness. Therefore, it is recommended that all new diagnosed cases of schizophrenia have access to CSC and length of stay should be anticipated to be approximately one year.

When treated with a CSC model, teams typically have a caseload of approximately 120 individuals, depending on the available staffing and population needs. Staffing for a CSC program may include:

Team composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Psychiatrist
- 3 Counselors/Case Managers
- 2 Social Workers
- 1 Peer Support Specialist
- 1 Education Support Specialist
- 1 Prescriber (Advance Practice Nurse or Psychiatrist, 0.2 FTE)

To provide services to 100,000 individuals with schizophrenia, the behavioral health workforce would need 833 teams (1 team/120 individuals X 833 teams/100,000 individuals) when one team manages a caseload of 120 individuals. In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 1,124 Supervisors, 1,124 Psychiatrists, 3,374 Counselors, 2,249 Social Workers, 1,125 Peer Support Specialists, 1,125 Educational Support Specialists, and 225 Prescribers.

**6. Certified Community Behavioral Health Clinics (CCBHCs) and Community Mental Health Centers (CMHCs): *what is the projected number of behavioral health providers needed to treat an estimated 12,081,000 individuals diagnosed with SMI including major depression, bipolar disorder, schizophrenia and other severe mental illnesses?***

Individuals diagnosed with SMI need ongoing access to treatment at CCBHC/CMHC. These individuals will also have additional need for specialty treatment services at various points of time depending on the severity and course of their illness. Based on estimates in the scientific literature, it is projected that 12,081,000 individuals with SMI will need services in these treatment settings. This is based on the following research:

- a. 11.4 million individuals with major depression, bipolar disorder or schizophrenia<sup>41</sup>
- b. 325,000 homeless individuals with these illnesses<sup>42</sup>
- c. 356,000 individuals with these illnesses who are in jail or prison<sup>43</sup>

Note: b and c populations are not accounted for in the National Survey on Drug Use and Health which estimates mental and substance use disorders in household residents of the United States

In the CCBHC model, teams are required to have a psychiatrist as medical director (or psychiatric nurse practitioner in designated shortage areas); a medically trained behavioral health care provider who can prescribe and manage medications independently under state law; credentialed SUD specialists; and, licensed counselors with expertise in addressing trauma and promoting the recovery of children and adolescents with SED, as well as adults with SMI and SUDs.<sup>24</sup>

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Psychiatrist
- 4 Counselors/Case Managers
- 4 Peer Support Specialists
- 1 Nurse

One team consisting of the above professions listed will be needed to care for an average of 200 individuals diagnosed with SMI.

To provide services to 12,081,000 individuals diagnosed with SMI, the behavioral health workforce would need 60,405 teams (1 team/200 individuals X 60,405 teams/12,081,000 individuals). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 81,547 Supervisors, 81,547 Psychiatrists, 326,187 Counselors/Case Managers, 326,187 Peer Support Specialists, and 81,547 Nurses.

**7. Inpatient Care Hospitals and Psychiatric Hospitals: *what is the projected number of behavioral health providers needed to treat an estimated 1.8 million individuals diagnosed with a mental disorder and/or a co-morbid SMI/SUD?***<sup>44</sup>



Hospital stays in the U.S. for individuals with SMI and SMI that co-occurs with SUDs have been increasing and are estimated to be 6.7% of all hospital stays annually (approximately 1.8 million). The average length of stay for these admissions is 6.6 days.<sup>45</sup> Therefore, 1.8 million hospital stays will require the behavioral healthcare teams described below. The estimated number of healthcare providers needed is calculated based on the number of individuals requiring acute care hospitalization.

One example of a hospital-based team is the Oklahoma HealthCare Authority's minimum inpatient staffing requirements for therapeutic services delivered in these inpatient settings. They include a psychiatrist, a licensed mental health professional (LCSW, psychologist, LPC, MFT, alcohol/drug counselor, or certified psychiatric APN), a registered nurse with at least two years' experience in a mental health setting, a nursing tech/aid, and a part-time dietitian.<sup>46</sup>

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTE:

- 1 Psychiatrist
- 1 Counselor/Case Managers
- 3 Nurses
- 3 Nursing Tech/Aides
- 1 Peer Support Specialist

Weekend Coverage:

- 2 Nurses (0.6 FTE)
- 2 Nursing Tech/Aides (0.6 FTE)
- 2 Counselors/Case Managers (0.6 FTE)

One team can manage a caseload of patients occupying 8 beds for 52 weeks/year (an anticipated caseload of 416 patients/year/team), based on 2019 personal communication with Psychiatric Physician at OCMO/SAMHSA.

To provide services to 1.8 million individuals diagnosed with a mental disorder or a mental disorder with a co-morbid SUD, the behavioral health workforce would need 4,327 teams (1 team/416 individuals x 4,327 teams/1,800,000 individuals). In terms of FTEs per profession and accounting for absenteeism and/or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 5,841 Psychiatrists, 5,841 Counselors/Case Managers, 17,524 Nurses, 17,524 Nursing Tech/Aides, and 5,841 Peer Support Specialists. For weekend coverage, in addition to FTE, the behavioral health workforce would need 5,192 Nurses, 5,192 Nursing Tech/Aides, and 5,192 Counselors/Case Managers.

**8. Long-term Acute Care Hospitals (LTACHs): *what is the projected number of behavioral health providers needed to treat/staff an additional 127,521 beds designated for individuals diagnosed with SMI?***

State hospitals care for approximately 37,679 individuals with SMI.<sup>47</sup> However, it is estimated that 50 state hospital beds are needed per 100,000 people to meet demand.<sup>47</sup> According to the US Census Bureau, there were 255,042,109 adults aged 18 and over in 2019.<sup>48</sup> Therefore, we would need an additional 127,521 beds (255,042,109 adults/100,000 people X 50 state hospital beds).

The Washington Department of Social & Health Services' Clinical Model Analysis for State Hospital minimum requirements assumes the current 28-30 beds model. Staffing includes psychiatrists, licensed nurses (RN and LPN), social workers, and mental health technicians.<sup>49</sup> Therefore, it is assumed the team ratio is one team to 30 beds. Given these requirements, it is projected that the number of behavioral health providers needed to treat/staff 165,200 (37,679 + 127,521) beds designated for those with SMI as follows:

Team Composition based on one team for a 30-patient unit (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020):

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 2 Psychiatrists
- 1 Psychologist
- 1 Counselor/Case Manager
- 2 Social Workers
- 9 FTE Nurses (10 patients/nurse)
- 17 Mental Health Technicians/Nurse Technicians
- 1 Peer Support Specialist (can handle the entire team since many will be very long-term patients)

Weekend Coverage:

- 3.6 FTE Nurses

To provide services to individuals with SMI in 165,200 beds, the behavioral health workforce would need 5,507 teams (1 team/30 beds X 5,507 teams/165,200 beds). In terms of FTE per professions and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 7,434 Supervisors, 14,869 Psychiatrists, 7,434 Psychologists, 7,434 Counselors/Case Managers, 14,869 Social Workers, 66,910 Nurses, 126,386 Mental Health Technicians/Nurse Technicians, and 7,434 Peer Support Specialists. For weekend coverage, in addition to FTE, the behavioral health workforce would need 26,764 Nurses.

**9. Supported Living Communities: *what is the projected housing demand and number of behavioral health providers needed to treat an estimated 868,350 individuals diagnosed with SMI?***

It is estimated that the need for housing options as part of the therapeutic treatment plan for individuals with SMI will be greater than 1 million. The Treatment Advocacy Center estimates that at least 325,000 homeless individuals are seriously mentally ill.<sup>42, 50</sup> Furthermore, there are 1.8 million acute psychiatric hospitalizations every year for SMI. Also, 356,000 individuals with SMI are incarcerated.<sup>43</sup>

If it is conservatively estimated that 35% of these individuals will need therapeutic housing options, then the annual number of individuals needing supportive housing is: 113,750 (homeless with SMI), 630,000 discharged from acute care hospitals, and 124,600 released from jails/prisons. Therefore, the total number of individuals with SMI who will need housing is: 868,350 (113,750 +630,000+124,600).

In the Supported Living Communities model of care, teams of behavioral health providers will include a psychiatrist, nurses, mental health and SUD licensed counselors, and case managers.

#### Team Composition<sup>51</sup>

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Psychiatrist\*
- 8 Counselors/Case Managers\*
- 2 Nurses
- 9 Behavioral Health Technicians/Aides
- 5 Peer Support Specialists (approximately 25 patients per peer)

To provide services to 868,350 individuals with SMI, the behavioral health workforce would need 6,432 teams (1 team/135 SMI patients X 6,432 teams/868,350 SMI patients). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 8,683 Supervisors, 8,683 Psychiatrists, 69,466 Counselors/Case Managers, 17,366 Nurses, 78,149 Behavioral Health Technicians/Aides, and 43,416 Peer Support Specialists. \*In comparison, a team with minimal staffing would have a (0.5 FTE) Psychiatrist and 2 Case Managers (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020). Calculation for minimal staffing was not performed.

#### ESTIMATES OF THE NUMBER OF BEHAVIORAL HEALTH PROVIDERS NEEDED TO ADDRESS SERIOUS EMOTIONAL DISTURBANCE (SED)/SERIOUS MENTAL ILLNESS (SMI) IN CHILDREN AND YOUTH

In 2018 it was estimated that there were 73,433,138 children in the U.S.<sup>52</sup> The prevalence of SED among children was reported to be 10.06%.<sup>53</sup> Therefore, it is estimated that 7,387,373 children would be diagnosed with SED and for many SED will become a SMI. However, only about 50% or 3,693,687 youth with SED receive any mental health treatment within a one-year period.<sup>54</sup> The following are estimates of behavioral health providers needed to serve children and

their families with SED/SMI in some of the most frequently utilized treatment modalities at the present time.

**10. Children/Youth Intensive Outpatient Program (IOP): *what is the projected number of behavioral health providers needed to treat an estimated 3,693,687 children diagnosed with SED?***

The patient to [alcohol and drug] counselor ratio may not exceed 15 patients to one full-time [alcohol and drug] counselor.<sup>13, 38</sup> (With five counselors, we estimate the staff-to-patient ratio as one team to approximately 75 patients.)

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Child Psychiatrist, (0.5 FTE)
- 5 Counselors/Case Manager
- 3 Peer Support specialists (Lived Experience)
- 1 Psychologist
- 1 Prescriber (Advance Practice Nurse or Psychiatrist, 0.5 FTE)

To provide services to 3,693,687 individuals diagnosed with SED in one year, the behavioral health workforce would need 49,249 teams (case managers/counselors/75 patients X 49,249 teams/3,693,687 patients). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 66,489 Supervisors, 33,243 Child Psychiatrists, 332,431 Counselors/Case Managers, 199,458 Peer Support Specialists, 66,489 Psychologists, and 66,489 Prescribers.

**11. Children/Youth Inpatient Care Hospitals and Psychiatric Hospitals: *what is the projected number of behavioral health providers needed to treat an estimated 1,218,917 individuals diagnosed with SED?***

In general, of children with SED/SMI receiving care, about 33% receive mental health care in hospital inpatient facilities.<sup>55</sup> To account for the 3,693,687 children with SED being treated in a year, it is assumed that 33% of these individuals with SED will need inpatient care, which is 1,218,917 children.

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs: (One team can manage a caseload of patients occupying 8 beds for 52 weeks/year (an anticipated caseload of 200 patients/year/team if the average length of stay is one week).

- 1 Child Psychiatrist

- 1 Counselor/Case Manager
- 3 Nurses
- 3 Nursing Tech/Aides
- 1 Peer Support Specialist (Lived Experience)

Weekend Coverage:

- 2 Nurses (0.6 FTE)
- 2 Nursing Tech/Aides (0.6 FTE)
- 2 Counselors (0.6 FTE)

To provide inpatient care services to 1,218,917 individuals diagnosed with SED, the behavioral health workforce would need 6,095 teams (1 team/200 patients x 6,095 teams/1,218,917 patients). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 8,228 Child Psychiatrists, 8,228 Counselors, 24,685 Nurses, 24,685 Nursing Tech/Aides, and 8,228 Peer Support Specialists. For weekend coverage, the behavioral health workforce would need 9,874 Nurses, 9,874 Nursing Tech/Aides, and 4,747 Counselors.

**12. Youth Residential Treatment: *what is the projected number of behavioral health providers needed to treat an estimated 184,684 children diagnosed with SED?***

Among youth receiving care for SED, about 5% are served in residential care programs.<sup>55</sup> To account for the 3,693,687 children with SED being treated in a year, it is assumed that 5% of these individuals with SED will need inpatient care for a total of 184,684 children.

The behavioral health providers needed to treat these children may include, but are not be limited to a psychiatrist, a physician (board certified pediatrician or family practitioner), a psychologist, a registered nurse, a psychiatric advance practice nurse, a social worker, and a counselor.<sup>56, 57</sup>

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020):

FTEs:

- 1 Child Psychiatrist (0.5 FTE)
- 1 Psychologist
- 1 Nurse
- 5 Nurse Technicians/Aides
- 1 Social Worker
- 2 Counselor/Case Manager
- 1 Peer Support Specialist (Lived Experience)

To provide services to 184,684 children with SED, the behavioral health workforce would need 4,735 teams (1 team/39 children with SED X 4,735 teams/184,684 children with SED). The team

ratio is 1 team to 39 individuals (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020). In terms of FTEs and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 3,196 Child Psychiatrists, 6,392 Psychologists, 6,392 Nurses, 31,961 Nurse Technicians/Aides 6,392 Social Workers, 12,785 Counselors, and 6,392 Peer Support Specialists.

**13. Children and Youth School-Based Mental Health Services: *what is the projected number of behavioral health providers needed to treat an estimated 1,900,736 children with SED in schools?***

The Department of Education projects 56.4 million students will attend school in the United States in 2020.<sup>58</sup> Of these students, 10.06%<sup>53</sup> (or 5,673,840 will have SED/SMI and about 50%<sup>54</sup> or 2,836,920 students with SED will receive any mental health treatment within a one-year period. It has been estimated that of those children that actually receive mental health services about two thirds do so in schools.<sup>59</sup> Increasingly, schools represent an important resource for child mental health services for those children with significant mental health issues, but who are able to continue to attend public school. SAMHSA encourages the integration of mental health services into the public-school system with resources available through Project AWARE and the Children’s Mental Health Initiative funding. However, behavioral health providers for school-based services for children and their families continue to be a major need nationally.

At a minimum, qualified behavioral health staff should be available in all public schools to provide assessment and, in acute instances of need, triage to appropriate services. These providers should provide counseling and other therapeutic interventions for affected children and their families. Also important to children’s mental health services in schools is the presence of behavioral health aides who may also be peer providers to assist with supporting mental health needs of children in the classroom and other school-based settings. The establishment of these school-based services at adequate staffing levels is critical to prevention of serious mental health issues for millions of children and to mitigating the severity of SMI/SED in affected children.

It is estimated that 1,900,736 children or 67% of children with SED that receive their treatment in school settings will benefit from school-based behavioral health staff. Further, these staff will be important to addressing mental health needs of children with mental health issues that have not advanced to the point of being termed “SED” and potentially diminishing the number of children who develop SED/SMI.

The estimates include providers who will be present in schools and those who may provide services via other means including telehealth services.

Team Composition treating 200 students (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020):

FTEs:

- 1 Child Psychiatrist
- 1 Psychologist (0.5 FTE)
- 1 Social Worker
- 10 Behavioral Health Aides/Peer Support Specialists

Depending on state regulations, Nurse Practitioners, Advance Practice Nurses, and Physician Assistants can serve as a mental health prescriber.

To provide mental health services in schools to 1,900,736 students with SED, the behavioral health workforce would need 9,504 teams (1 team/200 students with SED X 9,504 teams/1,900,736 students with SED). The team ratio is 1 team to 200 students (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020). In terms of FTEs and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 12,830 Child Psychiatrists, 6,415 Psychologists, 12,830 Social Workers, and 128,304 Behavioral Health Aides or Peer Support Specialists. For the purposes of accounting in the table below, it assumes a 50/50 split for Behavioral Health Aides and Peer Support Specialists.

### **III. Projected Estimate of the Number of Behavioral Health Providers Needed to Treat Individuals Diagnosed with Substance Use Disorder**

The third section of this document estimates the number of behavioral health providers needed to treat individuals in the United States diagnosed with SUD. Several factors are considered in estimating the number of providers and calculating the number of individuals diagnosed with SUD as discussed below.

SUD was estimated to affect 7.8 percent of the population or approximately 19.3 million adults in the United States aged 18 or older in 2018.<sup>41</sup> Of these adults, 1.9 million had an opioid use disorder (OUD).<sup>41</sup> Like, severe mental illness, it was conservatively estimated that 25% of those with SUD would be severe cases that would require specialty treatment, using a number that subtracts the number with OUD from the total; i.e.  $19.3M - 1.9M = 17.4M (.25) = 4,350,000$ . Furthermore, we can assume that all with OUD need treatment.

NSDUH collects information on the receipt of any substance use treatment and the receipt of substance use treatment at a specialty facility. Receipt of any substance use treatment includes substance use treatment received in the past year at any location, such as a residential/rehabilitation inpatient facility. Approximately 921,000 people aged 18 or older in 2018 received substance use treatment at a rehabilitation inpatient facility.<sup>41</sup>

Several treatment modalities, described in the first section of this document, are used to project the number of clinical behavioral health providers needed to treat the estimated number of individuals with severe SUD.

- The first treatment modality -- Intensive Outpatient Program -- *focuses on the number of behavioral health providers needed to treat an estimated 4.35 million individuals diagnosed with SUD<sup>41</sup> as well as an estimated 362,438 who receive Office-Based Opioid Treatment (OBOT) from primary care providers who are not able to provide the necessary psychosocial supports to accompany the prescribed medication assisted treatment for OUD. Instead these patients would receive those supportive services within the IOP setting.*
- The second treatment modality -- Residential Program -- *addresses the number of behavioral health providers needed to treat an estimated 921,000 individuals diagnosed with severe SUD.<sup>41</sup>*
- The third treatment modality -- Opioid Treatment Programs -- *focuses on the number of behavioral health providers to treat 450,247 individuals diagnosed with severe OUD with methadone.<sup>41, 60</sup>*

## **1. Intensive Outpatient Program (IOP):**

***a. what is the projected number of behavioral health providers needed to treat an estimated 4,350,000 individuals diagnosed with severe SUD?***

The patient to [alcohol and drug] counselor ratio may not exceed 15 patients to one full-time [alcohol and drug] counselor.<sup>13, 38</sup> (With five counselors, it is estimated the staff-to-patient ratio as one team to approximately 75 patients.)

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 5 Counselors/Case Manager
- 1 Prescriber (Advance Practice Nurse or Addiction Psychiatrist/Addiction Medicine Specialist Physician, 0.5 FTE)
- 3 Peer Support Specialists

To provide services to 4,350,000 individuals diagnosed with SUD in one year, the behavioral health workforce would need 58,000 teams (1 team/75 patients X 58,000 teams/4,350,000 patients). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 78,300 Supervisors, 391,500 Counselors, 39,150 Prescribers, and 234,900 Peer Support Specialists.

***b. what is the projected number of behavioral health providers needed to treat an estimated 362,438 individuals diagnosed with OUD who currently receive office based opioid treatment (OBOT), but also require intensive outpatient (IOP) care?***



Some individuals with OUD receive OBOT only, which may not provide psychotherapeutic intervention. However, it is assumed that individuals who currently receive OBOT for OUD will need psychosocial therapy and/or other recovery supports based on individual assessment.

Of the 1.9 million who had an OUD, 450,247 individuals were treated with methadone.<sup>41, 60</sup> As a result, 1,449,753 of the 1.9 million with an OUD will receive treatment outside of the OTP setting. It is conservatively estimated that 25% of these individuals or 362,438 individuals will require specialty care at an IOP. The other 1,087,315 individuals would receive outpatient care including OBOT and other outpatient substance use disorder treatment services. To treat these 1,087,315 individuals, an estimated 21,750 counselors would be needed (1 Counselor/50 Patients X 21,750 Counselors/1,087,315 Patients).<sup>38</sup> To note, this estimate is not included in the calculation below as it is not in specialty care based in an IOP.

For the IOP calculation, the patient to [alcohol and drug] counselor ratio may not exceed 15 patients to one full-time [alcohol and drug] counselor.<sup>13, 38</sup> (With five counselors, it is estimated the staff-to-patient ratio as one team to approximately 75 patients.)

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 5 Counselors/Case Manager
- 1 Prescriber (Advance Practice Nurse or Addiction Psychiatrist/Addiction Medicine Specialist Physician, 0.5 FTE)
- 3 Peer Support Specialists

To provide services to 362,438 individuals diagnosed with OUD in one year, the behavioral health workforce would need 4,833 teams (1 team/75 patients X 4,833 teams/362,438 patients). In terms of FTEs per profession and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 6,525 Supervisors, 32,623 Counselors, 3,262 Prescribers, and 19,574 Peer Support Specialists.

## **2. Residential Program: *what is the projected number of behavioral health providers needed to treat an estimated 921,000 individuals diagnosed with SUD?*<sup>41</sup>**

To be eligible for medical assistance or reimbursement, the hospital, nursing facility, or other institution primarily engaged in providing diagnosis, treatment, or care of persons with mental diseases, including medical attention, nursing care, and related services, i.e. substance use, must be of no more than 16 beds unless the facility has applied for and obtained an 1115 waiver to lift

the IMD exclusion on these facilities from the Centers for Medicare and Medicaid Services.<sup>61</sup> It is assumed a team would be able to treat 15 patients.

Team Composition (Psychiatric Physician, OCMO/SAMHSA personal communication, 2020)

FTEs:

- 1 Physician (either Addiction Psychiatrist or Addiction Medicine Specialist)
- 1 Counselor/Case Manager
- 1 Psychologist
- 3 Nurses
- 3 Nurse Tech/Aides
- 1 Social Worker/Case Manager
- 1 Peer Support Specialist

Weekend Coverage:

- 2 Nurses (0.6 FTE)
- 2 Nurse Tech/Aides (0.6 FTE)
- 2 Counselors/Case Manager (0.6 FTE)

To provide services to 921,000 individuals with SUD, the behavioral health workforce would need 61,400 teams (1 team/15 patients X 61,400 teams/921,000 patients). In terms of FTEs and accounting for absenteeism and or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 82,890 Physicians, 82,890 Counselors/Case Managers, 82,890 Psychologists, 248,670 Nurses, 248,670 Nurse Tech/Aides, 82,890 Social Workers, and 82,890 Peer Support Specialists. For weekend coverage, the behavioral health workforce would need 99,468 Nurses, 99,468 Nurse Tech/Aides, and 99,468 Counselors/Case Managers.

For the purposes of calculating the behavioral health workforce needs, the number of Physicians calculated for this treatment model as well as the subsequent exercise was estimated as follows: 50% Addiction Psychiatrist and 50% Addiction Medicine Specialist Physicians. Totals for each profession can be found below in Section IV of the report.

**3. Opioid Treatment Program (OTP) or Substance Use Disorder Specialty Program: *what is the projected number of behavioral health providers needed to treat 450,247 individuals diagnosed with OUD with methadone?*<sup>41, 60</sup>**

In addition to methadone, OTPs also provide buprenorphine and injectable naltrexone, but buprenorphine and injectable naltrexone can also be prescribed via office-based treatment. Since OTPs are the only entity to prescribe methadone, this calculation is focused only on methadone treatment for OUD. In addition, focusing on methadone allows the generation of a more conservative minimum estimate of the number of needed providers.

Team Composition<sup>9</sup>

FTE:

- 1 Supervisor (Master or Doctorate level, can be a Psychologist, Counselor or Social Worker)
- 1 Physician (either Addiction Psychiatrist or Addiction Medicine Specialist)
- 1 Nurse (RN or Advance Practice Nurse)
- 2 Counselors (Licensed Counselors and or Alcohol/Drug Counselors)/Case Managers
- 2 Peer Support Specialists

The staff model reflects a common core of staff. Depending on state regulations, other professions, such as Licensed Practical Nurses or pharmacists, may be employed. In addition, mid-level providers such as a Physician Assistants and Advance Practice Nurses may work under a physician. There are no set patient-to-staff ratios specified in the federal regulations, but states have set their patient-to-staff ratios.<sup>9</sup> For example, in Mississippi the OTP must employ at least one full time RN for the first 100 or fewer individuals.<sup>62</sup>

To provide services to 450,247 individuals with OUD, the behavioral health workforce would need 4,502 teams (1 team/100 OUD patients X 4,502 teams/450,247 OUD patients). The team ratio would be 1 team to 100 patients, assuming the team ratio only includes 1 nurse. In terms of FTEs and accounting for absenteeism and/or time off by multiplying each provider total by 1.35, the behavioral health workforce would need 6,078 Supervisors, 6,078 Physicians, 6,078 Nurses, 12,155 Counselors/Case Managers, and 12,155 Peer Support Specialists.

#### **IV. Behavioral Health Workforce Supply and Demand**

The table below summarizes the most recent numbers for the different occupational categories within the behavioral health workforce. The numbers are derived from five different sources: the American Medical Association Masterfile (AMA Masterfile), Texas Institute for Excellence in Mental Health, National Sample Survey of Registered Nurses (NSSRN), and the Bureau of Labor Statistics (BLS) Occupational Employment Statistics, as described below. Each of these data sets has varying strengths and weaknesses that are described at the end of this section. Other key considerations when interpreting the data table are also provided.

Occupation	Number in Workforce	Data Source	Number of Workforce Need Calculated		Additional needed to care for SMI/SUD population
			SMI/SED	SUD	
Psychiatrists (General)	33,364 – 38,205	AMA Masterfile, 2017	143,910	--	105,705-110,546
Addiction Psychiatrists	1,164	AAAP	--	44,484	43,320
Addiction Medicine Specialist Physicians	3,171	ABMS	--	44,484	41,313
Child and Adolescent Psychiatrists	8,181 – 9,204	AMA Masterfile, 2017	57,497	--	48,293 – 49,316
Psychologists (in behavioral health settings)	28,630	BLS Occupational Profile, 2019	195,590	128,342	295,302
Counselor (Behavioral Health)	283,540	BLS Occupational Profile, 2019	1,078,407	641,361	1,436,228
Social Workers (Behavioral Health) or Case Workers	117,770	BLS Occupational Profile, 2019	108,769	105,615	96,614
Nurses (Psychiatric Or Behavioral Health and Counseling)	110,275	NSSRN (2019)	304,541	354,216	548,482
Prescriber (Mid-level profession, e.g., Physician Assistant/Advanced Practice Nurse)	17,507	NSSRN (2019)	79,262	42,412	104,167
Peer Support Specialist	23,507	Texas Institute for Excellence in Mental Health, 2017	777,326	349,519	1,103,338
Nurse Assistant/Tech/Aides (in behavioral health settings)	11,730	BLS Occupational Profile (2019)	215,622	348,138	552,030
Psychiatric or Behavioral Health Technicians/Aides	43,880	BLS Occupational Profile (2019)	150,089	--	106,209
Education Support Specialist	1,320	BLS Occupational Profile (2019)	1,125	--	--
Total Behavioral Health Practitioners Necessary to Meet Current Needs					4,486,865

*Key Considerations When Interpreting the Table*

- SMI/SED workforce estimates use the following assumptions: all 12,081,000<sup>41, 42, 43</sup> individuals diagnosed with major depression, bipolar disorder or schizophrenia will receive care at a CCBHC or CMHC; there are 1,800,000<sup>44</sup> acute psychiatric hospitalizations every year for SMI; and an additional 127,521<sup>47,48</sup> state hospital beds are needed to treat severe, unremitting mental illness in LTACH settings (state hospitals for care of those with long term severe illness preventing community-based treatment).
- In addition, 1 million individuals with schizophrenia will also need ACT/AOT services, partial hospitalization, intensive outpatient treatment, crisis mobile services, and supported living services. The approximately 100,000<sup>40</sup> per year newly diagnosed individuals with schizophrenia will need to receive coordinated specialty care and providers needed for this population were also calculated and are part of the total number of behavioral health providers needed.
- For children with SED, these estimates assume 3,693,687<sup>52, 53, 54</sup> will need intensive outpatient treatment, 1,218,917<sup>52, 53, 54, 55</sup> will need inpatient care, and 184,684<sup>52, 53, 54, 55</sup> will need youth residential treatment.
- SUD workforce estimates used the following assumptions: 4,350,000 individuals diagnosed with severe SUD will receive intensive outpatient treatment, 921,000<sup>41</sup> will receive residential program services, and 450,247<sup>41, 60</sup> individuals with OUD will participate in an OTP treated with methadone. An additional 362,438 individuals diagnosed with OUD will receive office based opioid treatment.
- Approximately 1,087,315 individuals with OUD would receive standard care. To treat these individuals, an estimated 21,750 counselors would be needed. This is not reflected in the table because these counselors would not be in specialty care like IOP.
- SMI/SED and SUD workforce estimates were also multiplied by a factor of 1.35 to account for absenteeism or time-off.
- Data on many key behavioral health workforce members, such as peer support specialists and community health workers, is very limited but a focus of ongoing research.
- The table does not list the 308,622 Supervisors calculated (217,719 for SMI/SED and 90,903 for SUD). However, Supervisors have been accounted for in the table by profession. Half of the total Supervisors calculated for each column (SMI/SED vs SUD) have been included as Psychologists. The remaining half were divided between Counselors and Social Workers, again in each column (SMI/SED vs. SED).
- The table does not list the 88,968 Physicians calculated for the SUD column. One half of Physicians are classified as Addiction Psychiatrists while the other half was classified as Addiction Medicine Specialist Physicians.
- Prescribers in the calculation exercise found in the previous sections can be either Advance Practice Nurses or Psychiatrists for the SMI, SED, or SUD models of care. Addiction Medicine Specialist physicians can also be prescribers in SUD programs. However, for the table above, Prescribers are identified as Advance Practice Nurses. Additional research for this occupation has been requested from a SAMHSA grantee and will be completed in the second year of the grant award when they are able to obtain additional data sources.
- A percentage of clinicians are not practicing albeit they are licensed to practice.

- A percentage of clinicians do not accept public insurance (e.g., Medicaid and/or Medicare) or work in government sponsored programs.
- State laws may differentially determine the types of behavioral health licenses/credentials, scopes of practice, patient caseloads, etc.
- When comparing to current workforce capacity, there is an assumption that current workforce is and future workforce will practice near capacity.

### *Secondary Data Sources for Supply of Behavioral Health Practitioners*

1. **American Medical Association (AMA) Masterfile** – The AMA Masterfile is a widely used data base maintained by the AMA of all physicians who have ever been licensed to practice medicine in the U.S. The AMA attempts to maintain up-to-date data on activity status but there are notable gaps including delays in reporting when physicians reduce hours, stop seeing patients, or retire. When IQVIA provider level pharmacy data are analyzed, it will be possible to track those actively prescribing behavioral health related medications as recently as 2019 and therefore provide a better reflection of the currently active workforce.
2. **Bureau of Labor Statistics (BLS)** – BLS collects profession level counts and salary information. Data are available to download from the website [BLS.gov/OOH](https://www.bls.gov/oooh). However, BLS does not have names or unique identifiers of individuals and provides only aggregated information. BLS data are available on the following MH/SUD professions: psychiatrists, primary care providers (family medicine, internal medicine, pediatricians, ob/gyn, nurse practitioners and physician assistants), psychologists, MH/SUD counselors, marriage and family therapists, MH/SUD social workers, and community health workers.
3. **2019 National Sample Survey of Registered Nurses (NSSRN)** – The NSSRN is the longest running survey of registered nurses (RNs) in the United States. Over 50,000 were surveyed in 2019. The data is weighted to be nationally representative and includes nurse practitioners and certified nurse specialists. Respondents were asked about clinical specialty area allowing analysis of those with a clinical specialty area of psychiatry.
4. **Texas Institute for Excellence in Mental Health** - Researchers from the Texas Institute for Excellence in Mental Health at the University of Texas Austin collected data about existing peer specialist training and certification (PSTC) programs in the United States. The data was collected by reviewing online resources from states, contracted trainers, and email and phone exchanges between the researchers and contacts from states' programs. The researchers conducted initial internet searches to obtain information published online regarding each state's PTSC program as well as contact information for representatives of each state's program from the official websites. A survey of state contacts was also conducted to gather information about the number of peer specialists currently trained and certified in each state. These counts are likely an undercount of the total peer support specialist workforce as it only includes those who are certified.
5. **American Board of Medical Specialties (ABMS)**, a nationally recognized not-for-profit organization, serves the public and the medical profession by improving the quality of

health care through setting professional standards for medical specialty practice and certification in partnership with its 24 certifying Member Boards.

6. **American Academy of Addiction Psychiatry (AAAP)** is an academic society organization, who have an interest in preventing and treating substance use disorders and co-occurring mental disorders.

## **Recommendations**

1. Develop and implement a national campaign to educate the public about the need for behavioral health providers and encourage students to pursue careers in behavioral health.
2. Provide funding to healthcare practitioner education programs to embed information on care and treatment of serious mental illness and substance use disorders into standard undergraduate curriculum.
3. Encourage clinical placements/practicums in mental health and substance use disorder settings to increase the knowledge base of practitioners in behavioral health services.
4. Increase loan forgiveness programs for all behavioral health specialties to encourage entry to the field.
5. Increase the peer professional workforce and make these providers an integral component of behavioral health services. Require insurers to reimburse for peer professional services

## **Conclusion**

This paper has reviewed national need for healthcare providers who can deliver services for individuals suffering from serious mental illness and severe substance use disorders. The document starts with the conservative premise that 1 million of the nearly 3 million individuals in the United States with schizophrenia will need mental health services. This value is used to estimate the numbers of provider types needed for each type of behavioral health service. The service types and numbers of individuals served by providers in each setting has been determined by review of the published literature. While the 1 million on whom the analysis of treatment provider need has been calculated do not need all of these services all the time; those with serious mental and substance use disorders will frequently need changes in level of care as their clinical needs change. Further, the National Survey on Drug Use and Health has consistently shown that the majority of those in need of treatment for mental and substance use disorders are not served.<sup>41, 63, 64</sup> This yearly public health surveillance instrument also showed that in 2018 there were 57.8 million Americans with mental and/or substance use disorders, while in 2019 this number increased to 61.2 million. These findings underscore the urgent need to address the over 4 million provider shortage for behavioral health services in America. The ability of Americans to access appropriate treatment and community recovery resources is critical to

improving the overall health of our citizens and reducing the impact of mental and substance use disorders on individuals, families and communities.

The discussion of the behavioral health workforce should also take into account the important role of peers in the treatment and the recovery process. Recently, there has been an emergence of recovery support centers or “recovery cafes” that encourage peers to support those in treatment. Recovery support centers may also provide critical services for individuals in recovery such as food, social support, access to housing, recovery education, and referrals to more specialized services.<sup>65</sup> In order to ensure that clients remain in treatment and can fully engage in productive activities, peer support should be a critical part of the behavioral health team and represent a major workforce need.

Finally, the need to expand the behavioral health workforce should also consider the expanding role of telemedicine. Specifically, telemedicine aims to deliver healthcare services by permitting two-way, real time interactive communication between the patient, and the physician or practitioner at the distant site.<sup>66</sup> In 2020, the expansion of telemedicine has broadened access to Medicare telehealth services so that beneficiaries can receive a wider range of services from their providers without having to travel to a healthcare facility including specialty care.<sup>67</sup> The expansion of telemedicine may facilitate access to treatment with fewer barriers related to both transportation and stigma, thereby, facilitating treatment services for substance use and mental health conditions.



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