



Adult Residential Mental Health Care Study Report

DHS Contract No. #120923-5

September 2010

Presented by:

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EXECUTIVE SUMMARY

The Oregon Department of Human Services, Addictions and Mental Health Division (AMH), contracted with Acumentra Health to conduct a statewide study of adult residential mental health services. The study was initiated to examine the types of treatment provided to residents, and to determine whether residents were receiving care at the appropriate level in the appropriate type of facility. The study also identified potential barriers to independent living that residents may face.

AMH sought to generate valuable information on how adult mental health residential services are utilized and integrated into the broader array of services available to Oregon Health Plan (OHP) members. This study was initiated to determine whether people are moving through the residential system into lower levels of care, or rather staying at the same level of care. The results will help guide AMH's planning for future utilization and delivery of adult residential mental health services.

From March through July 2010, Acumentra Health staff visited 99 facilities, including adult foster homes, residential treatment homes, residential treatment facilities, and secure residential treatment facilities, with a total of 506 residents. The study team interviewed residents, reviewed residents' clinical records, and surveyed providers in order to address the following study questions:

1. Are residents at the correct level of care?
2. Is the resident ready to be at a lower level of care?
3. If other options were available, could the resident move to a lower level of care?
4. What treatment services are offered at each level of care to help residents move to a lower level of care?
5. Are treatment services individualized for each resident?
6. Are residents more functional and more independent as a result of the treatment services?

This report presents the study results and Acumentra Health's quantitative and qualitative analysis of the data relevant to each of the six questions.

Overview of Study Results

The purpose of Oregon's residential mental health system is to provide a community-based alternative to long-term institutionalization. In this study, Acumentra Health found that the system generally is succeeding in this goal. Residents have benefitted from the residential treatment services, and most are

stabilized and reported satisfaction with services. However, there is little evidence to suggest that residents, on the whole, progress through the residential system to less intensive settings toward independent living.

In this report, Aumentra Health addresses each of the six study questions using indicators described in the Study Components section. The report describes the number, frequency, and types of services provided by each facility type; evidence of individualized treatment plans and discharge/transition planning; and self-reports on services provided and expected levels of functioning from a survey of providers. Aumentra Health combined these results and observations made by reviewers in the field to answer the questions as completely as possible.

Aumentra Health found that, overall, only 26% of residents are at the appropriate level of care as indicated by facility type. These residents demonstrate the need for ongoing placement at the same level as it meets their long-term clinical needs. By comparison, about 60% of residents seem capable of transitioning into a lower level of care or into independent living. This high percentage could reflect the success of their current services; however, transitioning residents to lower levels of care and eventually out of the system does not appear to be a focus of the residential care system. A lack of discharge/transition services across all facility types in the residential system means that, although many residents could be at a lower level of care, they have not been prepared and are not ready for the transition. In the provider survey, responders cited the lack of available options and resident reluctance as primary barriers to moving residents to lower levels of care.

Overall, there seemed to be minimal service provision across all levels of care. During the six-month study period, many residents received few to no services (or if they did, the services were not documented; documentation practices varied widely between and within facility types). The main services provided were skills training and group activities, not intensive mental health treatment such as psychotherapy, prescriber visits, and case management. This suggests that the main focus of residential treatment is daily structure and support rather than comprehensive mental health treatment.

Both between and within facility types, there was profound variation in service provision and treatment strategy. Aumentra Health also found that the distinctions between the levels of care are unclear in terms of roles and services provided. There was little distinction between the highest and second-highest levels of care: secure and non-secure residential treatment facilities (SRTFS and RTFs). In some areas, distinctions between the higher and the two lower levels of care—residential treatment homes (RTHs) and adults foster homes (AFHs)—were also difficult to ascertain. For example, SRTFs provided the most services overall, including

providing more services than one would expect the lower levels of care to provide, such as vocational/educational training.

Provider survey results indicated that their expectations did not correspond with the intended functions and roles of the facility types. In some categories, provider expectations reflected minimal distinctions in the differences between facility types, and SRTF responders actually reported higher expectations for residents' levels of functioning in some categories than did responders from lower level of care facilities. It was particularly striking that AFH facilities, the lowest level of care purportedly meant to serve as a transitional placement to independent living, expected to provide more assistance with things like medication management and food preparation than did the SRTFs.

All this suggests is that there is little guidance to support transitioning of residents into lower levels of care. In the definitions of the residential facilities, the Oregon Administrative Rules do not clearly assign levels of care to the facilities or specify transitioning residents to lower levels of care as a responsibility. Many residents would benefit from a residential track that focuses on initial stabilization followed by intensive skills building to steadily transition them into supported and/or independent living. However, many residents would not benefit from obligatory movement into a lower level of care due to the severity of their illness. They may be best served in their current residential care setting, and will require ongoing placement as an alternative to long-term institutionalization.

This points to the existence of more than one type of need being addressed in the system. Specialized services have developed within each facility type, such as single-resident RTHs and facilities for residents with chronic medical conditions, suggesting that the level of care and the facility type are not necessarily tied together, but are independent variables.

Oregon's residential system would benefit from further definition of and distinction between the levels of care and the facility types, taking into account the different treatment paths and desired goals.

INTRODUCTION

To develop more comprehensive information about residential care services statewide, the Addictions and Mental Health Division (AMH) contracted with Acentra Health to conduct a statewide study that describes residents' level-of-care needs and the treatment services they receive to meet those needs. This section presents a brief history of adult residential care in Oregon and describes the current structure of service delivery for these residents.

Adult Residential Care in Oregon

As part of the nationwide shift toward community-based treatment in the 1960s, Oregon began to establish community-based mental health treatment programs. In 1973, the Oregon legislature passed the Comprehensive Community Mental Health Program Act, which integrated the state hospitals with community programs to form a regional system. The act also encouraged counties to expand basic mental health services and develop alternatives to hospitalization by granting one-to-one matching state funds to cover the cost for most services and up to 100% state funding for defined alternatives to state hospital care.¹

Efforts continued through the 1980s to expand the community-based residential care system as an alternative to state hospitals. Since the late 1980s, the number of adults served in acute care units and intensive community and residential programs has increased dramatically.¹ Significant developments in the past two decades include the implementation of the Governor's Task Force on Inpatient Psychiatric Services Report in 1988, the creation of the Oregon Health Plan (OHP) in 1994, and the addition of mental health services to the OHP in most Oregon counties in 1995.

The 2006 *Oregon State Hospital Framework Master Plan Phase II Report* presented recommendations for the state hospital system, including expanding and enhancing community-based services.² The report states that in order for changes to the state hospital system to be successful, improvements must also be made to the community-based services (continued financial support, etc.).

¹ Oregon DHS. Overview of the Public Mental Health System in Oregon. Available at: www.oregon.gov/DHS/mentalhealth/history.shtml.

² KMD Architects with New Heights Group. *Oregon State Hospital Framework Master Plan Phase II Report*. 2006. Available at: http://www.oregon.gov/DHS/mentalhealth/osh/hospital-plan_II.pdf.

2009 AMH Evaluation of Residential Care Services

During 2009, AMH conducted a pilot study of 10 residential care facilities to determine why their residents had unusually long lengths of stay. AMH interviewed a provider at each facility and reviewed a sample of charts.

According to the 10 providers interviewed, the average occupancy rate in their facilities was 90.6%.³ Most residents had been “stepped down to” those facilities from the Oregon State Hospital or from an acute care setting.

The providers estimated that about 70% of residents are initially considered appropriate for placement. Eventually, about 15% of residents are determined to be inappropriately placed (i.e., not in the appropriate care setting). The providers also estimated that about 56% of residents eventually step down to a lower level of care; usually a private residence, supported housing, or another non-secure residential facility. Six of the 10 providers reported that the lack of availability of appropriate transition options is a major barrier to discharging residents to a lower level of care.

According to the providers interviewed, about 46% of the individuals not admitted to their facilities are excluded solely due to lack of available beds; the provider facilities had wait lists of 0–3 people.

Adult Mental Health Initiative (AMHI)

In 2010, AMH formed the Adult Mental Health Initiative (AMHI) with the mental health organizations (MHOs), community mental health programs, providers, and residents, to “develop a system that consistently assists adults with mental illness to live and receive services in the least restrictive environment appropriate for their needs.”⁴

As part of AMHI, responsibility for managing residential services will be transferred to the MHOs, and the MHOs will coordinate care for their members. The goal is to alleviate problems caused by having separate systems of community-based mental health care in Oregon: community-based long-term care and community-based services managed by MHOs. MHOs will also ensure that their members receive ongoing assessments using the Level of Care Utilization

³ Oregon Department of Human Services, Addictions and Mental Health Division. An initial evaluation of adult psychiatric residential care services: Findings based on interviews of 10 residential treatment providers and a review of the medical records of a sample of their residents - Draft. September 17, 2009.

⁴ Oregon DHS. AMH Transformation Initiative, Adult Mental Health Initiative (AMHI) – Fact Sheet #1. May 4, 2010. Available at: <http://egov.oregon.gov/DHS/mentalhealth/adult-initiative/amhi-fact-sheet-1.pdf>.

System for Psychiatric Addiction Services (LOCUS) to work toward the goal of ensuring that members receive care at the appropriate level.⁵

Types of Adult Residential Care in Oregon

There are four levels of residential care in Oregon: adult foster homes (AFHs), residential treatment homes (RTHs), residential treatment facilities (RTFs), and secure residential treatment facilities (SRTFs).

Adult foster care services

These services are delivered to people with chronic or severe mental illness who have been hospitalized or are at immediate risk of hospitalization, or who pose a danger to the health and safety of themselves or others, and who cannot live by themselves without supervision. The purpose is to maintain the individual at his or her maximum level of functioning or to improve the individual's skills to enable him or her to live more independently.

Non-relative foster care services are delivered in a licensed and certified family home or facility with no more than five people receiving services. The list of services is similar to that for residential treatment services (RTS). **Relative** foster care is provided by a caregiver related to the individual in a private residence setting that promotes the resident's safety and independence. Both types of facilities are subject to state inspection and criminal background checks.

Providers must deliver services in accordance with a personal care plan for each individual approved by the Department of Human Services (DHS). The county must complete a new personal care plan annually for each person receiving these services, and must review the plan at least every 180 days, or as needed, and revise the plan as necessary.

Residential treatment services

These services are delivered on a 24-hour basis to adults with mental or emotional disorders who have been hospitalized or are at immediate risk of hospitalization; who need continuing services to avoid hospitalization; who endanger themselves or others; or who otherwise require continuing care to remain in the community. People determined by the county and DHS to be unable to live independently without supervised intervention also may receive these services.

⁵ Oregon DHS. AMH Transformation Initiative, Adult Mental Health Initiative (AMHI). Communication 2. June 17, 2010. Available at: <http://egov.oregon.gov/DHS/mentalhealth/adult-initiative/communications/amhi-comm2.pdf>.

The residential services delivered depend on an individualized assessment of treatment needs and the development of a plan of care intended to promote the individual's well-being, health, and recovery.

Residential treatment homes provide services on a 24-hour basis for five or fewer residents. OAR 309-035-0250 (1) states that services “will be provided in safe, secure and homelike environments that recognize the dignity, individuality and right to self-determination of each resident.”

Residential treatment facilities are facilities that provide services on a 24-hour basis for six or more residents.

State regulations define the services delivered by RTHs (OAR 309-035-0250 through 309-035-0460) and by RTFs (OAR 309-035-0100 through 309-035-0190). These services include, but are not limited to:

- crisis stabilization services rendered by psychiatric, medical, or qualified professional intervention
- timely, appropriate access to crisis intervention to prevent or reduce acute emotional distress that might necessitate psychiatric hospitalization
- management of personal money and expenses
- supervision of daily living activities and life skills (e.g., nutritional wellness, personal hygiene, clothing care and grooming, communication skills, health care, household management, using community resources)
- provision of care, including assumption of responsibility for the individual's safety and well-being
- administration and supervision of medications
- provision or arrangement of routine and/or emergency transportation
- management of aggressive or self-destructive behavior
- management of a physician-prescribed diet
- management of physical or health problems, including seizures or incontinency

For admissions, RTS providers must give first priority to referrals from state hospitals, followed by referrals from AMH's Transitions Management and Utilization Review Unit and referrals of people on the state hospital waiting list. Providers must deliver RTS services in state-licensed facilities.

Secure residential treatment facilities provide specialized services for people discharged from state psychiatric hospitals or local acute psychiatric programs who have a history of behaviors that harm themselves and others. OAR 309-035-0105(39) specifies that SRTFs “restrict resident's exit from the facility or its

grounds through the use of approved locking devices on resident exit doors, gates or other closures.”

In addition to services provided by a standard RTS provider, SRTFs may provide

- rehabilitative services such as mental health assessment, diagnosis, and treatment plan development
- monitoring and management of psychotropic medications
- development of behavioral programs
- establishment of a therapeutic milieu
- group and individual skills training
- consultation to other RTS agencies and providers

These facilities must be as “homelike” as possible, but the buildings and grounds must be locked to prevent free egress by those receiving services. Facility staff must include onsite Qualified Mental Health Professionals, Qualified Mental Health Associates, and other staff sufficient to meet residents’ identified security, behavioral, recreational, and mental health needs on a 24-hour basis.

Recovery and Resiliency Focus

Nationally, in recent years, mental health service delivery systems have shifted toward a recovery-based model of care, based on recommendations of the 2003 President’s New Freedom Commission on Mental Health.⁶ In Oregon, AMH has adopted a policy to promote recovery and resiliency and integrate these principles into mental health services statewide.

In February 2010, DHS adopted new rules governing Integrated Services and Supports. The purposes, as defined by OAR 309-032-1500, are to⁷:

- (1)(a) Promote recovery, resiliency, wellness, independence and safety for individuals receiving addictions and mental health services and supports; (b) Specify standards for services and supports that are person-directed, youth guided, family-driven, culturally competent, trauma-informed and wellness-informed; and (c) Promote functional and rehabilitative outcomes for individuals throughout a continuum of care that is developmentally appropriate.

⁶ The President’s New Freedom Commission on Mental Health. Achieving the Promise: Transforming Mental Health Care in America. 2003. Available at: <http://mentalhealthcommission.gov/reports/FinalReport/downloads/FinalReport.pdf>.

⁷ Department of Human Services, Addictions and Mental Health Division. Integrated Services and Supports Rule. <http://www.oregon.gov/DHS/addiction/rule/issr-rule.pdf>.

OAR 309-032-1505 defines recovery as “a process of healing and transformation for a person to achieve full human potential and personhood in leading a meaningful life in communities of his or her choice.” Resilience is “the universal capacity that a person uses to prevent, minimize, or overcome the effects of adversity. Resilience reflects a person’s strengths as protective factors and assets for positive development.”

Acumentra Health incorporated these definitions into its general approach to this study. In examining the type and frequency of treatment services provided by the facilities, Acumentra Health considered specific treatment services that focused on encouraging residents’ movement toward achieving their individualized goals of life satisfaction beyond traditional symptom management, including:

- **Transition planning:** progress toward ideal living arrangement
- **Community integration:** social skills training and recreational activities
- **Life functioning:** individual and group skills training in Activities in Daily Living (ADL), finances, and care coordination
- **Meaningful roles:** enrichment of social and familial relationships
- **Vocation:** supported employment, education, volunteer work, and other meaningful activities

Acumentra Health surveyed residents to evaluate the progress they felt they were making in the above listed areas. Acumentra Health designed the survey to assess the residents’ sense of progress and movement in their recovery. Additionally, the survey asked residents if their level of life satisfaction had improved since receiving services at their residential placement.

STUDY COMPONENTS

Methodology

AMH requested that the statewide study of adult residential care address the following specific questions:

1. Are residents at the correct level of care?
2. Is the resident ready to be at a lower level of care?
3. If other options were available, could the resident move to a lower level of care?
4. What treatment services are offered at each level of care (i.e., for each facility type) to help residents move to a lower level of care?
5. Are treatment services individualized for each resident?
6. Are residents more functional and more independent as a result of the treatment services?

The study methodology generally followed the Centers for Medicare & Medicaid protocol, *Conducting Focused Studies of Health Care Quality*, Final Protocol, Version 1.0 (May 1, 2002).

From March through July 2010, Acumentra Health gathered data from AFHs, RTHs, RTFs, and SRTFs in every Oregon county that had at least one of these facilities. Data were collected from the day of the review to six months prior using four methods: a web survey of residential facility providers, residential record review, clinical provider record review, a brief resident interview, and a LOCUS⁸ assessment.

The resident interviews and clinical record reviews were conducted by two qualified mental health professionals, who each have more than 10 years of experience working with people with serious mental illness.

Study Indicators

The study questions are addressed by quantitative analysis, qualitative analysis, and observation. Acumentra Health used the following study indicators as part of its quantitative analysis for some study questions. The indicators and corresponding calculations are listed by question below.

⁸ Level of Care Utilization System for Psychiatric and Addictions Services, Adult Version 2000, American Association of Community Psychiatrists, May 30, 2000.

1. Are residents at the correct level of care?

Indicator 1-1a: The percent of study residents whose current LOCUS score was consistent with the facility’s level of care.

$$\frac{\text{Total number of residents in the denominator whose current LOCUS score was consistent with the facility’s level of care}}{\text{Total number of residents in the study population}}$$

Total number of residents in the study population

Indicator 1-1b: The percent of study residents whose current LOCUS score was lower than the facility’s level of care.

$$\frac{\text{The total number residents in the denominator whose current LOCUS score was lower than the facility’s level of care}}{\text{Total number of residents in the study population}}$$

Total number of residents in the study population

Indicator 1-1c: The percent of study residents whose current LOCUS score was higher than the facility’s level of care.

$$\frac{\text{Total number residents in the denominator whose current LOCUS score was higher than the facility’s level of care}}{\text{Total number of residents in the study population}}$$

Total number of residents in the study population

2. Is the resident ready to be at a lower level of care?

Indicator 1-1b also addressed this question: the percent of study residents whose current LOCUS score was lower than the facility’s level of care.

Indicator 2-1: The percent of interviewed residents in the study population who had a current LOCUS score lower than the facility’s level of care who affirmatively answered resident interview question, “Do you feel ready for more independent living?”

$$\frac{\text{Total number of residents in the denominator who affirmatively answered resident interview question, “Do you feel ready for more independent living?”}}{\text{Total number of interviewed residents in the study population who had a current LOCUS score lower than the facility’s level of care}}$$

Total number of interviewed residents in the study population who had a current LOCUS score lower than the facility’s level of care

3. If other options were available, could the resident move to a lower level of care?

This question was addressed by the evaluation of LOCUS scores and the observations of the reviewers.

4. What treatment services are offered at each level of care to help residents move to a lower level of care?

This question was addressed by the description of the type, number, frequency, and percent of facilities providing services. This includes services provided by the residential facilities (in-house), services provided by outside parties (out-of-house), and the total of these services.

5. Are treatment services individualized for each resident?

Indicator 5: The percent of residents who had one or more treatment plan modifications during the study period.

$$\frac{\text{Number of residents in the denominator who had one or more treatment plan modifications during the study period}}{\text{Total number of residents in the study population}}$$

Total number of residents in the study population

6. Are residents more functional and more independent as a result of the treatment services?

Indicator 6-1: The percent of residents who had discharge plans during the study period.

$$\frac{\text{Number of residents in the denominator who had discharge plans during the study period}}{\text{Total number of residents in the study population}}$$

Total number of residents in the study population

Indicator 6-2: The percent of residents who had transition options included in the treatment plan during the study period.

$$\frac{\text{Number of residents in the denominator who had transition options included in the treatment plan during the study period}}{\text{Total number of residents in the study population}}$$

Total number of residents in the study population

Indicator 6-3: The percent of residents whose treatment plan noted improvements in treatment goals, or treatment goals were resolved during the study period.

$$\frac{\text{Number of residents in the denominator whose treatment plan noted improvements in treatment goals, or whose treatment goals were resolved during the study period}}{\text{Total number of residents in the study population}}$$

Total number of residents in the study population

Definitions

- “Current LOCUS score” means the resident’s level of care need as assessed by Aumentra Health using the Level of Care Utilization System for Psychiatric and Addictions Services, Adult Version 2000, American Association of Community Psychiatrists, May 30, 2000.
- “Consistent with the facility’s level of care” means the current LOCUS score falls within the same range as the facilities level of care.
- Aumentra Health assigned the following LOCUS score ranges to each facility type. “Facility’s level of care” means the following:
 - **AFH:** LOCUS scores 14–16
 - **RTH:** LOCUS scores 17–19
 - **RTF:** LOCUS scores 20–22
 - **STRF:** LOCUS scores 23 or more
- “Treatment services” means any service provided by a residential treatment facility included in the study, or by a community mental health agency, documented in a resident’s clinical and residential progress notes, or by resident’s residential services tracking sheets.

Study Population

The study population included all Medicaid residents living at selected AFHs, RTHs, RTFs, and SRTFs on the day of the review for each facility. The reviews occurred between March 30 and July 20, 2010.

Excluded from the study were any residents under the jurisdiction of the Psychiatric Security Review Board (PSRB), which controls placement, and residents of Brookside Center, a fee-for-service SRTF, at the request of AMH.

With regard to the study population for the resident interviews, 54% of the residents (273 out of 506) voluntarily participated in the interview. Residents who did not participate in the interview included the following:

- residents who declined to participate
- residents who were not physically present at facility during the review
- residents whose symptomology made it impossible for the reviewer to ascertain the meaning of their answers
- residents who were admitted so recently that no documentation was available for review

Sampling methodology

Facility selection affected the study population. Aumentra Health performed a power analysis that determined the sample needed to include 96 residents per facility type, a large enough sample size to form a 95% confidence level estimate of the true population proportion of consumers ready for a lower level of care, the percent more functional as a result of treatment services, etc., with a margin of error of plus/minus 10%. However, AMH does not maintain an active registry of residents from which a random sample could be made. Aumentra Health addressed this issue by selecting at least 20 facilities of each type in the sample, which would include 96 residents (estimating that there would be 4 to 5 residents at each facility). In addition, AMH requested that facilities from each county that had a residential facility be included in the study. Whenever possible, at least one facility of each type was selected in each county.

Some SRTFs are PSRB-only facilities, meaning that the residents did not meet inclusion criteria and were excluded from the study. All remaining SRTFs that met the inclusion criteria were included in the study in order to have a sufficient number of SRTF residents that would be comparable to other facility types. The SRTF population includes the entire Medicaid, non-PSRB population.

Likewise, the number of residents in RTHs was insufficient to meet the goal of 96 residents. Therefore, all RTHs were included, which resulted in the inclusion of the entire RTH population of 87 residents.

Validation and verification procedures

AMH provided Aumentra Health with lists of residential facilities identified by type, including address and contact information. Missing information was obtained from AMH licensors or by phoning the facility. A resident's Medicaid status was verified with each facility when the review date was confirmed, and again during

the clinical record review when the Medicaid identification number was found and entered in the study database. A resident's non-PSRB status was verified with each facility when the review date was confirmed. Acumentra Health ensured that the entire study population was included in the study by reviewing all eligible residents living at the facility on the day of the review. There was no length of stay requirement, except for residents who had been admitted so recently as to not have documentation available for review.

Data Collection

For this study, Acumentra Health collected data from the following: a web survey of residential facility providers, residential and clinical record review, a brief resident interview, and a LOCUS assessment. Acumentra Health developed a database in MS Access to record all study data, except for the facility web survey data. The two reviewers participated in the development of the data collection instruments, and resident survey and record review items were defined and validated using a consensus process to facilitate inter-rater reliability and consistency in interpretation. Data collection guidelines were documented and included in database help tables.

Pilot study

Before initiating data collection for the study, Acumentra Health piloted the study protocol at Estuesta House (an RTF) in Portland; these data were excluded from the study. Estuesta House provides both residential and clinical services, so all types of data to be collected during the study were available. The reviewers collected data together from two records, and then each reviewer independently reviewed another group of three records. Similarly, the reviewers took turns interviewing residents. Interpretation issues were discussed as they arose, and consensus was reached about how items would be interpreted for the study. Database issues were identified during the pilot study and resolved by the Acumentra Health programmer, who was also present during the pilot.

Data entry

The database included data entry checks that prevented typographical and logic errors. The database assigned a unique identifier for each resident included in the study as the data for that person was entered into the database. Reviewers entered data from residential records and clinical records brought to the site by clinical providers. To avoid duplication, reviewers kept records that had already been

reviewed physically separated from those yet to be reviewed. Both reviewers went to the same sites throughout the study, except for the last three weeks of data collection. This allowed for ongoing resolution of interpretation issues as they arose.

Some clinical records were sent directly to Acentra Health's office, where they were stored in a secure medical records room. A log of these records was kept in a Microsoft Excel spreadsheet. Entry of these data into the master database on the network was tracked on this spreadsheet.

Data transfer

The study database: Each reviewer used a copy of the database which was stored on a secure HIPAA-compliant USB storage device. Data were routinely transferred from these devices to a secure HIPAA-compliant network drive and appended to a master file. The database included a field that indicated that the data had been transferred, which prevented duplications. Data from the USB storage device were copied to another directory so that original data from each upload were preserved. This allowed for the master file to be checked for omissions. These data were checked manually and through query for logic, missing data, and consistency with the interpretation guidelines. Once this was done, they were uploaded into SAS for analysis.

The Web survey: Facility providers completed the study survey using the online service, Survey Monkey. These data were downloaded to an MS Excel file, and uploaded into MS Access for analysis. Results were verified by analyzing the same data with SAS. Record counts and data completeness checks were performed after each data transfer.

Study Limitations

Several issues affected the results of this study. Readers should keep these limitations in mind when interpreting the results.

- **Variance in documentation** – Some facilities were more thorough and consistent in their documentation than others, which made comparison between facilities at the same levels of care challenging. AFHs and RTHs are only required to document monthly summaries of services provided, which prevented collection of the number of services provided. However, some AFHs and RTHs do keep daily progress notes, or logs of daily services, which Acentra Health did collect. RTFs and SRTFs had daily progress notes from which data were abstracted. Comparison of the number

of services provided by AFHs and RTHs to those provided by RTFs and SRTFs cannot be made accurately.

- **Referral source** – The majority of formal referral forms in the residents’ charts were from the Extended Care Management Unit (ECMU). Although the referral information included a resident’s previous living situation, such as the state hospital or other residential facilities, it was not clear whether the initial referral to ECMU was made by these institutions. Therefore, ECMU was recorded as the referral source and specifics of the referral chain were not noted.
- **Service participation** – There is wide variation in the service provision amongst facilities. There are two reasons for this variation:
 1. Some facilities provide more services to residents than others.
 2. Some facilities have documentation practices that accurately capture the ongoing services they provide to individual residents beyond the state mandated monthly progress notes. Service participation numbers increased when facilities maintained daily meeting, activity, and progress logs.
- **LOCUS scores** – Each resident was scored on a LOCUS scale to determine level of functioning and responsiveness to treatment. These scores reflect the residents’ current level of functioning in their residential placement at the time of the study, as opposed to how they may function independent of these supports and services; therefore, residents’ level of functioning may be over estimated.
- **Resident surveys** – The qualitative portion of the study was affected by the following limitations, both of which introduce the possibility of selection bias:
 1. Symptomology: All residents were given the opportunity to provide feedback regardless of their mental status. Some residents, given the nature of their illness, were symptomatic and either unable to understand the questions or to provide clear answers. These individuals were not included in the resident survey analysis.
 2. Voluntary participation: Interviews were voluntary, and many residents chose not to participate.

RESULTS

Acumentra Health reviewed a total of 99 residential facilities (39 AFHs, 23 RTHs, 20 RTFs, and 17 SRTFs) and a total of 506 residents for this study. Acumentra Health compiled and analyzed the data from the residential and clinical record review, resident interviews, LOCUS assessment, and web survey of residential facility providers.

Characteristics of the Study Population

Demographics

Study results demonstrated equal proportions of male and female residents across facility types, with the exception of RTFs, which serves over 20% more men than women (as shown in Table 1). The vast majority of residents are white (Caucasian) and between the ages of 44 and 50.

Table 1. Demographic Characteristics of Study Population, by Facility Type.						
Characteristics		AFH (N=143)	RTH (N=87)	RTF (N=161)	SRTF (N=115)	Total (N=506)
Sex	Female	47.9%	47.7%	39.1%	43.9%	44.1%
	Male	52.1%	52.3%	60.9%	56.1%	55.9%
Ethnicity*	Non-white	7.0%	13.8%	6.9%	15.6%	10.1%
	White	93.0%	86.2%	93.1%	84.4%	89.9%
Average age* (years)		50.1	44.0	49.4	48.0	48.3

*Indicates a statistically significant difference between facility proportions, or significant difference between facility averages.

Diagnoses

In the chart review, Acumentra Health looked at residents' diagnoses and found no substantial variations in diagnoses among facility types.

Psychotic disorders account for the majority (85%) of diagnoses across all facility types, including:

- 45.6% with schizophrenia (all sub-types combined)
- 36.8% with schizoaffective disorder
- 3.2% with psychotic disorder not otherwise specified (NOS)

Twenty-five percent had a dual-diagnosis, meaning an Axis I mental health diagnosis and a substance abuse and/or dependence diagnosis.

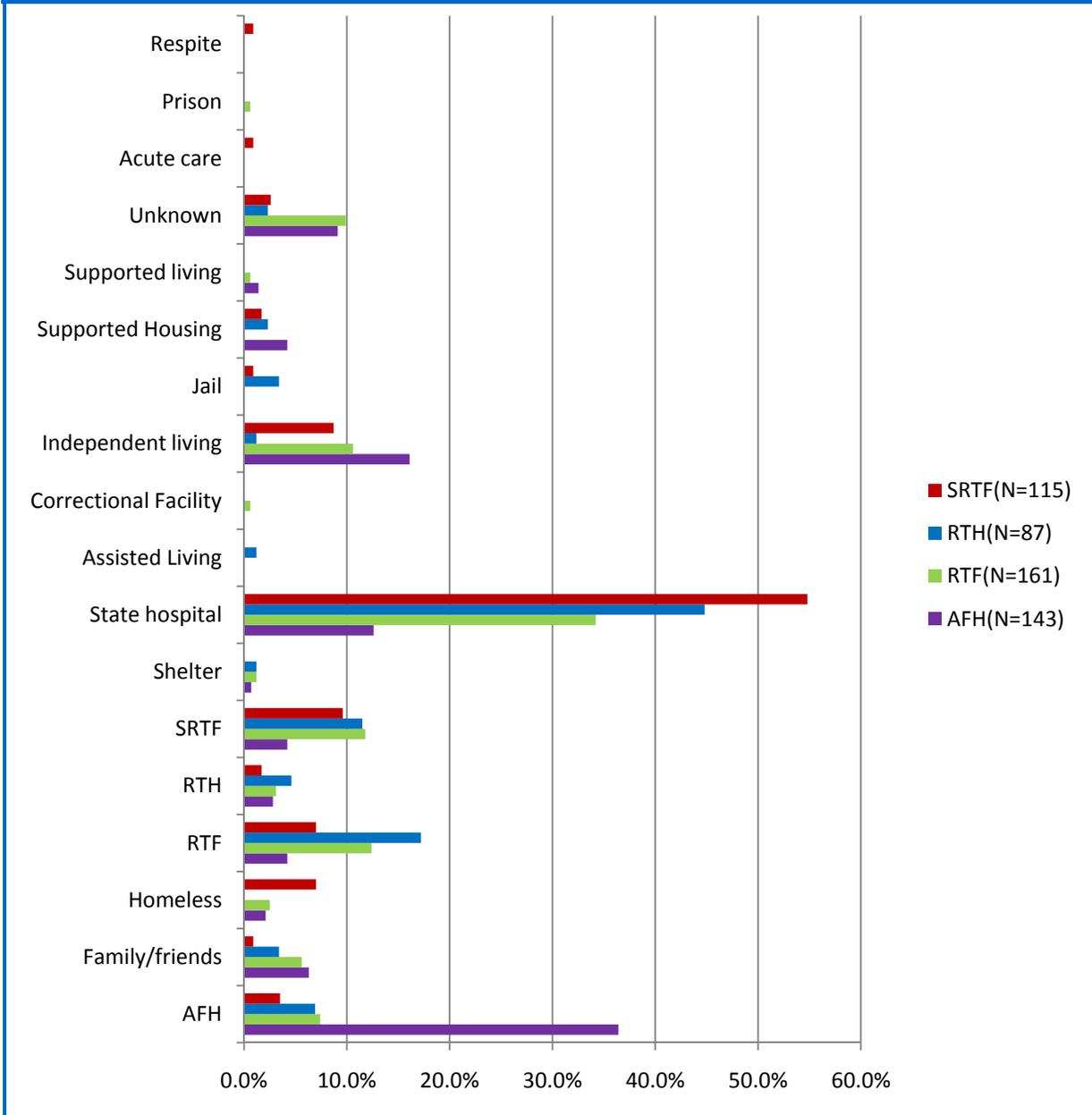
Borderline intellectual functioning, which is significant when assessing life functioning and transition capabilities, accounted for 8.9% of all Axis II diagnoses.

Pre-Admission Placement

Acumentra Health looked at the placement of residents prior to their admission to their current residential facility to determine whether they had stepped down to a lower level of care.

Figure 1 below shows pre-admission placement by facility type.

Figure 1. Pre-Admission Placement by Facility.



Adult foster home

The most common pre-admission placement for AFH residents was in the same facility type: 36.4% of all AFH residents were previously in an AFH and transferred to a different one. The reason for such frequent lateral moves is unknown, but may be due to geographic preferences, milieu incompatibility, or other changes in life circumstances. Of pre-admission placements, 16% were independent living and 12.6% were the state hospital system. The percentage of pre-admission placements in a higher level of residential care was negligible.

Residential treatment home

The state hospital was the primary pre-admission placement for RTH residents (44.8%). SRTFs were the pre-admission placement for 11.5% of RTH residents and RTFs were the pre-admission placement for 17.2% of RTH residents, demonstrating achievement of a shift to a lower level of care. Some (6.9%) RTH residents were previously placed in an AFH, a lower level of care, and 4.6% were in another RTH, the same level of care.

Residential treatment facility

Similar to the RTHs and SRTFs, the primary pre-admission placement was the state hospital (34.2%). Secondary was the same level of care (another RTF) at 12.4%, followed by 11.8% in the higher level SRTFs.

Secure residential treatment facility

The majority (54.8%) of SRTF residents were previously placed in the state hospital system, either the Oregon State Hospital in Salem, Portland Oregon State Hospital, or Blue Mountain Recovery Center, prior to admission to the SRTFs.

Other previous placements included lower levels of residential settings, indicating that those residents likely had an increase in symptomology and/or decrease in functioning, resulting in their need for more intensive services. This suggests that movement within the residential treatment system may prevent acute or long-term hospitalization for residents experiencing setbacks.

Summary

With the exception of AFHs, the vast majority of pre-admission placements were in the state hospital system. Since the purpose of the state residential system is to provide a community-based alternative to long-term institutionalization, these

numbers support achievement of that goal. However, there is little evidence of downward movement through the residential system into independent living.

Length of Stay

Acumentra Health determined the average and median lengths of stay for each facility type, as well as the shortest individual length of stay (LOS) and the longest individual LOS for each type. Acumentra Health calculated the LOS by subtracting the resident's admission date from the review date. The parameters of this study included the tenure of only a resident's current placement, and did not include previous placements at the same facility type. Therefore, a resident may be noted as being a resident of one RTF for two years, but the length of their residency at a different RTF prior to the current placement was not captured.

Table 2 shows that the average LOS across all facility types was 32.8 months (2.7 years). RTFs had the greatest average LOS at 45.6 months (3.8 years), and the greatest variation of lengths of stay with 57 months as the standard deviation. RTHs had the shortest average LOS at 12.9 months and shortest median at 11 months.

Table 2. Length of Stay, in Months, by Facility Type.					
Length of stay	AFH (N=143)	RTH (N=87)	RTF (N=161)	SRTF (N=114)	Total (N=505)
Average	35.5	12.9	45.6	26.5	32.8
Standard deviation	40.8	11.0	57.0	26.7	42.6
Median	22.2	11.0	24.6	16.3	17.1
Minimum	0.2	0.1	0.4	0.2	0.1
Maximum	295	59.7	242.7	101.7	295

The maximum LOS is the longest individual stay for that facility type. AFHs had the longest LOS at 24.5 years (295 months), with two residents (1.4%) with stays greater than 15 years. RTFs had the second longest at about 20 years, with 10 residents (6.2%) with stays of over 15 years. The SRTFs and RTHs did not have any residents with stays over 15 years. The longest individual resident stays in SRTFs and RTHs were less than 10 years (8.4 years in SRTFs and 4.9 years in RTHs).

Study Question 1: Are Residents at the Correct Level of Care?

Acumentra Health examined the level of care (LOC) needs of residents at the four facility types to determine whether there was any correlation between LOC and facility type. The LOCUS is a standardized and generally accepted measure for assessing a resident's level of care needs for residential services.

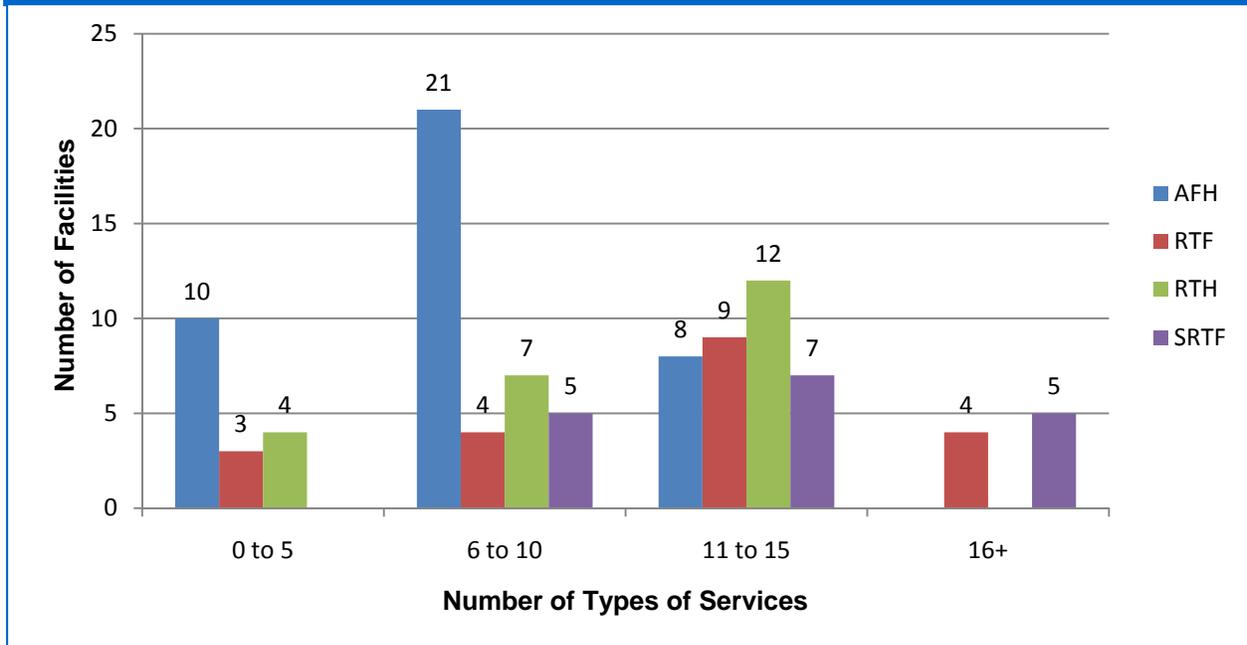
LOCUS score as a proxy for facility type level of care

The LOCUS levels of care approximate Oregon's four facility types. Acumentra Health assigned LOCUS score ranges to each facility type based on the expectation that level of care increased from AFH, with the lowest LOC, to RTH, to RTF, and ultimately to SRTF, with the highest LOC. The types of services provided generally do increase as the prescribed level of the facility type increases. With an understanding of the limitations of this study, the assigned LOCUS score ranges can serve as proxies for the level of care provided by each facility type.

The data demonstrated a considerable overlap of the level of care needs between facility types. In fact, in individual cases, an AFH or an RTH may provide the same or more intensive services than an RTF or SRTF. A correlation between facility type and LOC was not always apparent. Further analysis of these data would shed light on this issue, and would help delineate the levels of care that are currently provided independent of setting.

Services provided

When looking at the total services provided to residents (both in-house and out-of-house), it appears that the number of types of services provided do generally increase as the level of the facility type increases (see Figure 2). As with LOCUS scores, there appears to be a significant overlap in the number of types of service provided. However, the quantity of services provided cannot be accurately compared between facility types due to documentation differences (see Study Limitations in the Study Components section). The section about Study Question 4 more thoroughly discusses the services provided to residents at the various facility types.

Figure 2. Histogram of Number of Types of Services Provided by Facility Type.

Level of care – LOCUS scores

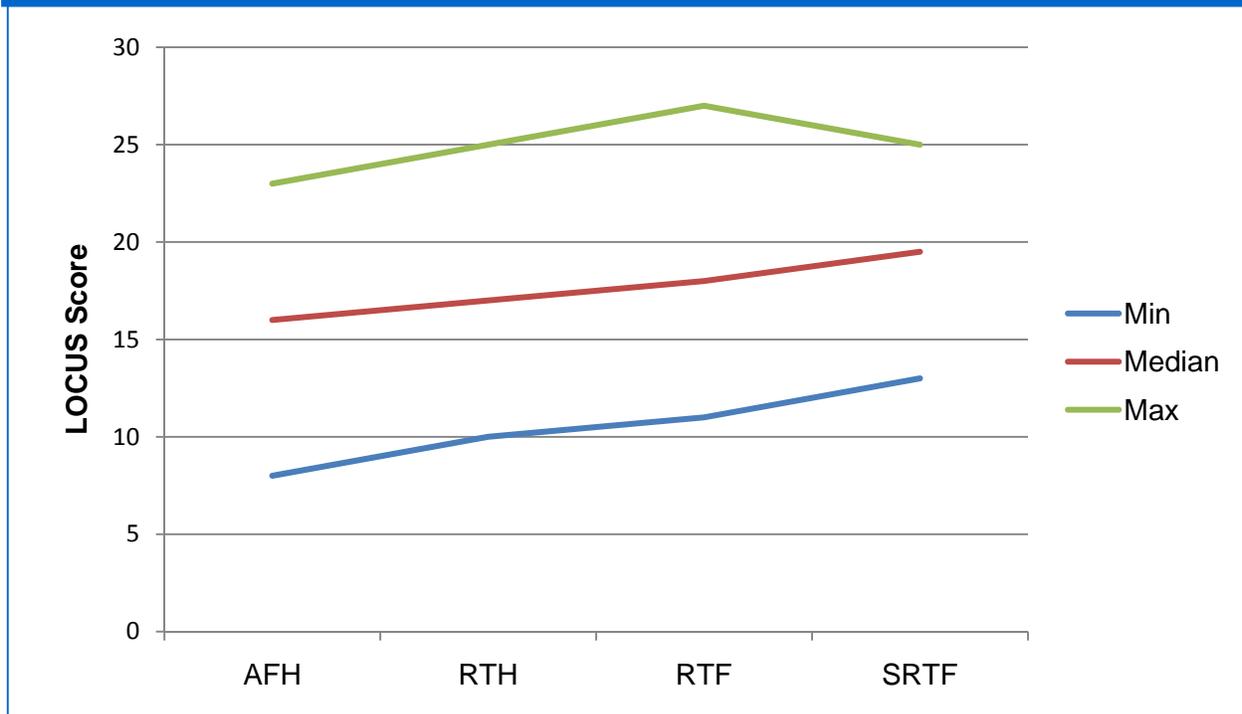
Table 3 shows the LOCUS score ranges assigned to each facility type, the average and median LOCUS scores for each, the lowest (minimum) scores, and the highest (maximum) scores.

Table 3 and Figure 3 show that the average and median LOCUS scores do increase as the level of the facility type increases, showing a trend that residents with higher LOCUS scores are at the higher LOC facility types. However, each type is not serving a discrete range of LOC. The range of LOCUS scores (i.e., the difference between maximum and minimum scores) reveals that there is considerable overlap of LOC between facility types. In fact, each facility type serves a significant number of residents with a lower or higher LOC than would be expected for that type. Empirically, it is impossible to distinguish between the levels of care at various facility types because of the significant overlap between them, except for the median LOCUS scores, which are distinct.

Table 3. Average, Median, Minimum, and Maximum LOCUS Score by Facility Type.

Facility Type	LOCUS Score Range	Average	Median	Minimum	Maximum
AFH (N=138)	14 to 16	15.7	16	8	23
RTH (N=87)	17 to 19	16.2	17	10	25
RTF (N=157)	20 to 22	17.8	18	11	27
SRTF (N=110)	>=23	19.3	19.5	13	25

Figure 3. Median, Minimum, Maximum LOCUS Score by Facility Type.



Adult foster homes provide appropriate placement for those residents scoring between 14 and 16 on the LOCUS scale. The study shows that the average LOCUS score for AFH residents was 15.7 and the median score was 16—these are well within the prescribed range. However, it is noteworthy that many scores were as low as 8 and some as high as 23. Twenty-four percent of AFH residents had LOCUS scores of 13 or less, below the range for this facility type.

Residential treatment homes are appropriate for those residents with a LOCUS score between 17 and 19. Based on study results, RTH residents scored an average of 16.2, which is just below the prescribed range. The median score was 17 and the total range was between 10 and 25.

Residential treatment facilities best serve residents with a LOCUS score of 20 to 22. The average LOCUS score of RTF residents in this study was 17.8, which is well below the prescribed range for this facility type and fits in the RTH LOCUS range instead. The median score was 18 and all scores ranged from 11 to 27.

Secure residential treatment facilities were assigned a LOCUS score of 23 or higher. The average LOCUS score for all sample SRTF residents fell short of this at 19.3. The median was 19.5 and the range was from 13 to 25. SRTFs were the least likely to serve residents at their expected LOC: only 7% of their residents' LOC was consistent with the facility type's LOC.

Summary

While AFHs had a large range of LOCUS scores, their average and median scores fell within the prescribed range for that facility type. For all the other facility types, the average LOCUS scores for residents fall short. This may indicate one of two things:

1. Residents are placed at a higher level of care than is required for their mental status and functioning level. Per the reviewers' observations, this appeared to be the case for most facility types.
2. Residents may have scored higher on the LOCUS scale prior to their admission to their facility type. This suggests that the services they are receiving are enabling them to function at higher level than they would without those services. The only accurate way to measure this would be to track the resident's LOCUS score at admission, throughout treatment, and finally, at discharge. (Please see the Study Limitations for more about the LOCUS methodology limitations.)

These data show that each facility type is serving a proportion of residents who could be served at a facility with a different level of care. These data do not reflect in any way the quality of services provided by individual facilities.

The wide range in overall LOCUS scores in each facility type is noteworthy. Those residents scoring a 10 or below may be better served in intensive community services and/or supported independent living. On the other hand, many residents score above the prescribed LOCUS range for their facility type. That information, coupled with the low instances of hospitalizations across all facility types (see Table 4 below), suggests that they are receiving adequate services in their current placement despite the severity of their symptoms.

	Number of residents	Percent
AFH (N=143)	4	2.8%
RTH (N=87)	3	3.4%
RTF (N=161)	6	3.7%
SRTF (N=115)	6	5.2%
Total (N=506)	19	4%

Study indicators 1a–c

Table 5 below shows the numbers of residents with a LOCUS score that was consistent, lower, or higher than the range for facility type. Overall, only 26% of the residents placed at facilities appeared to be at a level of care consistent with the LOC offered by their facility type (variations by individual facilities are not discussed in this report). AFHs had the most variation, with an almost even distribution of residents who have consistent, lower, or higher LOC needs.

Each facility type had residents who could be served at a lower level of care. A great majority of SRTF residents (93%) had a LOCUS score consistent with a lower LOC, which suggests that they could be served at least in an RTF. Likewise, 77% of RTF residents could be served at a lower level of care. In RTHs, 48% of residents had LOCUS scores below the RTH level of care, and 24% of AFH residents had LOCUS scores lower than the AFH range.

Table 5. Number of Residents with LOCUS Score that is consistent, lower, or higher than the range for facility type.

Range	Total across facility types		AFH		RTH		RTF		SRTF	
			14 to 16		17 to 19		20 to 22		>=23	
Consistent	129	26%	58	42%	38	43%	25	16%	8	7%
Lower	298	60%	33	24%	42	48%	121	77%	102	93%
Higher	65	13%	47	34%	7	8%	11	7%		
Total	492	100%	138	100%	87	100%	157	100%	110	100%

Study Question 2: Is the Resident Ready to be at a Lower Level of Care?

The data presented in Table 5 suggest that 60% of residents could be served at a lower level of care; however, of those, only 61% reported that they are ready for a lower LOC (Table 6). The 39% who reported that they are not ready for a lower LOC, but were assessed as meeting a lower LOC,⁹ would represent the portion of the population who are not motivated to progress to a lower LOC. This lack of motivation is a barrier to more independent living.

Table 6. Residents with an LOC lower than their current facility type who reported being ready to move to a lower LOC.

All Facility Types (Total)		AFH		RTH		RTF		SRTF	
N=299	61%	N=33	23%	N=43	47%	N=121	77%	N=102	93%

⁹ This second criterion was necessary because reviewers observed that residents with the highest LOCUS scores answered affirmatively that they were ready for a lower level of care or totally independent living.

Study Question 3: If Other Options Were Available Could the Resident Move to a Lower Level of Care?

The results from Questions 1 and 2 above show that a large proportion of residents could be served at a lower level of care. For those residents in RTHs and AFHs, movement to a lower level of care could be successful if the proper community services are in place (i.e., Assertive Community Treatment and other mobile services). An understanding of the barriers to stepping residents down to a lower level of care can lead to suggestions for other options.

A survey of residential care providers identified the lack of appropriate options and the chronicity of resident symptoms as the leading barriers to stepping residents down to a lower level of care (Table 7). Resident reluctance and physical health issues were also suggested.

While health issues were identified as a barrier, some facilities specialize in this type of care. For example, 7% of AFHs reported on the survey that they would provide total assistance with bathing, grooming, and dressing, and 4% reported they would provide total assistance with toileting, which no other facility type would do. These also are examples where there are many levels of care provided within a facility type. (For more survey results, see pgs. 56–63.)

Resident reluctance to move to a lower level of care is consistent with the finding for Question 2 that a portion of the population is not motivated to be more independent. Reviewers observed that although many residents could be placed at a lower LOC, the support and sense of community they receive in their residential setting is beneficial. Reviewers also observed that a few residents have been in some kind of care for much of their lives; therefore, living outside familiar settings is a significant psychological challenge for these residents.

Table 7. Provider Survey Question 19: What are the barriers to stepping residents down to a lower level of care? Number and percent of total responses, by facility type.

Barriers	AFH		RTH		RTF		SRTF		Total Responses	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
A. Lack of appropriate options	16	23%	14	25%	15	24%	13	25%	58	24%
B. Resident reluctance	13	19%	11	20%	13	21%	10	19%	47	20%
C. Chronicity of resident symptoms	16	23%	13	23%	14	22%	13	25%	56	23%
D. Frequent acute care hospitalization for resident	11	16%	7	13%	6	10%	2	4%	26	11%
E. Physical health issues	11	16%	8	14%	10	16%	9	17%	38	16%
F. Other, list	3	4%	3	5%	5	8%	5	10%	16	7%
Total	70	100%	56	100%	63	100%	52	100%	241	100%

Study Question 4: What Treatment Services Are Offered at Each Level of Care (i.e., for each facility type) to Help Residents Move to a Lower Level of Care?

Acumentra Health looked at the type, number, and frequency of services provided by the residential facilities (in-house), services provided by outside parties (out-of-house), and the total of these services.

The services can be categorized as follows:

- 1. Daily Structure and Support:** community meetings, social/recreational activities, and 12-step meetings
- 2. Rehabilitative Skills Training:** group life skills, individual life skills, social skills, vocational, health and wellness counseling, and peer counseling
- 3. Intensive Mental Health Services:** medication management, prescriber visits, individual psychotherapy, group psychotherapy, chemical dependency education/counseling, assessments, and care coordination
- 4. Recovery/Transition Services:** transition planning, discharge planning, treatment planning, and case management

Please note that in the discussion below, unless otherwise specified, services include those provided directly by the facility (in-house) and those provided by an outside mental health provider (out-of-house). The data presented are based on reports on the total services documented in both residential and clinical records.

The following data present types and frequency of services over the six-month study period, not on a monthly basis.

Daily structure and support

Fewer AFHs provide residents with daily structure and support services when compared to other facility types. Approximately the same percentage of RTHs and RTFs provide residents with these services, while all SRTFs do (Table 8).

Table 8. Number and proportion of facilities that reported providing* daily structure and support services, by facility type.

Service	AFH (N=39)		RTH (N=23)		RTF (N=20)		SRTF (N=17)	
	Count	Proportion	Count	Proportion	Count	Proportion	Count	Proportion
12-Step meetings	0	0.0%	2	8.7%	2	10.0%	5	29.4%
Structured community meetings	3	7.7%	10	43.5%	10	50.0%	15	88.2%
Structured social/recreational activities	18	46.2%	17	73.9%	15	75.0%	17	100.0%

*Services provided in-house and out-of-house over the six-month study period.

Table 9 shows the median number of residents who received daily structure and support services during the six-month study period. Most AFH residents received no daily structure and support services, RTH residents received structured social/recreational activities, and RTF residents received structured social/recreational activities and structured community meetings. SRTF residents received a significantly higher number of structured social/recreational activities and structured community meetings. While the lack of documentation at AFHs and RTHs is in effect here, reviewer observation during the study supports this general trend.

Table 9. Number of residents (average number of services, median, minimum, maximum) who received daily structure and support services* by facility type.

Service	AFH (N=143)				RTH (N=87)				RTF (N=161)				SRTF (N=115)			
	average	median	min	max	average	median	min	max	average	median	min	max	average	median	min	max
12-Step meetings	0.0	0	0	0	0.1	0	0	2	0.6	0	0	53	0.3	0	0	20
Structured community meetings	1.1	0	0	64	17.2	0	0	211	57.6	1	0	540	67.8	27	0	355
Structured social/recreational activities	9.0	0	0	123	27.9	8	0	223	21.3	8	0	180	63.0	30	0	420

*Services provided in-house and out-of-house over the six-month study period.

Rehabilitative skills training

Approximately the same percentage of AFHs and RTHs provide rehabilitative skills training services in-house or out-of-house compared to other facility types. More RTFs provide residents these services than AFHs and RTHs do. Significantly more SRTFs provide rehabilitative skills training services of all types.

Interestingly, a majority of SRTFs (58.8%) provide vocational/education counseling, while only about 26% of AFHs, RTHs, and RTFs provide it (Table 10). One would expect the lower level of care facilities to provide more vocational/educational counseling because these residents have the most potential for more independent living. A greater percentage of RTHs provide both individual life skills training (20 out of 23) and group life skills training (15 out of 23), while AFHs tend to provide either individual life skills training (21 out of 39) or group life skills training (19 out of 39).

Table 11 shows the median number of residents who received rehabilitative skills training during the six month study period. Most AFH residents did not receive rehabilitative skills training while residents of all other facility types received these services. Most residents of RTFs and SRTFs received about the same number of rehabilitative skills training services.

Table 10. Number and proportion of facilities that reported providing* rehabilitative skills training services, by facility type.

Service	AFH (N=39)		RTH (N=23)		RTF (N=20)		SRTF (N=17)	
	n	%	n	%	n	%	n	%
Life skills training, group	19	48.7%	15	65.2%	15	75.0%	17	100.0%
Life skills training, individual	21	53.8%	20	87.0%	19	95.0%	16	94.1%
Peer counseling/mentorship	1	2.6%	0	0.0%	0	0.0%	1	5.9%
Physical health counseling	7	17.9%	6	26.1%	7	35.0%	12	70.6%
Social skills training	12	30.8%	10	43.5%	12	60.0%	13	76.5%
Vocational/educational counseling	10	25.6%	6	26.1%	5	25.0%	10	58.8%

*Services provided in-house and out-of-house over the six-month study period.

Table 11. Number of residents (average number of services, median, minimum, maximum) who received rehabilitative skills training services*, by facility type.

Service	AFH (N=143)				RTH (N=87)				RTF (N=161)				SRTF (N=115)			
	average	median	min	max	average	median	min	max	average	median	min	max	average	median	min	max
Life skills training group**	9.8	0	0	222	17.0	3.5	0	195	18.1	10	0	435	22.6	7	0	247
Life skills training individual**	15.9	0	0	553	16.2	3	0	270	59.0	9	0	534	40.7	10	0	558
Peer counseling/mentorship	0.0	0	0	2	0.0	0	0	0	0.0	0	0	0	0.0	0	0	2
Physical health counseling	0.5	0	0	27	0.1	0	0	7	1.1	0	0	20	2.8	0	0	49
Social skills training	1.4	0	0	44	13.8	0	0	299	6.6	0	0	364	5.7	0	0	124
Vocational/Educational counseling	2.3	0	0	119	0.4	0	0	13	0.6	0	0	24	5.6	0	0	101

*Services provided in-house and out-of-house over the six-month study period.

**For some facility types, the total number of residents (N) is slightly less for this service than the total shown in the column heading.

The provider survey revealed that a smaller proportion of SRTFs expect to provide total assistance with preparation of food and taking medications than do facilities of lower LOCs (Table 12). For example, 78% of AFHs expected to provide total assistance with taking medications as compared to 47% of SRTFs. About 50% of all facility types expected to provide total assistance with food preparation, except SRTFs (40%). This is counterintuitive; one would expect the facilities at the lowest levels of care to expect residents to be mostly independent.

Table 12. Proportion of facilities that expect residents to need total assistance with preparing own food and taking medication.

Activity of Daily Living	AFH	RTH	RTF	SRTF
Preparing own food	48%	53%	50%	40%
Taking medication	78%	68%	55%	47%

Intensive mental health services

The proportion of AFHs and RTHs that provide intensive mental health services was smaller than that of RTFs and SRTFs. As shown in Table 13, there was little to distinguish AFHs from RTHs, except coordination of care (AFH at 51.3% and RTH at 78.3%). There was also little to distinguish RTFs from SRTFs in this regard. A greater proportion of RTFs (50%) provided formal mental health or chemical dependency assessments when compared to SRTFs (17.6%).

Acumentra Health examined the residential and clinical chart data to determine how many residents used mental health services. Table 14 shows the median number of residents who had a progress note for mental health services during the six month study period. These data reveal that most AFH residents only receive psychiatric (prescriber) services. Most RTH residents received prescriber services, individual psychotherapy, and coordination of care. Most RTF and SRTF residents received prescriber services and coordination of care.

Table 13. Number and proportion of all specific services provided*, by facility type.

Service	AFH (N=39)		RTH (N=23)		RTF (N=20)		SRTF (N=17)	
	n	%	n	%	n	%	n	%
Assessment/screening	13	33.3%	7	30.4%	9	45.0%	6	35.3%
Chemical dependency counseling or education	5	12.8%	8	34.8%	9	45.0%	5	29.4%
Coordination of care	20	51.3%	18	78.3%	15	75.0%	13	76.5%
Family therapy	0	0.0%	0	0.0%	2	10.0%	1	5.9%
Formal mental health or chemical dependency assessments	10	25.6%	12	52.2%	10	50.0%	3	17.6%
Group psychotherapy	17	43.6%	12	52.2%	15	75.0%	14	82.4%
Individual psychotherapy	25	64.1%	18	78.3%	18	90.0%	14	82.4%
Medication management services	18	46.2%	11	47.8%	12	60.0%	13	76.5%
Prescriber visits	27	69.2%	17	73.9%	18	90.0%	15	88.2%

*Services provided in-house and out-of-house over the six-month study period.

Table 14. Number of residents (average number of services, median, minimum, maximum) who received intensive mental health services,* by facility type.

Service	AFH (N=143)				RTH (N=87)				RTF (N=161)				SRTF (N=115)			
	average	median	min	max	average	median	min	max	average	median	min	max	average	median	min	max
Assessment/screening	0.1	0	0	3	0.2	0	0	3	0.1	0	0	3	0.7	0	0	40
Coordination of care	2.1	0	0	54	3.0	1	0	24	1.7	0	0	51	3.4	0	0	38
Family therapy**	0.0	0	0	0	0.0	0	0	0	0.0	0	0	2	0.0	0	0	3
Formal mental health or chemical dependency assessments	0.1	0	0	5	1.3	0	0	60	0.1	0	0	2	0.0	0	0	1
Group psychotherapy**	4.0	0	0	108	6.4	0	0	72	8.6	0	0	94	2.4	0	0	55
Individual psychotherapy**	8.6	0	0	380	6.4	3	0	34	13.4	4	0	81	3.4	1	0	22
Medication management services**	1.5	0	0	23	2.0	0	0	90	2.3	0	0	54	26.4	0	0	443
Prescriber visits [†]	1.6	1	0	14	3.1	2	0	17	3.1	3	0	17	4.6	3	0	70

*Services that were provided in-house and out-of-house over the 6-month study period.

**For one or more facility types, the total number of residents (N) is slightly less for this service than the total shown in the column heading.

[†]Originally in this study, prescriber visits were part of medication management services. After about the first 50 cases, prescriber visits were separated, which caused the Ns for this category to be lower than the Ns for the other services shown in this table. Prescriber visits: AFH (N=139), RTH (N=85), RTF (N=150), and SRTF (N=104).

Recovery/transition services

About the same proportion (an average of 72%) of each facility type provides case management and treatment planning. The greatest variance was found in discharge/transition planning, as shown in Table 15. Only 7.7% AFHs and 17.4% of RTHs provided discharge/transition planning in-house or out-of-house. The greatest proportion of facilities providing this service is found with SRTFs (47%) and RTFs (35%). One would expect all facilities to be doing discharge planning. However, the median for number of recovery/transition services residents received at all facility types is 0 (Table 16).

The range of the services received was broad at AFHs and SRTFs; a few residents at these facilities received a substantial number of these services. Further analysis would be required to determine whether there is a subset of these residents at each facility type, which may identify those residents who are progressing to lower levels of care.

Table 15. Number and proportion of facilities that reported providing* recovery/transition services, by facility type.

Service	AFH (N=39)		RTH (N=23)		RTF (N=20)		SRTF (N=17)	
	n	%	n	%	n	%	n	%
Case management	30	76.9%	14	60.9%	15	75.0%	12	70.6%
Discharge/transition planning	3	7.7%	4	17.4%	7	35.0%	8	47.1%
Treatment planning	16	41.0%	7	30.4%	10	50.0%	7	41.2%

*Services that were provided in-house and out-of-house over the 6-month study period.

Table 16. Number of residents (average number of services, median, minimum, maximum) who received recovery/transition services*, by facility type.

Service	AFH (N=143)				RTH (N=87)				RTF (N=161)				SRTF (N=115)			
	average	median	min	max	average	median	min	max	average	median	min	max	average	median	min	max
Case management	5.3	1	0	53	2.3	0	0	27	4.5	1	0	99	2.9	0	0	36
Discharge/transition planning	0.0	0	0	2	0.5	0	0	10	0.1	0	0	4	0.3	0	0	7
Treatment planning	0.4	0	0	6	0.1	0	0	2	0.3	0	0	6	0.6	0	0	11

*Services that were provided in-house and out-of-house over the 6-month study period.

Services by facility type

For each facility type, reviewers determined the average and median numbers of services provided during the six-month study period (Table 17). The averages show some service provision, but these numbers can be misleading because a few residents may have received a service many times—raising the average—while most residents did not receive the service at all. The median numbers give a more accurate picture of services provided to most residents.

The following discussion and Table 17 are based on in-house and out-of-house services combined. Appendix A contains tables showing the same services, separated by in-house (Table A-1) and out-of-house (Table A-2).

AFH: According to the data, there was a significant absence of service provision in AFHs. The service most often provided was individual skills training, but it was only provided an average of 15.9 times over the 6-month period (Table 17). Group life skills training was the second most frequently provided service at an average of 9.8 times during the 6 months. Structured social/recreational activities were provided an average of 9.0 times.

There was one service incident of case management and one prescriber (Table 17, AFH median), which were provided by an outside facility since AFHs do not employ case managers or psychiatrists. This equals a total of two services over a 6-month period. These data demonstrate that, for the most part, residents in AFHs were not receiving any mental health services.

RTH: Based on averages, the most commonly provided service was social and recreational activities (average of 27.9 times in 6 months; Table 17). Community meetings (average of 17.2), group life skills training (average of 17.0), and individual life skills training (average of 16.2) were the next most common services provided during the 6-month period.

RTH residents had a median of eight social and recreational activities and about four group life skills trainings. There were medians of 3 individual life skills trainings, 3 psychotherapy, and 2 prescriber visits over the course of the 6-month study period. This amounts to an approximated 3.5 services per month per resident.

RTF: The most commonly provided services provided by RTFs were individual and group life-skills training, community meetings, and recreational outings (Table 17). The two most regular services were individual life skills trainings and community meetings, provided an average of 59.0 and 57.6 times, respectively, over the course of 6 months. Psychotherapy, case management, chemical dependency counseling, and social skills training were also provided, but not enough to substantiate consistency of services.

Over the 6-month study period, there was a median of 10 group life skills trainings, 9 individual life skills trainings, 8 social/recreational activities, 4 individual psychotherapy visits, and 3 prescriber visits for RTF residents.

SRTF: The SRTF provided the most services of all facility types. As shown in Table 17, the primary SRTF services over the 6-month period included community meetings (67.8), social and recreational activities (63.0), individual skills training (40.7), medication management (26.4), and group life-skills training (22.6).

Most residents in the SRTF setting participated in regular community meetings and social/recreational activities and occasionally received individual life skills training. Median numbers suggest an average of 13 services per month per resident.

Table 17. Services provided during 6-month study period, by facility type. Number of enrollees (average number of services, median, minimum, maximum).

Service	Facility Type																			
	AFH					RTH					RTF					SRTF				
	Number	average	median	min	max	Number	average	median	min	max	Number	average	median	min	max	Number	average	median	min	max
12-Step meetings	143	0.0	0	0	0	87	0.1	0	0	2	161	0.6	0	0	53	115	0.3	0	0	20
Assessment/screening	143	0.1	0	0	3	87	0.2	0	0	3	161	0.1	0	0	3	115	0.7	0	0	40
Case management	143	5.3	1	0	53	87	2.3	0	0	27	161	4.5	1	0	99	115	2.9	0	0	36
Chemical dependency counseling or education	143	0.5	0	0	24	87	2.8	0	0	60	161	7.0	0	0	154	115	1.2	0	0	28
Coordination of care	143	2.1	0	0	54	87	3.0	1	0	24	161	1.7	0	0	51	115	3.4	0	0	38
Discharge/transition planning	143	0.0	0	0	2	87	0.5	0	0	10	161	0.1	0	0	4	115	0.3	0	0	7
Family therapy	142	0.0	0	0	0	87	0.0	0	0	0	161	0.0	0	0	2	115	0.0	0	0	3
Formal mental health or chemical dependency assessments	143	0.1	0	0	5	87	1.3	0	0	60	161	0.1	0	0	2	115	0.0	0	0	1
Group psychotherapy	142	4.0	0	0	108	87	6.4	0	0	72	159	8.6	0	0	94	115	2.4	0	0	55
Individual psychotherapy	143	8.6	0	0	380	86	6.4	3	0	34	160	13.4	4	0	81	115	3.4	1	0	22
Life skills training, group	142	9.8	0	0	222	86	17.0	3.5	0	195	160	18.1	10	0	435	115	22.6	7	0	247
Life skills training, individual	142	15.9	0	0	553	85	16.2	3	0	270	160	59.0	9	0	534	114	40.7	10	0	558
Medication management services	143	1.5	0	0	23	86	2.0	0	0	90	161	2.3	0	0	54	114	26.4	0	0	443
Peer counseling/mentorship	143	0.0	0	0	2	87	0.0	0	0	0	161	0.0	0	0	0	115	0.0	0	0	2
Physical health counseling	143	0.5	0	0	27	87	0.1	0	0	7	161	1.1	0	0	20	115	2.8	0	0	49
Prescriber visits	139	1.6	1	0	14	85	3.1	2	0	17	150	3.1	3	0	17	104	4.6	3	0	70
Social skills training	143	1.4	0	0	44	87	13.8	0	0	299	161	6.6	0	0	364	115	5.7	0	0	124
Structured community meetings	143	1.1	0	0	64	87	17.2	0	0	211	161	57.6	1	0	540	112	67.8	27	0	355
Structured social/recreational activities	142	9.0	0	0	123	86	27.9	8	0	223	160	21.3	8	0	180	114	63.0	30	0	420
Treatment planning	143	0.4	0	0	6	87	0.1	0	0	2	161	0.3	0	0	6	115	0.6	0	0	11
Vocational/educational counseling	143	2.3	0	0	119	87	0.4	0	0	13	161	0.6	0	0	24	115	5.6	0	0	101

Summary of treatment services provided

According to the clinical record review, the majority of residents (95.5%) do have their medication administered weekly or more frequently. However, based on averages presented in the previous table, there seemed to be minimal service provision overall across facility types. Additionally, the main services provided were primarily skills training and group activities, not intensive mental health treatment such as psychotherapy, prescriber visits, and case management. This suggests that the main focus of residential treatment is daily structure and support rather than comprehensive mental health treatment.

While the averages indicate the presence of some services, the medians for each service in each facility type were more indicative of the “state of service provision” in the residential system. Data show that, within the six-month study period, only a few residents received multiple services, while the vast majority of residents received few to none at all.

By facility type, the medians show the common service experience of residents. The significantly low median numbers for services across all facility types is concerning given the nature and purpose of residential facilities. These low numbers may be due to the variation in documentation practices and requirements (see the Study Limitations section). Additionally, only a portion of facilities under each facility type provide any given service. This echoes the themes of inconsistent service provision and indistinct treatment boundaries between facility types.

Without consistent and adequate documentation practices within and across facility types, both the quantity and the quality of residential services will remain unknown. Based on these numbers, most residential programs provide a limited number of mental health treatment and supportive services.

Study Question 5: Are treatment services individualized for each resident?

Acumentra Health looked at residents' treatment plans to determine whether they had been modified in the past 6 months, which is an indicator of individualized treatment. Overall, only 27% of residents had modifications made to their treatment plans during the six months prior to the review date. Table 18 shows that SRTFs had the highest percentage of individualized treatment plans (33.9%), while RTFs had the lowest (21.7%).

Table 18. Number and percent of residents with individualized treatment plans.*		
Facility Type	Number	%
AFH (N=143)	40	28.0
RTH (N=87)	23	26.4
RTF (N=161)	35	21.7
SRTF (N=115)	39	33.9
Total (N = 506)	137	27.0

*Plans that had one or more modifications within the past 6 months.

State regulations only require residential facilities to review treatment plans annually. Observation revealed that most annual treatment plans were too global and non-specific to support any recovery/resiliency activities. Even though specific knowledge of residents' needs was noted at times, it was generally not included in treatment plans.

For the most part, both residential and clinical treatment services were focused on minimal activities to support maintenance of the resident at the current facility rather than to set goals to move the resident to the next level of care. There were some efforts to move residents to the next level of care, but as the data show, this was only for 27% of the overall resident population. The provider survey data also supports this finding. Overall, 18 out of 71 (25.4%) respondents reported modifying the treatment or service plan annually (Table 19).

Table 19. Provider Survey Question 10: How often do you modify the treatment plan?*

Category	AFH		RTH		RTF		SRTF	
	n	%	n	%	n	%	n	%
As needed	10	40%	2	12%	3	19%	1	8%
Annually	1	4%	2	12%	1	6%	1	8%
As needed or annually			4	24%	6	38%	3	23%
Every 6 months or annually								
As needed or every 6 months	6	24%	4	24%	1	6%		
Every 6 months	6	24%	2	12%	3	19%	4	31%
Every 3 to 6 months			1	6%				
Every 3 months	2	8%	1	6%	1	6%		
As needed or every 3 months					1	6%		
Every 30 to 60 days							1	8%
As needed or monthly							1	8%
Monthly			1	6%			1	8%
Weekly							1	8%
Total	25	100%	17	100%	16	100%	13	100%

*This was an open-ended question in the online survey. The above categories were written in by providers.

Study Question 6: Are residents more functional and more independent as a result of the treatment services?

To address this question, reviewers looked for discharge plans in the records reviewed. Reviewers also looked for the inclusion of transition options and notes about progress in meeting treatment goals in residents' treatment plans.

Indicator 6-1: Percent of residents who had discharge plans during the study period.

Reviewers looked for discharge plans in residents' records, and found that discharge planning is not a regular treatment activity for any facility type. Table 20 shows the number of residents with discharge plans for each facility type. Just under half (45.2%) of SRTF residents had discharge plans, while 36.8% of RTH, 21.7% of RTF, and only 17.5% of AFH residents had a discharge plan. This suggests that planning for movement into a lower level of care or independent living is not a priority of residential services in Oregon.

Table 20. Number and Percent of Residents with Discharge Planning in Study Period.

Facility Type	Number	%
AFH (N=143)	25	17.5
RTH (N=87)	32	36.8
RTF (N=161)	35	21.7
SRTF (N=115)	52	45.2

Indicator 6-2: Percent of total number of residents in study population who had transition options included in the treatment plan during the study period.

Reviewers also looked for evidence of planning for transition to a lower level of care. Table 21 shows that only 25.2% of SRTF, 20.7% of RTH, 14.9% of RTF, and 6.3% of AFH residents have discussed or received services focused on transition options. Again, it is noteworthy that AFHs had the lowest percent of residents who had transition options in their treatment plans when this population would seem to have the greatest potential for more independent living. This lack of transition planning indicates that moving residents toward a lower level of care is not a focus of residential services.

Table 21. Number and Percent of Residents Who Had Transition Options Included in Treatment Plans.

Facility Type	Number	%
AFH (N=143)	9	6.3
RTH (N=87)	18	20.7
RTF (N=161)	24	14.9
SRTF (N=115)	29	25.2

Indicator 6-3: Percent of residents whose treatment plan noted improvements in treatment goals, or treatment goals were resolved during the study period.

Based on the treatment plans reviewed, the majority of residents do not have noted improvements in treatment goals documented, or are not higher functioning as a result of services. Table 22 shows that residents' treatment plans in RTFs showed the most improvement: 35.4% of RTF residents demonstrated treatment progress. AFH residents showed the least progress toward treatment goals at 18.2%.

Overall, this suggests one of the following:

- Treatment plans are not individualized, updated, or modified to specifically reflect the course of a resident's treatment.
- Progress on specific treatment goals is not commonly documented.
- No progress is being made; therefore, the facilities are not providing services necessary to move residents toward more independent living.

Table 22. Number and Percent of Residents with Noted Improvements in Treatment Goals or Treatment Goals Were Resolved.

Facility Type	Number	%
AFH (N=143)	26	18.2
RTH (N=87)	18	20.7
RTF (N=161)	57	35.4
SRTF (N=115)	29	25.2

Results of Resident Interviews

Acumentra Health asked residents about their readiness for more independent living, and whether, in their opinion, the services they received helped them to meet their treatment goals. Fifty-four percent (273 out of 506) of the residents included in the study agreed to participate in the interview.

Acumentra Health asked residents the following questions:

- Why are you living in a residential facility?
- Do you feel ready for more independent living?
- What would be your options if you were ready to move to more independent living?
- Do you feel you've made progress since you've been here? Specifically, in the following areas:
 1. Activities of daily living (cleaning, bathing, cooking, dressing, etc.)
 2. Physical health (doctor's appointments, managing a physical condition, medications for a physical condition, etc.)
 3. Mental health (decrease in symptoms, medications, ways to self-soothe, staying out of the hospital, fewer crises, etc.)
 4. Social/recreation (family, friends, hobbies, getting out in the community, etc.)
 5. Self care (nutrition, exercise, quitting smoking, spiritual life, etc.)
 6. Substance use/abuse
 7. Job/school
 8. Money (getting money [SSI, GAU, job, etc.], budgeting, shopping, etc.)
 9. Housing (independent living options)
 10. Life satisfaction (sense of happiness, contentment, direction, fulfillment, etc.)

Most residents (47% of SRTF residents, 57% of RTH and RTF residents, and 67% of AFH residents) reported *not* being ready for more independent living. Of these, 51% preferred living independently (see Tables 23 and 24 below). However, these results should be interpreted cautiously because reviewers observed that residents with the highest LOCUS scores would frequently report that they were ready for independent living, and that residents with the lowest LOCUS scores would frequently report that they were not ready for more independent living.

Table 23. Percent of residents who report being ready for lower level of care by facility type.

Facility	Ready	Not Ready
AFH	33%	67%
RTH	43%	57%
RTF	43%	57%
SRTF	53%	47%

Table 24. Percent of residents who are ready for a lower level of care and their preferred setting by facility type.

	AFH	RTH	RTF	SRTF	Total
A lower level of care residential setting	3%		13%	43%	14%
Don't know			7%		2%
Family	3%				1%
Independent housing	57%	41%	57%	43%	51%
Shared housing	10%	18%	10%	10%	11%
Supported housing	27%	41%	13%	5%	20%

Table 25 below shows that a great majority (70% or more) of residents feel that services have helped them to improve; the most frequently cited areas include life satisfaction (79%), mental health (77%), physical health (74%), activities of daily living and self care (70%). The most frequent areas cited for no improvement include understanding their housing options (59%); preparation for work, school or other meaningful activity (49%); and, social life and recreation (34%).

There were no appreciable differences between facility types.

Table 25. Percent of residents who reported that services have helped them improve, all facility types.

Area of improvement	N	Yes	No	Don't know	No problem
Activities of daily living	273	70%	12%	4%	15%
Physical health	273	74%	14%	4%	8%
Mental health	273	77%	13%	5%	5%
Social/recreation	273	56%	34%	5%	5%
Self care	272	70%	18%	5%	7%
Substance use/abuse	272	17%	6%	4%	73%
Job/school	272	42%	49%	4%	4%
Money	272	62%	22%	3%	13%
Housing	272	35%	59%	3%	3%
Life satisfaction	271	79%	15%	5%	2%

Results of Online Survey of Providers

Acumentra Health asked the facilities reviewed for this study to participate in a web survey designed to capture their perception of both their function and their impact. Results of this survey echo previous discussion of the indistinct functions of facility types and the significant overlap of roles, services, and residents.

The web survey results for service provision reveal two significant points of consideration:

- 1) There were major inconsistencies between the online survey results and on-site reviews regarding the type and frequency of services. What facilities reported in the web survey varied from services that were actually documented and evidenced in chart reviews and site visits. This difference further demonstrates the lack of consistent documentation practices within and among facility types and the lack of clear service structures for each facility type. Figure 4 shows the median number of services provided during the 6-month study period based on chart reviews and site visits. Figure 5 shows the number of the services facilities reported that they provide at least once a week. These data are not directly comparable but illustrate the gap between what services are actually provided versus what the facilities reported providing. For example, the median number of social skills services provided by all facility types during the six-month study period was zero; however, all facility types reported providing these services at least once a week. It is unclear whether this discrepancy is due to lack of documentation or misperception about how many services are actually being provided.
- 2) Web survey averages of service type and frequency demonstrate a lack of consistent service provision. With the exception of social and recreational activities, which all facility types provide on a weekly basis, fewer than half of all facility types provide structured, consistent (weekly) skills training and supports. As the facilities provide 24-hour residential care, it can be assumed that services could be provided on a daily basis. The majority of facilities do identify providing such services on an “as needed” basis. However, chart documentation did not support this claim, and “as needed” care provision does not support the concept of intentional treatment planning and provision.

Figure 4. Comparison of median number of services provided (both in-house and out-of-house) in a 6-month period, by facility type.

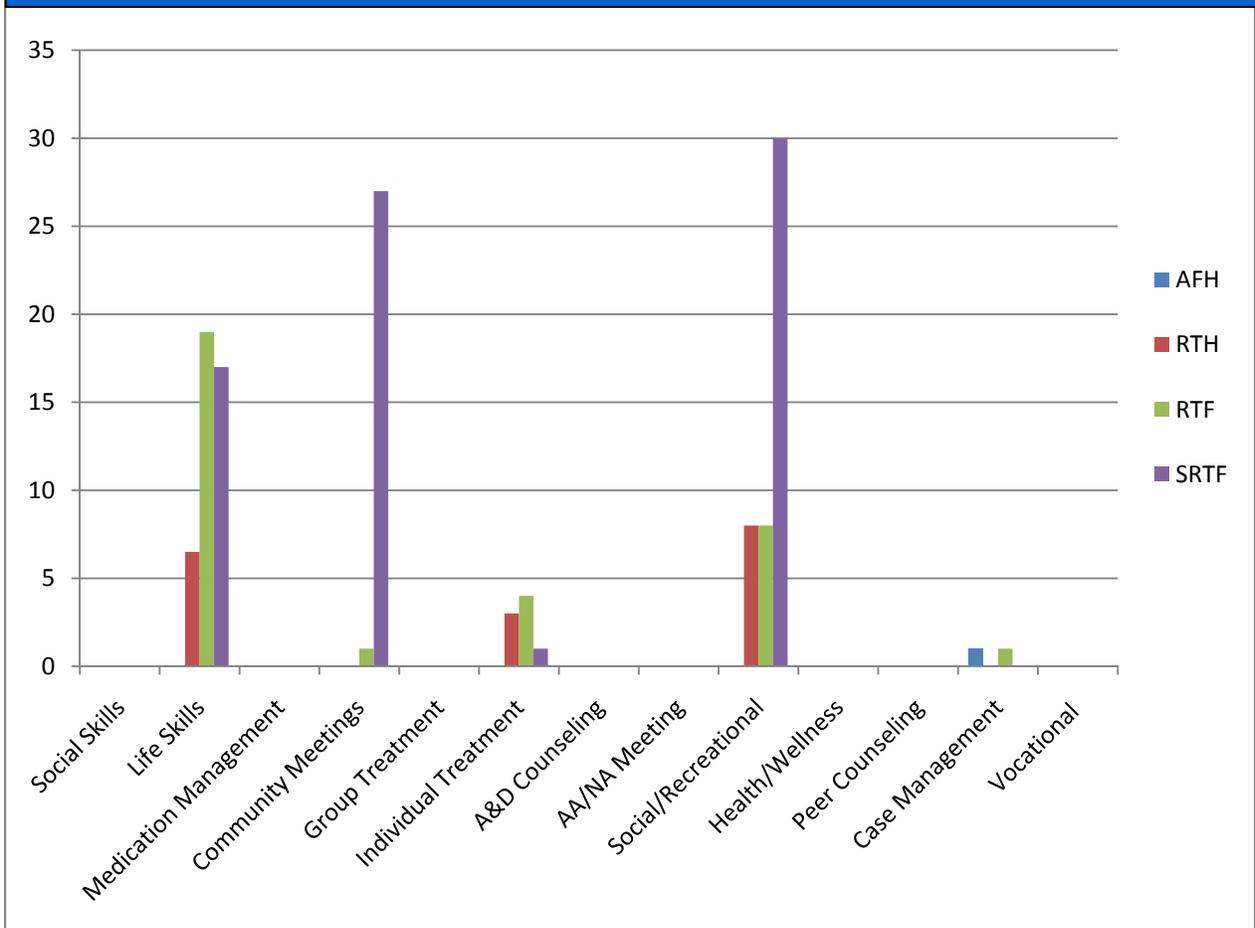
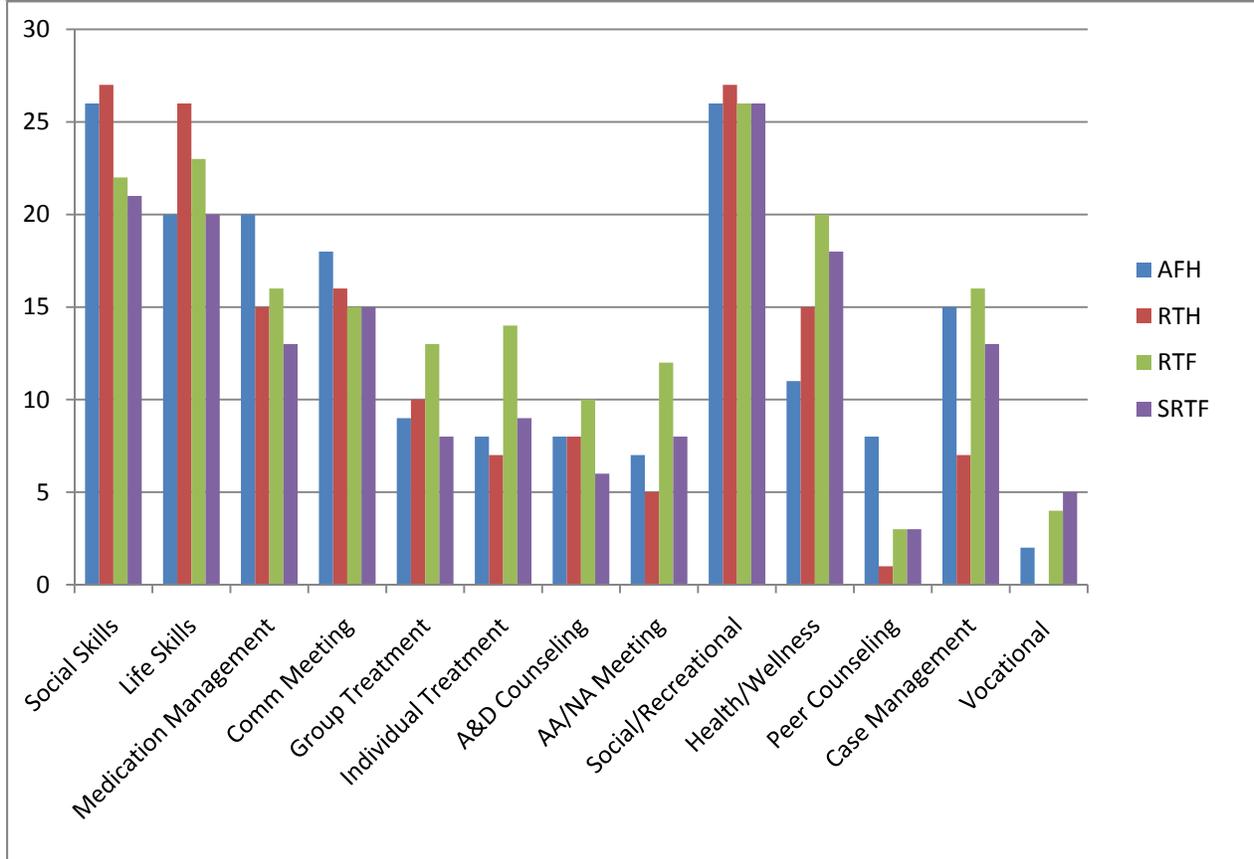


Figure 5. Comparison of self-reported services provided weekly* (both in-house and out-of-house), by number of responses by facility type.



*The graph combines services provided 1 to 2 times a week with those provided 3 or more times a week.

Expected level of independent function

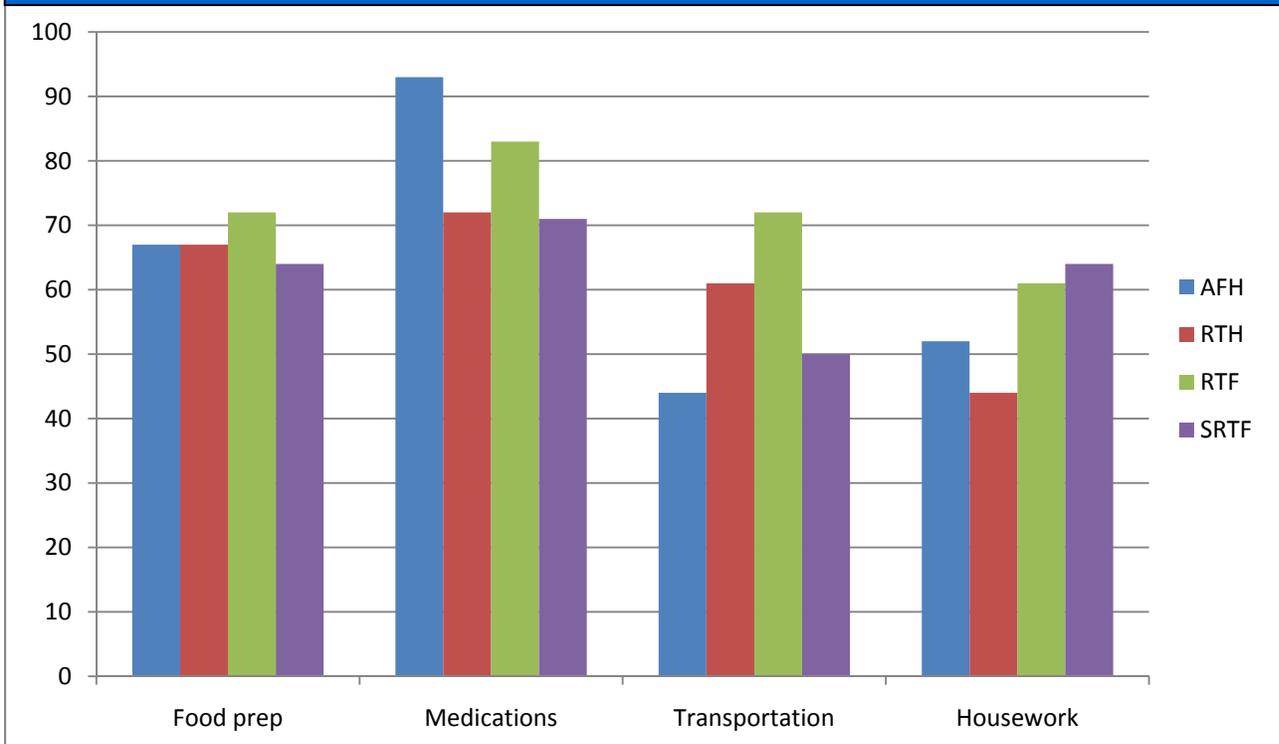
Acumentra Health asked providers to report on their expectation of levels of independent functioning for residents upon admission into the facility (see Figure 6 below). Survey results indicated that their expectations did not correspond with the intended functions and roles of the facility types. For example, the AFH is the residential type closest to independent living and should serve as a transition to such. Therefore, it may be assumed that residents living in an AFH setting are higher functioning and closer to independent living than those in a higher level of residential care, such as an RTH or SRTF. However, the AFHs' web survey responses indicate that they expect a rather low level of independent functioning in activities of daily living—activities that are integral to successful community integration and independent living. This is evidenced by AFH responses on what they expect to provide significant to total assistance with: 93% medication

dispensing, 67% food preparation, 52% housework and laundry, 44% transportation, 26% phone, and 36% other tasks.

When compared to the highest level of residential care, SRTF, these numbers suggest a confusing role distinction between levels of care. SRTFs report an expected level of functioning requiring significant to total assistance with: 71% medication dispensing, 64% food preparation, 64% housework and laundry, 50% transportation, 43% phone, and 0% other. The SRTF and AFH expectations for level of functioning had little variation with the exception of the AFH being prepared to provide more assistance with medication dispensing and “other” tasks. Additionally, the RTF reported a greater expectation of significant to total assistance than the SRTF as well: 83% medication dispensing 72% food preparation, 72% transportation, 61% housework and laundry, 33% phone, and 29% other.

These results raise concern as to the different functions of facility types. Based on their expectations of resident functioning, facility types do not vary much with respect to their level of care. It is particularly curious that AFHs are prepared to provide intensive assistance in basic activities of daily living even though they are the lowest level of care within the residential system and purportedly serve as transitional placement to independent living. The expectation for low functioning levels, combined with the significant lack of skills training provided, point to indistinct treatment and functioning levels among facility types. Observation would indicate that the level of care provided by individual facilities varies within each facility type. Further analysis would be necessary to determine whether the level of care provided by individual facilities is independent of facility type, and whether uniform levels of care can be ascertained.

Figure 6. Sampling Comparison of Expected Levels of Significant to Total Assistance, Percent of Facilities.



Barriers to admission, provision of care, and transition

The following questions addressed barriers that may affect transition to lower levels of care throughout the residential system. The survey contained open-ended questions about waiting lists and the length of waits and reasons for waits. The answers varied widely, and many survey participants did not respond to these questions. The results described below are based on the qualitative survey responses.

Admission

The lowest median wait list time was 0 days for RTHs. AFHs had the second lowest median wait at 7 days, while SRTFs had a median wait of 30 days. RTFs had the highest median wait time at 90 days.

These medians are based on 15 responses for AFHs, 13 responses for RTHs, 9 responses for RTFs, and 7 responses for SRTFs. Eight AFHs, 1 RTH, 2 RTFs, and 2 SRTFs answered this question with “N/A.”

What are some of the reasons residents stay on the waiting list?

The lack of available beds was the most commonly cited reason for residents staying on a waiting list. Facilities also identified the role that certain medical conditions play in determining appropriateness of placement. If a resident requires 24-hour nursing care or other intensive medical maintenance, the resident remains on the waiting list until there is a resolution of these issues. Other wait list reasons included polydipsia diagnoses (i.e., excessive drinking of water), concerns regarding compatibility with current milieu, and Psychiatric Security Review Board regulations. Additionally, some facilities reported that they will accept a person with history of assaultive behavior, but require a moratorium of such behavior (usually 30 days) and will waitlist a resident until this is satisfied.

Many facilities also indicated a lack of knowledge of how wait lists for their facilities are maintained since ECMU is the referral gatekeeper and manages the process.

Reasons that consumer was inappropriate for the facility.

The most common responses for reasons why a consumer was inappropriate for a facility included the need for a higher level of care, consumers’ refusal to adhere to program rules, assaultive behavior, and inappropriate substance abuse.

What are the restrictions you have on admissions?

Responders cited the following as restrictions on admission: consumer refusal to accept program rules at admitting facility, assaultive behavior, current drug/alcohol

use and/or dependence, history of sex offenses, and medical problem/physical disability. Responders reported that they are not equipped to provide the level of nursing and medical supervision that some referrals require. Also, three providers indicated that their facilities are not equipped to accommodate handicap disabilities. Another three facilities noted that they do not accept residents with primary diagnoses of Developmentally Delayed or Substance Abuse/Dependence without an accompanying Axis I mental health diagnosis.

Additional restrictions include history of arson, inability to meet evacuation requirements, smoking, and sex offense related to the impact on the children living in the home.

What are some of the challenges to getting residents admitted?

The majority of responses indicated issues related to referrals. Facilities are concerned with the appropriateness of referrals made with respect to diagnoses, medical conditions, and mental health stability. Additionally, many facilities noted that referrals are often incomplete, requiring more medical and financial information and more thorough coordination of initial care (medication orders and financial arrangements) prior to admission to the facility. The main referral challenge was an overarching lack of referrals. Facilities reported not receiving enough referrals to keep their facilities at capacity.

Responders also cited funding as a challenge to admission.

Provision of care

What are your primary treatment approaches?

Responders cited person-centered care, psychosocial rehabilitation, recovery/resilience model, and cognitive behavioral therapy as primary treatment approaches. A few responders reported using other treatment approaches, including motivational interviewing, dialectical behavior therapy, assertive community treatment, and strengths-based approach. Others identified using an individualized, eclectic treatment approach for each resident.

Many of the responders that provided commentary in the survey seemed to equate a treatment approach with providing clinical services. These facilities stated that they do not provide treatment and are unable to account for a therapeutic approach.

Generally, facilities at a higher level of care (RTF and SRTF) had a clearer understanding of their therapeutic and service approach. AFH providers most commonly expressed a view that they were allowed only to provide a homelike

environment, and minimized their therapeutic role in providing daily structure, cueing, defusing, and emotional support. Many AFH providers considered their role to be maintaining residents rather than assisting resident to progress toward more independent living. As a clear example of this, many providers do all the cooking for residents and some residents complained during interview that they were not allowed to cook.

Obstacles to delivering services at current placement.

The primary obstacle noted was resident refusal to participate in available services. Secondary was a request for hands-on training for direct care staff and funding resources to provide more comprehensive care.

Other obstacles noted were a lack of sufficient access to specialty services, not being licensed or equipped to deliver nursing care, assaultive behaviors, and inadequate communications and collaboration with county partners.

Transition

What are the barriers to stepping residents down to a lower level of care?

The primary barriers noted were lack of appropriate options, chronicity of symptoms, client reluctance, and physical health issues (Table 26). Other barriers mentioned were residents needing help with medication compliance, posing a danger to self and others, loss of Medicaid coverage if moved into a lower level of care, and concerns about substance abuse relapse. Also, facilities specializing in the treatment of polydipsia were concerned about these residents receiving adequate treatment for this disorder.

Table 26. Provider Survey Question 19: What are the barriers to stepping residents down to a lower level of care? Number and percent of total respondents by facility type.

Barriers	AFH (N=29)		RTH (N=19)		RTF (N=18)		SRTF (N=14)	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
A. Lack of appropriate options	17	59%	15	78%	15	83%	13	93%
B. Client reluctance	15	52%	12	63%	13	72%	10	71%
C. Chronicity of client symptoms	18	62%	14	74%	14	78%	13	93%
D. Frequent acute care hospitalization for client	13	45%	7	37%	6	33%	2	14%
E. Physical health issues	13	45%	8	42%	10	56%	9	64%

List other criteria (for moving into lower level of care)

Facilities noted the following: safety to self and others, treatment goals satisfied, ability to comply with medications, achievement of daily living skills, adequate community supports, ability to self-coordinate care, financial capability, and available housing. Some facilities note that they do not make discharge and transition decisions—this is determined by county entities.

Housing type (for those who moved into lower level of care)

From 21% to 39% of the responders reported that residents who moved to a lower level of care moved to independent living (Table 27). Interestingly, this includes SRTF providers (21%). About two-thirds of residents moved to shared or supported housing.

Table 27. Provider survey question 16A, housing type: In 2009, how many residents moved to a lower level of care after discharge?

Lower Level of Care Housing	AFH (N=29)		RTH (N=19)		RTF (N=18)		SRTF (N=14)	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
a. Shared housing	7	24%	1	5%	3	17%	7	50%
b. Supported housing	8	28%	8	42%	11	61%	3	21%
c. Independent housing	7	24%	6	32%	7	39%	3	21%
d. Other, list...								
AFH	1	3%	0	0%	3	17%	1	7%
RTH	0	0%	1	5%	0	0%	1	7%
RTF	0	0%	0	0%	0	0%	1	7%
Family	1	3%	1	5%	0	0%	1	7%

Where? (For those moving into higher level of care)

Providers commonly cited nursing facilities (for medical conditions), higher-level residential facilities, jail, and acute care settings as locations for residents who were discharged to a higher level of care (Tables 28, 29).

Table 28. Provider survey question 16B: In 2009, after discharge how many residents moved to a higher level of care? Discharge location by facility type.

Discharge location	AFH (N=29)		RTH (N=19)		RTF (N=18)		SRTF (N=14)		Responses	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
a. Secure residential facility	4	14%	3	16%	2	11%	0	0%	9	100%
b. State hospital	4	14%	5	26%	9	50%	7	50%	25	100%
c. Other, list...	19	66%	9	47%	10	56%	8	57%	46	100%

Table 29. Provider survey question 16B, other locations: In 2009, after discharge how many residents moved to a higher level of care? Discharge location by facility type.

Category	AFH		RTH		RTF		SRTF	
Acute Care			1	50%			3	100%
Crisis Center					1	12%		
Family with in-home nursing care	1	25%						
AFH					3	38%		
From an RTF to an RTF with a higher level of care					1	12%		
Jail	2	50%	1	50%	1	12%		
Nursing Facility	1	25%			2	25%		
Total	4		2		8		3	

*This was an open-ended question in the online survey. The above categories were written in by providers.

DISCUSSION

A great majority of residents served by Oregon’s mental health residential system and community mental health system are living successfully in the community. Most (73%) have a major psychotic disorder. While 35% of these residents came to their current living situation directly from the state hospital, most had experienced tenure at state hospitals. So it is no small measure of success that so many, who otherwise would be institutionalized, live in community settings.

However, within the residential system, there is considerable ambiguity between facility types and the levels of care provided. While the median LOCUS scores show that each facility type has a core population and services that distinguish it from the others, there is still significant overlap between the facility types in terms of their resident populations, service provision, and intensity of care.

The overlap raises the question of whether level of care should be tied to a building. For example, reviewers observed that a resident who could not be managed at the state hospital was being successfully managed at an RTH. Residents who require personal care, which is typically provided at nursing facilities, receive such care at mental health residential facilities. Existing OARs do not provide sufficient guidance about the provision of the level of care at each facility type, or even address level of care.

The data show that, overall, only 26% of residents are at the correct level of care, based on the level of care anticipated for each facility type. A majority (60%) were found to have LOCUS scores for a lower level of care, which may be a measure of the success of the current services. However, the lack of discharge/transition services demonstrates that residential facilities are not generally focused on preparing residents for more independent living. There is little evidence of downward movement through the residential system into independent living.

There is also little consistency within the facility types with respect to the intensity and frequency of services provided to residents. The variation in service provision and treatment strategy both across and within facility types is profound.

Major Observations by Facility Type

Adult foster homes

Site visits and chart reviews of the AFH revealed two treatment strategies in the same facility type. One type of foster home actively encouraged the recovery model and provided skills training to assist residents in transitioning to independent living. The residents in these homes were considerably more active in

their treatment and daily living skills such as cooking, cleaning, and laundry. Additionally, these residents openly talked about upcoming transition and expressed a desire to live independently.

The other type of foster home provided more of a “caretaking” approach and did not require residents to actively engage in daily living skills, nor did these homes appear to focus on transitioning residents. During interviews, residents in these homes did not express a desire to move toward independent living and reported benefitting from the ongoing sense of support and community offered by the home. This type of AFH does not provide treatment, but functions more as a “room and board” home.

Some AFH residents benefit from short-term stabilization and skills training for independent living. Others are able to thrive in a lower level of care than an RTH, RTF, or SRTF, but the severity of their mental illness would compromise their ability to live independently. They clearly benefit from the sense of community and belonging afforded by a foster home setting; in a more independent setting, they would likely experience severe isolation.

Residential treatment home

Much like the RTFs, the RTHs proved to be beneficial when operated by or closely connected to a community mental health program focused on recovery and transition. With few exceptions, the RTHs did not demonstrate a focus on transitioning residents to a lower level of care, nor did they provide intensive recovery services.

Residential treatment facility

The RTF chart reviews, LOCUS scores, and resident interviews revealed the potential for many of these residents to succeed in a lower level of care. The services provided by RTFs were frequently indistinguishable from those provided by an SRTF.

Secure residential treatment facility

The SRTF proved to be the most consistent facility type in terms of services provided. Many of these facilities provide exceptional recovery-focused treatment and are a successful alternative to long-term institutionalization in the state hospital. However, a vast majority (93%) of SRTF residents had LOCUS scores for a lower level of care, many residents had daily passes to move about the community independently and unsupervised, which raises the question why these residents are in an SRTF rather than an RTF.

CONCLUSIONS

After considering all the data collected and observations made during this study, Aumentra Health has answered the six study questions as follows:

1. Are residents at the correct level of care?

Most residents (60%) could be at a lower level of care.

2. Is the resident ready to be at a lower level of care?

Most residents with LOCUS scores indicating that they are ready for a lower level of care reported that they are reluctant for more independent living. Furthermore, the lack of discharge/transition planning services has not prepared them for a lower level of care.

3. If other options were available, could the resident move to a lower level of care?

The most frequently cited barriers to residents' ability to move to a lower level of care were: (1) the availability of other options and (2) resident reluctance.

4. What treatment services are offered at each level of care (i.e., for each facility type) to help residents move to a lower level of care?

The most common treatment services provided to residents are daily structure and support and medication management. This is a very traditional approach and not consistent with the recovery model.

5. Are treatment services individualized for each resident?

Overall, treatment plans are not specific enough to provide truly individualized services. The requirement to update treatment plans only once a year encourages stasis, rather than active recovery-based services.

6. Are residents more functional and more independent as a result of the treatment services?

Based on our observations, Oregon's residential care system is succeeding in keeping people out of the state hospitals by offering community-based treatment settings. Residents have benefitted and are more functional as a result of the residential treatment services. Most residents are stabilized and report satisfaction with services.

Next Steps

Two-track system

Currently, the state residential system operates as a hierarchical continuum, with SRTFs serving the most chronic cases and AFHs serving the least severe. The focus is on moving residents from “top to bottom” and ultimately out of the system into independent living. Our study results and reviewer observations, however, indicate the need for a systemic shift.

Many residents benefit from a residential track that focuses on initial stabilization followed by intensive skills building to steadily transition them into supported and/or independent living. This is in alignment with the tenets of a recovery/resiliency model and promotes individual success while decreasing institutional dependency. However, many other residents are living at the lowest level of care suitable for the severity of their illness and it is clear that they will require ongoing residential placement as an alternative to long-term institutionalization. These residents will not benefit from obligatory movement into a lower level of care and are best served in their current settings. Aumentra Health recommends that the residential system expand its scope of recovery-oriented services to support indefinite placements for these residents.

Training and regulation

No overarching treatment model or theory guides residential services in Oregon. Some facilities adhere to a recovery model with a focus on transitioning residents to a lower level of care. Other facilities focus primarily on traditional symptom management and stability, while others strictly adhere to the minimum requirements set forth by the state, not necessarily following a treatment model but providing a basic “caretaking” service.

While some facility operators demonstrate an understanding of best practices for residential treatment, a large percentage do not. There is a prevalent attitude among many of the facilities that residents are incapable of making progress given their condition. This attitude sets a precedent for creating a sense of dependency between the resident and the facility, thereby inhibiting the resident from reaching his/her fullest potential.

A statewide focus on training facility operators in the theory and method of recovery-oriented approaches would improve both the quality and quantity of services. Aumentra Health recommends that the state establish rules and regulations that enforce the implementation of these approaches and hold facilities accountable for the quality of their treatment.

APPENDIX A

Table A-1. In-house services provided during 6-month study period, by facility type. Number of enrollees (average number of services, median, minimum, maximum).

Service	Facility Type																			
	AFH					RTH					RTF					SRTF				
	Number	average	median	min	max	Number	average	median	min	max	Number	average	median	min	max	Number	average	median	min	max
12-Step meetings	143	0.0	0	0	0	87	0.0	0	0	1	161	0.0	0	0	2	115	0.3	0	0	20
Assessment/screening	143	0.0	0	0	2	87	0.0	0	0	3	161	0.0	0	0	3	115	0.7	0	0	40
Case management	143	0.7	0	0	49	87	0.9	0	0	19	161	2.7	0	0	99	115	2.9	0	0	36
Chemical dependency counseling or education	143	0.0	0	0	0	87	2.6	0	0	60	161	6.6	0	0	154	115	1.2	0	0	28
Coordination of care	143	1.2	0	0	54	87	2.0	0	0	23	161	1.1	0	0	51	115	3.3	0	0	38
Discharge/transition planning	143	0.0	0	0	1	87	0.5	0	0	10	161	0.1	0	0	4	115	0.3	0	0	7
Family therapy	142	0.0	0	0	0	87	0.0	0	0	0	161	0.0	0	0	2	115	0.0	0	0	3
Formal mental health or chemical dependency assessments	143	0.0	0	0	1	87	0.9	0	0	60	161	0.1	0	0	1	115	0.0	0	0	1
Group psychotherapy	142	0.0	0	0	1	87	4.6	0	0	67	159	6.1	0	0	94	115	2.3	0	0	55
Individual psychotherapy	143	6.2	0	0	380	87	4.3	0	0	34	161	10.1	0	0	81	115	2.8	0	0	22
Life skills training, group	143	1.8	0	0	69	87	14.4	2	0	140	161	17.1	6	0	435	115	14.0	6	0	116
Life skills training, individual	142	14.3	0	0	553	87	15.8	3	0	270	161	59.4	9	0	534	115	20.0	7	0	169
Medication management services	143	0.3	0	0	16	87	2.1	0	0	90	161	1.7	0	0	54	115	26.3	0	0	443
Peer counseling/mentorship	143	0.0	0	0	0	87	0.0	0	0	0	161	0.0	0	0	0	115	0.0	0	0	2
Physical health counseling	143	0.1	0	0	4	87	0.1	0	0	7	161	0.8	0	0	18	115	2.8	0	0	49
Prescriber visits	139	0.1	0	0	2	85	1.8	0	0	12	150	1.8	0	0	10	105	3.8	3	0	33
Social skills training	143	1.3	0	0	44	87	13.6	0	0	299	161	6.1	0	0	364	115	5.5	0	0	124
Structured community meetings	143	1.0	0	0	64	87	17.2	0	0	211	161	57.6	1	0	540	115	62.4	17	0	355
Structured social/recreational activities	143	6.4	0	0	113	87	27.9	8	0	223	161	20.4	7	0	180	115	55.3	26	0	420
Treatment planning	143	0.1	0	0	5	87	0.1	0	0	2	161	0.1	0	0	6	115	0.6	0	0	11
Vocational/educational counseling	143	0.9	0	0	48	87	0.4	0	0	13	161	0.6	0	0	24	115	5.6	0	0	101

Table A-2. Out-of-house services provided during 6-month service period, by facility type. Number of enrollees (average number of services, median, minimum, maximum).

Service	Facility Type																			
	AFH					RTH					RTF					SRTF				
	Number	average	median	min	max	Number	average	median	min	max	Number	average	median	min	max	Number	average	median	min	max
12-Step meetings	143	0.0	0	0	0	87	0.0	0	0	2	161	0.6	0	0	53	115	0.0	0	0	3
Assessment/screening	143	0.1	0	0	3	87	0.1	0	0	1	161	0.1	0	0	1	115	0.0	0	0	0
Case management	143	4.6	0	0	53	87	1.4	0	0	27	161	1.8	0	0	28	115	0.0	0	0	0
Chemical dependency counseling or education	143	0.5	0	0	24	87	0.1	0	0	11	161	0.4	0	0	26	115	0.0	0	0	0
Coordination of care	143	0.9	0	0	28	87	1.1	0	0	21	161	0.6	0	0	17	115	0.1	0	0	7
Discharge/transition planning	143	0.0	0	0	2	87	0.0	0	0	0	161	0.0	0	0	4	115	0.0	0	0	0
Family therapy	143	0.0	0	0	0	87	0.0	0	0	0	161	0.0	0	0	0	115	0.0	0	0	0
Formal mental health or chemical dependency assessments	143	0.1	0	0	5	87	0.5	0	0	19	161	0.0	0	0	2	115	0.0	0	0	0
Group psychotherapy	143	4.0	0	0	108	87	1.8	0	0	72	161	2.6	0	0	55	115	0.1	0	0	3
Individual psychotherapy	143	2.4	0	0	52	86	2.0	0	0	22	160	3.4	0	0	53	115	0.6	0	0	18
Life skills training, group	142	8.2	0	0	222	86	2.8	0	0	60	160	1.1	0	0	37	115	8.6	0	0	247
Life skills training, individual	143	1.6	0	0	35	85	0.3	0	0	10	160	0.4	0	0	15	114	20.6	0	0	558
Medication management services	143	1.1	0	0	23	86	0.1	0	0	2	161	0.6	0	0	34	114	0.0	0	0	2
Peer counseling/mentorship	143	0.0	0	0	2	87	0.0	0	0	0	161	0.0	0	0	0	115	0.0	0	0	0
Physical health counseling	143	0.4	0	0	27	87	0.0	0	0	0	161	0.3	0	0	20	115	0.0	0	0	4
Prescriber visits	140	1.5	0	0	14	85	1.3	0	0	17	150	1.3	0	0	17	104	0.9	0	0	70

Social skills training	143	0.1	0	0	5	87	0.2	0	0	7	161	0.5	0	0	22	115	0.2	0	0	5
Structured community meetings	143	0.0	0	0	1	87	0.0	0	0	0	161	0.0	0	0	0	112	4.4	0	0	119
Structured social/recreational activities	142	2.9	0	0	48	86	0.8	0	0	50	160	1.1	0	0	54	114	7.3	0	0	184
Treatment planning	143	0.3	0	0	6	87	0.0	0	0	2	161	0.2	0	0	6	115	0.0	0	0	0
Vocational/educational counseling	143	1.4	0	0	119	87	0.0	0	0	2	161	0.0	0	0	2	115	0.0	0	0	0