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Statewide Implementation of High-Fidelity Recovery-Oriented ACT: A Case Study

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Statewide implementation of high-fidelity recovery-oriented ACT: A case study

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Abstract

Background: Assertive Community Treatment (ACT) is a recognized evidence-based practice, but the use of Translation Science to ensure the broad implementation of high quality ACT services has not yet been fully explored. This single intrinsic case study explores how Oregon uses strategies identified through Translation Science to achieve statewide implementation of high-fidelity recovery-oriented ACT.

Method: Multiple data sources were used to evaluate this implementation process, including ACT fidelity review reports, programmatic outcome data, a national ACT taskforce survey, and focus groups with program participants.

Findings: In 2013, the Oregon Health Authority funded the creation of the Oregon Center of Excellence for Assertive Community Treatment to support the implementation of ACT. It also implemented administrative rules requiring an annual re-certification process with a minimum level of fidelity to the evidence-based model. Other implementation strategies included establishing an ACT Advisory Committee, quarterly reviews of implementation and outcome data, and trainings promoting the role of peer providers and related evidence-based practices.

Conclusion: High-fidelity recovery-oriented ACT services in Oregon are maintained through multiple strategies, including codifying the minimum level of ACT implementation into state administrative rule, linking fidelity benchmarks scores to Medicaid reimbursements, and funding ongoing oversight, training and technical assistance through a statewide technical assistance center. Strict adherence to the ACT model has been a key to ensuring a uniform level of high-quality care across Oregon while incorporating additional evidence-based practices without compromising the integrity of the original model.

Plain language abstract:

Assertive Community Treatment (ACT) is a mental health program serving individuals with the most severe mental illness in the community. While ACT is an evidence-based practice, there is more research needed to explore how ACT is implemented and maintained in different settings. In 2013, Oregon implemented ACT statewide. The Oregon Center of Excellence for ACT was created to provide training and technical assistance to ACT teams and conduct yearly fidelity reviews. Oregon is among the few states who have attached funding to yearly ACT certification, uses community sizes to determine the size of the ACT teams, and the technical assistance center not only provides training but also conducts yearly review of fidelity to the ACT model. This case study will review the steps Oregon took to implement ACT, how it continues to monitor fidelity to the model and provide training and support, and focus on recovery orientation and integrating evidence-based practices. Continued support, training, and the linking of fidelity benchmark scores to program funding are the ways that Oregon makes sure that ACT teams are successfully implementing the ACT model to fidelity with recovery-oriented care.

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The Assertive Community Treatment (ACT) model is a recognized evidence-based practice with over 25 randomized clinical trials demonstrating its effectiveness in reducing inpatient hospitalization and improving housing stability among individuals with serious mental illness (SMI; Dixon, 2000; Drake et al., 2001). The Schizophrenia Patient Outcome Research Team (PORT) studies recommend ACT treatment for individuals with schizophrenia (Dixon et al., 2010). Despite its long history as an evidence-based model, the impact of a systematic, statewide implementation of recovery-oriented ACT has not been fully explored.

ACT has been implemented in 41 states and abroad in the 50 years since its creation (Bjorklund et al., 2009; Stein & Test, 1980; Test & Stein, 1976), but was not broadly practiced in Oregon until recently. More than 20 years ago, Sobell (1996) identified the gap between research and practice in mental health settings. It often took 20 years for evidence-based practices to make it into the field (Department of Health and Human Services, 1999). Brekke et al. (2007) argued for the use of translational science to bring evidence-based practices into settings that may be different from those in which they were originally developed. Despite the awareness of the gap between research and practice, it continues to exist (Stirman et al., 2016).

Drake et al. (2003) identified factors to ensure successful implementation of evidence-based practices, including the following: (1) practitioners must receive sufficient education, training and skill development in an evidence-based practice; (2) education alone is ineffective at changing health care practices, so in addition to training, mental health practitioners must receive ongoing support because change occurs over time with sustained attention and effort; (3) to sustain evidence-based practice, there must be buy-in from stakeholders at all levels, mental health practitioners, agency leadership, funders, and mental health administrators at the state level; and (4) adherence to the evidence-based practice must be clearly defined and reinforced through financial and regulatory strategies that align with model expectations and outcomes.

One way to ensure that key components of an intervention are not "lost in translation" is the use of fidelity scales. Mowbray et al. (2003) defines fidelity as "the extent to which delivery of an intervention adheres to the protocol or program model originally developed" (p. 315). Interventions implemented with high fidelity are more likely to achieve the outcomes identified in the original studies of those models. Fidelity scales can identify and measure optimal levels of implementation of program elements that contribute to its efficacy. The assessment process can also inform new staff and remind existing staff of these key elements. Assessments must be repeated on a regular basis to ensure continued fidelity despite changes in leadership, staffing, and resources.

Currently, two fidelity scales are used nationally to measure fidelity to the ACT model. The Dartmouth ACT Scale, also known as DACTS, measures 28 indicators using a 5-point scale ranging from 1 (component is not implemented) to 5 (component is fully implemented). The Dartmouth scale is the most widely used standard fidelity measure for ACT (Phillips et al., 2001), is well researched, has established psychometric properties (Teague et al., 1998) and is referenced in the Substance Abuse and Mental Health Services Administration's ACT Toolkit (SAMHSA, 2008). The newer Tool for Measuring Assertive Community Treatment (TMACT) expands on the Dartmouth ACT Scale to include person-centered planning and incorporation of evidence-based mental health practices (Monroe-DeVita et al., 2011).

ACT fidelity scales cover the following three main elements: human resources and staffing (staff to client ratios, expertise, turnover rates), organizational boundaries (admission criteria, crisis policies, array of treatment services), and the nature of the services (treatment model, frequency of contact, SAMHSA, 2008). For example, an excerpt of the Dartmouth ACT Fidelity Scale on the indicators of fidelity related to Human Resources includes the existence of "small caseloads," "a team approach," and "continuity of staffing." On a scale of 1–5, caseloads receive a maximum score of 5 if there are 10 clients or less for each staff member; a caseload of 21–34 clients per staff member results in score of 3; and a caseload of 50 or more consumers per staff member receives a 1 (SAMHSA, 2008).

Despite the range of implementation levels included in fidelity scales, their use can create tension between adherence to the model and use of a beneficial site-specific adaptation. As Drake and Deegan (2008) point out, ACT fidelity scales focus on the structure of services but fail to measure more valuable aspects of the therapeutic relationship between ACT participants and clinicians, such as the attitudes of staff and the quality of the relationship. For example, recovery-oriented care is a central principle of mental health service provision (Hogan, 2003) that is not adequately addressed in ACT fidelity scales. To remedy this shortcoming, Salyers et al. (2011) define "high recovery-oriented" ACT services as those that instill hope, foster personal responsibility for illness management, and help individuals pursue meaningful life activities. In their study, high recovery-oriented ACT staff were shown to have high expectations of ACT participants and viewed them as capable to achieve a variety of life goals. The high-recovery orientation also emphasized the role of the peer specialist as a valued member of the ACT team.

Finally, high recovery-oriented ACT teams train ACT participants in self-directed Illness Management and Recovery (IMR), and frequently use "strengths" language and shared decision-making in determining treatment interventions (Salyers et al., 2011). IMR is a curriculum-based approach to helping individuals set and achieve personally important recovery goals and acquire knowledge and skills for independently managing their illness (Gingerich & Mueser, 2011). IMR gives staff new clinical skills and perspectives around goal setting and helps ACT participants achieve personal recovery goals. Finally, peer support specialists have been reported to be an important part of IMR group sessions as some participants were more comfortable sharing experiences with peers (Morse et al., 2019).

The aim of this interpretive case study is to explore how Oregon has used strategies identified by translational science and ACT experts such as technical assistance centers and annual fidelity assessments to achieve statewide implementation of high-fidelity ACT. The study will also explore how a standardized fidelity scale can be used when a site-specific adaptation would be beneficial.

Methods

Study design

The Oregon Center of Excellence for Assertive Community Treatment (OCEACT) and the Regional Research Institute for Human Services at Portland State University designed this single intrinsic case study to explore the statewide implementation of high recovery-oriented ACT in Oregon. The case study framework followed the approach described by Crowe et al. (2011) and the reporting standards suggested by Rodgers et al. (2016). Multiple data sources were used to identify the strategies used in Oregon to (1) ensure ongoing training and support to the ACT model, (2) facilitate stakeholder buy-in, and (3) maintain statewide fidelity to the model.

The case

In 2010, an investigation by the United States Department of Justice (USDOJ) found that too many Oregonians living with serious mental illness (SMI) were receiving institutionalized care in the State Hospital or in residential care settings instead of living as integrated members of their local communities. The investigation also determined that Oregon had not adequately developed an infrastructure to provide the full array or volume of outpatient services needed in community-based settings (Bernstein, 2014). In 2013, as part of the USDOJ settlement, Oregon committed to expanding access to high-quality community-based mental health services by ensuring the implementation of high fidelity recovery-oriented ACT programs statewide. This study explores the strategies used and the results of those strategies.

Data sources

As suggested by Crowe et al. (2011), multiple data sources were used to evaluate the implementation process, including staff interview data from annual ACT fidelity reviews, participant outcome data, an informal survey of directors from other state technical assistance centers, and focus groups with ACT participants.

ACT fidelity reviews. Since 2013, OCEACT has collected annual fidelity review data from all ACT programs operating in Oregon to assess their fidelity to the evidence-based model. A modified version of the Dartmouth ACT fidelity assessment scale is used for this purpose. The modifications are in accordance with guidance from the Oregon Health Authority and limited to the addition of two items from the Tool for Measuring Assertive Community Treatment (TMACT): (1) transition to less intensive services and (2) the role of the Peer Support Specialist. The methodology for the OCEACT fidelity assessments consists of two reviewers conducting a 2-day site visit that includes staff interviews, observation of an ACT team meeting, and a comprehensive chart review. After the site visit, the reviewers arrive at a consensus score and write a comprehensive report which is then shared with the provider organization and the state. The report includes an item by item analysis of each indicator in the ACT fidelity scale, program strengths, and recommendations. This case study includes data from one to two annual fidelity assessments each of 36 ACT teams (65 reviews total) conducted between January 2018 and December 2019.

National ACT taskforce survey. Technical assistance centers have been created in several states in the United States to support the implementation of evidence-based mental health practices. In 2020, a national taskforce representing ACT technical assistance centers from seven states in the United States participated in an informal survey of ACT implementation around the country. Taskforce members shared their survey findings with us by email regarding which states tied re-certification or benchmark scores to continue funding of ACT services.

Participant outcome data. Oregon ACT programs are required to submit quarterly program data to the state through a web-based portal called the Oregon ACT Database, including participant referrals, enrollment, and outcome data. OCEACT analyzes the uploaded data each quarter and presents in a summary report at each OCEACT advisory committee meeting. The ACT data analyzed for this case study included participant enrollment in supported employment services and their competitive employment status from data submitted for October to December 2019. Additional outcomes related to psychiatric hospitalizations, emergency room use, living arrangements, arrests, nights in

jail, homelessness, substance use, and contact with natural supports can be found in past reports posted on the OCEACT website (https://OCEACT.org/outcomes/).

Participant focus groups. In 2017–2018, 31 focus groups were conducted by OCEACT with 156 ACT participants regarding their experience receiving ACT services. Respondents provided verbal informed consent to participate in the discussions, which were held in local mental health agencies. De-identified transcripts of the recorded focus groups were analyzed in collaboration with Portland State University's Regional Research Institute for Human Services. The university's Office of Institutional Research determined that this analysis did not require Human Research Protection Program (HRPP) review.

Analysis

Qualitative data from the focus groups were analyzed using Atlas.ti software to understand the contexts and processes as perceived from different perspectives (Crowe et al., 2011). Analysis followed Saldaña's (2016) method of first-cycle and second-cycle coding. Researchers started their analysis by using a content analysis coding method. Provisional coding gave an initial outline to the coding system based on the interview question and literature review, and then a more deductive approach was used through initial coding along with values, descriptive, and evaluation coding methods (Saldaña, 2016). Researchers read a sample of the data until the "first saturation point" (Friese, 2019) was reached. To make sure the codes were exhaustive and mutually exclusive, the research team worked together through several rounds of coding, making sure to come to a consensus when disagreements arose. All interviews were reviewed through successive rounds of coding by two coders. This refinement using pattern coding was continued until the essential themes were fully defined (Saldaña, 2016).

Descriptive statistics were used to summarize quantitative data in the annual ACT fidelity reports (2018 and 2019) and the Oregon ACT Database (October to December 2019).

Results

Training and ongoing support

In 2013, the Oregon Health Authority (OHA) funded the creation of OCEACT to support its first statewide effort to implement high-fidelity recovery-oriented ACT programs. Funding has continued since then to ensure continued fidelity to the model. The primary mission of OCEACT is to provide training and technical assistance to ACT programs around the state. Its secondary mission is to conduct the ACT fidelity reviews needed for state

certification. OCEACT also collaborates with local stakeholders by facilitating a quarterly ACT advisory meeting, and monitoring ACT outcomes through the collection of quarterly reporting of ACT referrals, utilization, and outcomes. The director hired to lead this initiative has above 18 years of experience conducting research and evaluation of evidence-based practices in mental health including implementation of ACT and the related Individual Placement and Support (IPS) model of supported employment (Clarke et al., 2000; Herinckx et al., 1997; Paulson et al., 1999, 2002). OCEACT hired five statewide trainers with previous experience on ACT teams to provide expert consultation and conduct annual fidelity reviews of ACT programs around the state. A full-time data analyst manages quarterly outcome data collection and reporting from all ACT teams, conducts qualitative evaluations of the effectiveness of ACT, and analyzes ACT data for quarterly reports. OCEACT was modeled after the Oregon Supported Employment Center of Excellence, which was created in 2008 to ensure high-fidelity implementation of the IPS model of supported employment throughout Oregon.

Statewide ACT implementation: 2013–2019. In the USDOJ settlement, Oregon committed to creating capacity to provide ACT services to residents who required this level of care, which was estimated to be approximately 2,000 individuals statewide. This estimate for ACT capacity was based on Cuddeback et al. (2006) research indicating that for a general population of 100,000 people, approximately 65 would meet the definition of severe mental illness and require ACT level of care. Researchers and policy makers in Canada and Japan estimate that 75–100 individuals respectively per 100,000 in the general population need ACT level of care (British Columbia Ministry of Health Services, 2008, p. 11; Nishio et al., 2014). Using these population parameter estimates and other local sources of data, OCEACT works with the community mental health program (CMHP) administrative leadership to determine the need for ACT services. This is based on the number of adults above the age 18 in their catchment area. They create an ACT staffing plan that maximizes ACT fidelity regarding staffing based on the number of individuals to be served.

Unlike other states, such as New York or Washington who authorize two sizes of ACT programs: "full" ACT teams (60–68 and 80–100 individuals) and "half" ACT teams (40–48 and 42–50 individuals; New York State Office of Mental Health, n.d.; Washington State Health Care Authority, 2012), Oregon took a different approach to creating ACT teams tailored to the size of each community. Oregon is made up of urban, rural, and frontier counties. In frontier counties, where there is one person or less per 6,000 square miles (Sackett, 2012), population parameter estimates for individuals in need of ACT was as low as

10 individuals. At the end of 2019, of the 31 ACT teams in operation, 20 of them (67%) operated in frontier and rural counties in Oregon and served between 10 and 40 individuals. Oregon set a minimum threshold that ACT teams may serve a minimum of 10 individuals and no more than 120 individuals as a maximum, which is specified in the Oregon administrative rules.

OCEACT consultation and implementation planning process. To support sufficient time for ACT implementation, OHA established a 12-month "provisional certification" timeline to implement all key components of the ACT model. OCEACT begins working with CMHPs in the early planning stages on practical steps to building a team such as hiring staff, budgeting, and determining the number of individuals to be served based on community need and population parameter estimates. ACT programs are comprised of a multidisciplinary team including the following: an ACT team leader, who is a master's level clinician; a prescriber, who can be a psychiatrist or a psychiatric nurse practitioner; nurses; and specialists in mental health, substance abuse treatment, employment, and peer support. It can take some time to recruit and hire all positions on an ACT team, especially in rural and frontier communities (Whitaker et al., 2006). Once the ACT team is hired, OCEACT provides training on the ACT model to all staff. Six months into the provisional provider year, OCEACT provides fidelity projection consultation to measure the extent to which all key components of the ACT model are implemented, which allows 6 more months to make program improvements by the first ACT fidelity review.

The first ACT fidelity review is conducted 12 months after the granting of provisional provider status. While there is no consensual agreement among ACT experts on cut off scores for quality assurance or accreditation for high fidelity ACT programs (McHugo et al., 2007), Oregon has set a minimum benchmark total score of 114 out of 140 on the modified DACTS to be certified as a "high fidelity" ACT program. Each year, ACT programs must meet this benchmark score and all additional program standards specified in the Oregon administrative rules to be certified in Oregon. Only certified ACT teams are allowed to bill Medicaid for their services using an ACT billing code.

At the time OCEACT was created in 2013, 13 ACT programs were in operation as identified by OHA. However, in the initial ACT fidelity reviews conducted by OCEACT, only two of these met the benchmark score of 114 to be considered a certified "high fidelity" ACT program. In 2014, OHA provided startup funds to develop 11 new ACT programs. Figures 1 and 2 illustrate the annual growth in the number of certified ACT programs and ACT capacity in Oregon from 2013 through 2019. There was a steady growth in ACT capacity through 2018. From 2013 to 2018, the number of certified ACT programs increased from 2 to 35 programs. In 2019, the total number of ACT programs dropped to 31, with two ACT programs closing and two
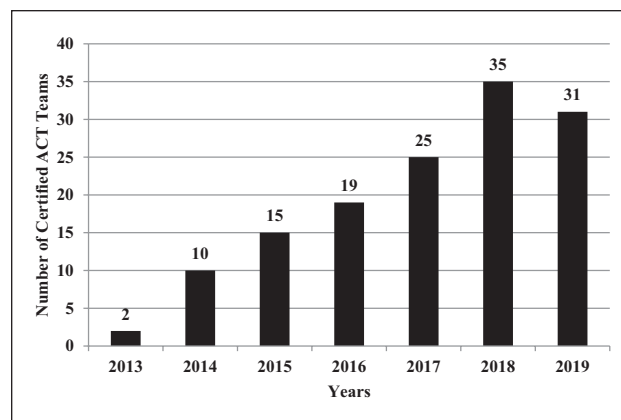

Figure 1. Growth in certified ACT programs in Oregon: 2013–2019.
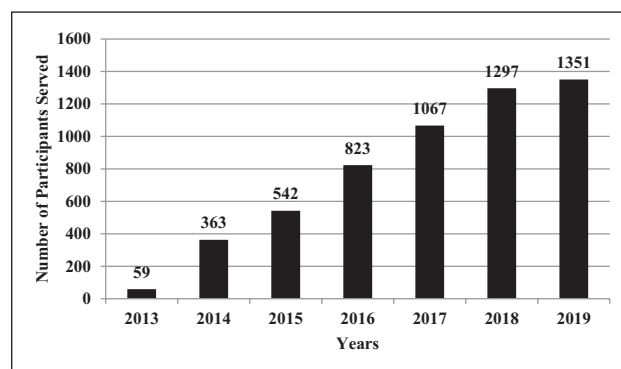

Figure 2. Growth in ACT capacity: 2013–2019.

agencies that had been operating two ACT teams each scaling back to one program each. The number of individuals served by certified ACT programs was 59 individuals in 2013 and reached 1,351 individuals by the end of 2019.

Annual state conferences for ACT teams on evidence-based mental health practices. OCEACT organizes and facilitates an annual statewide conference to promote evidence-based practices in mental health service. The annual OCEACT conference offers an efficient way to provide training for new and existing ACT programs. Each year, three nationally recognized experts in the mental health field are invited to provide keynote addresses and trainings in their area of expertise. In addition, the conference generally offers approximately 20 breakout sessions on a variety of topics to meet the needs of the ACT multi-disciplinary team. Keynote speakers have included mental health experts Kim Mueser, Peggy Swarbrick, Maria Monroe DeVita, Ben Henwood, Helle Thorning, Mark Salzer, and Eric Granholm, and others. Keynote topics have covered Cognitive Behavioral Therapy for Psychosis, Eight Dimensions of Wellness, community integration, cognitive behavioral social skills training, and working with specialized populations. The conference

serves as a venue for ACT teams to come together to share lessons learned and celebrate the successes of ACT programs and their participants as well as to address challenges to the operation of ACT programs in their local communities. Each year, the conference provides training to approximately 250 mental health professionals.

Buy-in from stakeholders at all levels

OCEACT has assembled a statewide advisory committee that meets quarterly so stakeholders from a variety of service sectors can address system-level issues and improve quality of care. The OCEACT Advisory Committee includes representatives from OHA, the Oregon State Hospital, the peer community, mental health providers, and housing service systems. The quarterly meetings facilitate dialog among stakeholders to create a common vision of the role ACT programs serve in the continuum of care. Attendees identify and resolve system-level issues regarding access to ACT services such as streamlining referrals, improving access, and the coordination between systems. Another core function of the Advisory Committee is to provide a forum for sharing the successes of ACT programs and ideas for improving the health outcomes of program participants. The advisory committee reviews ACT program outcomes and establishes quality improvement goals and benchmarks.

Adherence to ACT fidelity: clearly defined and reinforced through financial and regulatory strategies

Linking fidelity scores to ACT program funding. In Oregon, only certified ACT programs are allowed to bill Medicaid for ACT services. Few states tie fidelity to the ACT model to funding. In an informal survey of a national taskforce of ACT, which consists of 10 experts in seven states, three states in addition to Oregon were reported to have linked their certification standards and Medicaid funding to fidelity scores as measured by the Dartmouth scale or the TMACT scale.

As previously described, the Oregon benchmark for certified ACT teams is a minimum score of 114 on the modified Dartmouth scale and a few additional program standards. If the team does not meet those standards, a follow-up meeting is scheduled within 2 weeks to develop a 90-day corrective action plan and schedule a re-review. If benchmarks are still not met by the end of that process, OCEACT notifies the state and ACT certification may be suspended.

Fluctuations in ACT fidelity scores from year to year highlight the need for these annual reviews. For example, in Oregon, 25% of the 32 certified ACT programs reviewed in 2018 did not pass their annual ACT fidelity reviews and 21% of the 31 programs reviewed in 2019 did not pass.

These programs were required to complete a corrective action plan and a 90-day re-review to maintain their certification and retain access to ACT funding. All but two programs were able to maintain their certification with program improvements and additional training. Left unchecked, ACT model practices can degrade over time. Linking fidelity review requirements to contractual requirements and funding provides an incentive to keep key components to the ACT model intact.

Barriers to maintaining fidelity. Staff turnover has been a significant challenge to maintaining program continuity and fidelity to the ACT model in Oregon. For example, in 2019, of the 31 ACT programs, the median annual staff turnover rate was 28% per program. The lowest annual turnover rate was 4% and the highest was 59%. In addition, 47% (15 of 31) lost their ACT team leaders in 2019 alone. When the team leader departs, it is difficult for programs to ensure that ACT policies and procedures are maintained and that core ACT components perpetuate (Mancini et al., 2009). Staff vacancies are exacerbated by shortages of licensed prescribers, nurses, and mental health professionals in Oregon as a whole (Wihtol, 2019).

Quality assurance and data-driven continuous improvement. The outcomes reported in the Oregon ACT Database each quarter are used to establish ACT program performance goals beyond those identified in the ACT fidelity scale. For example, Oregon uses the IPS model of supported employment to help individuals living with serious mental illness and other behavioral health conditions to obtain and maintain employment at regular jobs of their choosing (What is IPS?, n.d.). An average of 61% of individuals with SMI enrolled in IPS has been known to achieve competitive employment (Campbell et al., 2011). In Oregon, the statewide IPS model has demonstrated an average annual employment rate among individuals with SMI of 40% (https://osece.org/outcomes/). Based on the employment literature and data sources, the advisory committee and ACT teams have established a benchmark goal of enrolling 40% of all ACT participants in IPS. An additional goal is to have 40% of those enrolled in such services engaged in competitive employment each quarter. As of the end of 2019, based on data reported in Oregon ACT Database, 25% of participants in ACT were enrolled in supported employment, and 26% of those participants were competitively employed. Through quarterly reviews of this kind of outcome data for ACT participants, quality assurance improvements are tracked, celebrated, or modified as needed.

Ensuring "high recovery-oriented" principles

Illness Management and Recovery (IMR). A key to recovery-oriented services is to support individuals in developing skills to self-manage their lives, including their mental

illness. The original Illness Management and Recovery model developed by Gingerich and Mueser (2011) was later enhanced (E-IMR) to include skills that address both mental illness and co-occurring substance use disorders (Gingerich et al., 2018). OCEACT sponsored three biennial rounds of statewide trainings with 8–10 ACT programs in each round. The first training in IMR was provided by Susan Gingerich, followed by a 2016 E-IMR training by Lindy Fox, and a 2018 E-IMR training by Steve Carlson from the University of Minnesota Center for Chemical and Mental Health. Both kinds of trainings were conducted in-person over two full-days followed by monthly consultations for at least a year to promote implementation, troubleshoot challenges, and share strategies to promote success. In addition, annual OCEACT fidelity reviews include questions regarding the ongoing use of this intervention and whether further training or support is needed. OCEACT has also provided ongoing support, consultations, and booster trainings. For example, in 2019, four ACT teams were identified at their annual fidelity review as needing more training in the E-IMR approach. In response, OCEACT provided a 1- to 2-day refresher course or full training to those teams.

The role of the peer support specialist. In Oregon, Peer Support Specialists are integral members of each ACT program. OCEACT incorporates the concept of peers at all levels of service provision and design by providing training on the value of peers on the ACT team, conducting monthly peer collaboration calls, and actively soliciting peer perspectives through the ACT advisory committee in service delivery design and state mental health policy related to the provision of ACT services. Essential roles of the peer support specialist include providing coaching and consultation to promote recovery and self-direction; facilitate wellness management and recovery strategies; participate in all ACT team activities as an equal professional; model skills for providing consultation to ACT team members; and provide cross training to fellow staff (Monroe-DeVita et al., 2011).

The role of the peer is evaluated at each fidelity review. In 2019, fidelity interviews with peer support specialists identified several tools peers used to facilitate wellness management, such as eight Dimensions of Wellness (Swarbrick & Yudof, 2015), Wellness Recovery Action Plan (WRAP; Copeland, 2011), IMR (Gingerich & Mueser, 2011), and Motivational Interviewing (MI; Miller & Rollnick, 2002). In 2019, 27 of 29 peer support specialists (94%) interviewed reported that they felt like they were equal professional members of the ACT programs. When asked if they had provided at least two cross-trainings to the team in the last year, 33% ($n = 11$) reported "no" or "partially" meaning only one cross training was provided. Through this, OCEACT identified a need for a training that helps ACT staff learn how to develop and provide an effective cross training.

Participant perceptions of recovery. During the focus groups conducted for this study, ACT participants were asked questions related to the recovery orientation of Oregon ACT teams. When asked, "How did the ACT team help you in your recovery?" respondents stated that the team helped them to become independent by giving them the power of choice. Examples included encouraging them to try new things such as getting a job or going back to school, then providing them with supports to help them succeed. In 19 out of 31 (61%) focus groups, at least one ACT participant stated that the ACT team helped the individual get a job. As one respondent stated,

> They have faith in me and believe in me where they tell me they feel like I have the ability to accomplish a lot more than what I have confidence in myself.

Participants also reported that the ACT team believed in their success and provided them with ongoing support to accomplish their recovery goals. One respondent stated,

> The ACT team has helped me throughout my mishaps and falling off the track so many times. They enlighten me that I can do better. All of the ACT team has. They are proud of me for what I have been doing.

Respondents also stated that the ACT team provided them with new perspectives and the tools for problem solving and help them become independent. The specific services identified as being most helpful for increasing their independence and achieving their recovery goals were facilitating access to housing and basic resources, substance abuse treatment, and skill building to manage mental health symptoms and life challenges. In 25 of the 31 (81%) focus groups, respondents discussed how the ACT team helped them acquire housing so that they could live independently in the community. Participants also highlighted the importance of the team helping them "stay on track" and holding them "accountable" while they took steps toward their goals.

Limitations

This case study was limited to the application of implementation strategies identified by translational science within a single state. Also, it did not examine differences in implementation for different geographic areas within that state. The strategies described in this article may have limited generalizability in other states. Statewide implementation of ACT elsewhere may require additional organizational, funding, or policy changes to account for local or state-level variations in culture, geography, or population density.

Discussion

This study adds to the field of Translation Science by highlighting how implementation strategies can be used to

expand access to high-quality evidence-based practices such as ACT services. It also adds strategies of addressing the tension between maintaining fidelity to evidence-based models in the face of adaptations that may improve care and enhance local program outcomes.

Next steps in promoting recovery-oriented care

The implementation of ACT in Oregon originated with a goal of building capacity to serve 2,000 individuals in the intensive ACT level of care statewide. As Oregon continues to build this capacity, maintaining fidelity to the model while also incorporating recovery – oriented care remained a priority. More could be done to ensure recovery-oriented service delivery in ACT. Dr Patricia Deegan's (2005) *CommonGround* Program offers an evidence-based web application that assists individuals living with mental illness to develop coping and wellness strategies uniquely suited to their values and life. MacDonald-Wilson et al. (2013) found this web-based application to be an effective method to teach the fundamentals of illness management and recovery when supplemented with peer support. OCEACT will sponsor trainings in the *CommonGround* curriculum to promote recovery orientation as a core principle in ACT programs starting in the fall of 2020.

Directions for future research

Few studies have measured the extent to which high recovery orientation improves mental health outcomes. Kidd et al. (2011) provides some initial evidence that the recovery-orientation of ACT teams is associated with better client outcomes (fewer hospital days, less legal involvement, higher levels of employment, and higher enrollment in educational training programs) beyond fidelity to ACT. Future research should include a controlled study comparing the participant outcomes of high recovery orientated ACT. While it is imperative for behavioral health programs like ACT to stay current in evidence-based practices and increase the number of effective tools shown to produce positive outcomes, it becomes challenging for programs to merge evidence-based practices without being duplicative or overburdening participants. Some experts have provided guides for cross-walking various evidence-based practices to help practitioners adhere to fidelity for multiple models (International IPS Learning Community, 2018). Further investigation and guidance are needed for integrating multiple evidence-based practices into a unified approach.

Conclusion

The primary aim of this study was to examine the use of implementation strategies used in Oregon to implement

and sustain high fidelity recovery-oriented ACT programs statewide. The fidelity assessment data demonstrate that year after year ACT programs are maintaining fidelity to the ACT model. The participant perspectives shared in this article show that the state's strategies for implementing recovery-oriented ACT programs are supporting clients to meet their recovery goals. The implementation strategies include codifying the minimum level of ACT implementation in state administrative rule, linking fidelity benchmarks scores to Medicaid reimbursements, and funding ongoing oversight, training, and technical assistance through a statewide technical assistance center. Annual fidelity assessments and follow-up corrective action plans have been used to overcome the challenges of high staff turnover and program drift over time. Finally, continuous learning through statewide conferences and trainings has helped ensure fidelity to ACT and its associated evidence-based practices. The secondary aim of this study was to identify how Oregon supplemented the original ACT fidelity scale to address a broader set of treatment goals while still maintaining the integrity of the ACT model. We found that incorporating supported employment, peer services, and recovery-oriented care into ACT has allowed the state to enhance ACT in a way that meets state-specific priorities and the needs of individuals served without compromising fidelity to the ACT model.

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