Assessing Technical Assistance Needs Among Recovery Residence Operators in the United States

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Abstract

Background: Recovery support services such as recovery housing may assist individuals with increasing their access to social support, employment services, and systems of care. Lack of evidence-based practices and calls for increased oversight of these settings suggests a growing need for technical assistance and training for recovery residence owners and staff members, yet little is known about their areas of greatest technical assistance needs, and if there are differences between the needs of owners/operators of one recovery residence vs. owners/operators of multiple recovery residences.

Methods: We developed and administered a survey to assess the technical assistance needs of recovery housing operators in the United States using a convenience sample of individuals who own or operate a recovery residence (N= 376). The survey was disseminated electronically via e-mail using REDCap to collect survey responses. Descriptive statistics were used to describe the survey respondents, and bivariate analyses were conducted to test for differences in TA needs by the number of residences owned by the respondent (1 vs. 2+). Thematic analysis methods were used to analyze open text survey response items focusing on challenges, resources needed to overcome challenges, and community perception of recovery residences.

Results: A total of 77 owners/operators completed the survey (20% response rate), representing urban, suburban, and rural communities. Almost one-half (45%) of respondents were the owner of their residence(s), and more than half (56%) of the respondents reported that their residence was certified based on a set of national best practices for recovery housing. Differences were observed between number of owned residences; owners/operators of a single residence expressed greater interest in technical assistance on house-specific policies and linkage to established systems of care, whereas owners/operators of multiple residences were more interested in technical assistance on complex topics such as building financial sustainability, and incorporation of best practices into their recovery residences.

Conclusion: As an increasing number of states move to implement voluntary certification or licensing for recovery residences, targeted training and technical assistance to owners/operators will facilitate the successful adoption of recovery residence best practices and quality standards.

Background

According to the 2018 National Survey on Drug Use and Health (NSDUH), nearly 20 million Americans experienced a substance use disorder (SUD) in the past year. (1) Individuals with SUD often experience comorbid psychosocial challenges that can make it difficult to maintain long-term recovery. (2) Therefore, increasing the psychosocial recovery capital at an individual's avail, i.e., employment, education, social support, (3) is an important treatment goal. Recovery support services may assist individuals with increasing their recovery capital by addressing the social determinants that affect an individual's ability to maintain their recovery. (4)

One type of recovery support service is the recovery residence (RR), or a “safe, sober, and affordable environment that is supportive of recovery from alcohol and other drug disorders.” (5) RRs are referred to in a variety of ways, such as Oxford House, sober living house, recovery home, halfway house, sober house, or therapeutic community. A recent study estimated that approximately 18,000 RRs exist in the US (6), and a nationally representative survey of individuals in recovery from SUD found that 8.5% of people reported using a RR as part of their recovery pathway (7). Despite their widespread use, most residences operate outside of the purview or oversight of government agencies. However, two national private non-profit organizations, Oxford House International and the National Alliance for Recovery Residences (NARR), have developed standards for the operation of different types of non-licensed RRs.

While all recovery residences operate based on the social model philosophy of recovery, they vary in terms of the degree to which they are peer- or staff- led, and the intensity of supports and services available on-site. (8) Oxford House model residences are peer-led and offer no direct services other than the social support of fellow residents. (9) Sober living homes, such as those in California, typically have a house manager who oversees the daily operation of the residence. (10) Recovery homes, such as those studied in Philadelphia, have a house manager and may also require attendance at outpatient treatment services as a stipulation of residence. (11) Therapeutic communities, which are typically licensed and considered part of many states’ treatment continuum, have trained staff that deliver treatment services on-site. (12) Several reviews of the literature on residential settings across the continuum have found significant increases in recovery capital, such as increased employment and social support for individuals utilizing these services. (12–14) Other models of recovery housing also show promise. For example, annual evaluations of Recovery Kentucky, a recovery housing model located across Kentucky that offers a continuum of recovery supports for residents, have consistently reported improvements in employment and housing, as well as decreases in criminal justice involvement and alcohol and drug use. (15)

At the same time, a recent report by the Government Accountability Office highlights the need for additional oversight of RRs, citing unscrupulous operator practices. (16) Few evidence-based practices exist for recovery residences; the Oxford House model is the only recovery residence-specific practice to be listed on the Substance Abuse Mental Health Services Administration (SAMHSA) National Registry of Evidence-based Programs. SAMHSA published a report in 2019 outlining ten “guiding principles” for operating a recovery residence and identified the NARR standards as an emerging best practice. As of June 2020, 5 states have adopted the NARR standards to guide their voluntary certification programs, and 33 states have or are in the process of establishing a NARR affiliate. (17, 18)

Low profit margins in the operation of recovery residences make it difficult for operators to access education and training resources, and additional financial and other support resources are needed to better support operators. Federally, SAMHSA allows states to allocate \$100,000 of their Substance Abuse Prevention and Treatment block grant dollars to provide loans that support the development of new recovery residences. (16) These loans are typically managed through contracts with Oxford Houses, leaving few resources to individuals that want to operate different models of recovery residences. (16) At the state level, Pennsylvania and Ohio offer financial support to operators that adhere to specific

standards, but these states are a rare exception. Additional investment is needed to support operator access to education and technical assistance.

To provide appropriate training and education it is important to understand the level of interest and gaps in access to technical assistance among operators, both overall and among different types of operators. A recent study found significant differences in resident outcomes between those residing in houses that were part of a larger parent organization compared with single-house operators, (19) suggesting that the technical assistance needs and topics of interest may differ for operators of small and larger programs. The aims of this study were to learn about the technical assistance needs of recovery housing operators, and to identify differing educational needs by whether the operator managed a single residence versus operated two or more recovery residences.

Methods

Survey development

A draft survey was developed by study staff to assess recovery residence owners'/operators' need for technical assistance. In an effort to increase validity, the draft survey was sent to three subject matter experts to review and provide input on clarity of instructions, question phrasing, conceptual domains assessed, and survey flow and timing. Subject matter expert feedback was incorporated into a second draft of the survey, and pilot tested by the subject matter experts before dissemination.

The final survey gathered descriptive information about the owners/operators, including their role in the organization, the number of houses they operate, the state in which they were located, and the type of residence or residences they operate. Respondents were provided with open-ended text response boxes and asked to describe the challenges they face as operators of recovery housing, resources they need to address these challenges, and how the recovery residence has been received by the community. Respondents were then presented with lists of potential technical training, assistance, or support, organized by the following content areas: business policies, community building, and on-site services and supports. Responses were not mutually exclusive meaning that respondents could check multiple technical training options or could leave it blank. Additionally, county of residence reported by respondents was used to determine whether the respondent was located in an urban or rural community based on the U.S. Department of Agriculture's rural-urban continuum codes. (20)

Recruitment

Individuals were eligible to complete the survey if they were knowledgeable about the daily operation of a recovery residence (i.e., an owner, operator, or staff person). There is no central registry of RRs from which to systematically recruit, so the recruitment strategy for this study was a convenience sample. The initial sample was derived from participants in an annual recovery residence best practices summit hosted by NARR (N = 282). Additional unduplicated individuals were recruited to complete the survey if they

participated in the December 2019 monthly call hosted by NARR (N = 60), or if they were identified by project staff as a recovery residence operator (N = 34). The final sampling frame consisted of 376 potential respondents, and multiple rounds of follow-up recruitment e-mails were sent to attempt to increase the response rate. A total of 77 individuals completed the survey, for a final response rate of 20%.

Data Collection

The survey was developed and administered using the REDCap data management system, and respondents could access the survey by clicking a link in the recruitment e-mail they received. Responses were collected anonymously, and consent was obtained electronically at the beginning of the survey.

Analytic Plan

Univariate statistics were used to describe the survey respondents and the overall results of the survey. Pearson's chi-square tests were run to test for differences between groups (owner/operator of 1 recovery residence vs. 2 + recovery residences), and Fisher's exact tests were run in cases where a cell size was < 5. (21) Due to the small sample size and exploratory nature of this survey, we report results as significant if they are $p < 0.25$. Open-ended survey questions were analyzed using thematic analysis methods. Using NVivo software, open coding was performed to generate codes which were subsequently sorted and collated into themes and redefined (18). The final qualitative analyses explored whether a particular theme was present in each response, overall and by the number of houses operated for each respondent.

Results

Description of respondents

Table 1 provides descriptive information on the survey respondents (N = 77). The survey respondents were located in 29 unique states, approximately 18% (N = 14) were located in a rural community and nearly a third of respondents (31%) were located in the Midwest region of the United States. Nearly half (45%) of respondents reported being the owner of the residence or organization, and 43 (56%) reported being NARR certified. Technical assistance provided in real-time was overwhelmingly preferred by respondents, either in-person (64% preferred) or via webinar (60% preferred); approximately a third of respondents said they prefer asynchronous video training (35%), and 21% said they preferred text or digital training materials.

Table 1
Description of survey respondents, by number of operated recovery residences, 2019.

	Overall		# of Residences				P-value
			1 Residence		2 + Residence		
	N	%	N	%	N	%	
Total respondents	77	100	29	38	48	62	
Role							0.467 ^b
Owner	35	45	15	52	20	42	
Manager	15	19	5	17	10	21	
Professional Staff	10	13	5	17	5	10	
Other	17	22	4	14	13	27	
NARR Certified							0.571 ^a
Yes	43	56	15	52	28	58	
No	34	44	14	48	20	42	
Rural (vs. urban)	14	18	6	21	8	17	0.764 ^b
Region							0.537 ^b
Southeast	21	27	7	24	14	29	
Northeast	21	27	7	24	14	29	
Midwest	24	31	12	41	12	25	
West	11	14	3	10	8	17	
TA Format Preferences ^c							
Live - in-person	49	64	19	66	30	63	0.790 ^a
Live - web-based	46	60	18	62	28	58	0.746 ^a
Asynchronous video	27	35	10	34	17	35	0.934 ^a
Text/digital	16	21	5	17	11	23	0.773 ^b
Notes: ^a = Pearson's chi-square test; ^b = Fisher's exact test; ^c = Categories are not mutually exclusive							

A total of 29 (38%) respondents operated only one recovery residence, and 48 (62%) respondents operated two or more residences. Half (52%) of single-residence respondents were owners (N = 15)

compared to 40% of those with 2 + residences. NARR certification was fairly equivalent between the 2 + recovery residence operators compared with single-house operators (58% vs. 52%, respectively).

Interest In Technical Assistance

Table 2
Areas of technical assistance interest, by number of recovery residences, 2019

	Overall (N = 77)		# of Residences				P- value
			1 Residence		2+ Residences		
			(N = 29)		(N = 48)		
	N	%	N	%	N	%	
Business Policies^c							
Establishing recovery house sustainability funding plans/models	54	70	18	62	36	75	0.230 ^a
Establishing or incorporating quality standards and best practices for recovery	45	58	16	55	29	60	0.651 ^a
Risk management for recovery housing operators	36	47	17	59	19	40	0.105 ^a
Staff and resident orientation	31	40	12	41	19	40	0.876 ^a
General house management	29	38	14	48	15	31	0.135 ^a
Creating medication assisted recovery policies	23	30	7	24	16	33	0.393 ^a
Obtaining certification for my recovery residences	23	30	9	31	14	29	0.862 ^a
Creating prescription medication use policies	21	27	5	17	16	33	0.187 ^b
Owner/Operator liability and insurance	15	19	6	21	9	19	0.835 ^a
Understanding and implementing good neighbor policies	13	21	3	10	10	21	0.349 ^b
Meeting fire and safety standards	6	8	3	10	3	6	0.667 ^b
Community Policies^c							
Creating partnerships with state and local government stakeholders	46	60	16	55	30	63	0.525 ^a
Creating partnerships with other referral agencies	44	57	17	59	27	56	0.839 ^a
Participating in local and statewide conversations among systems of care providers	44	57	17	59	27	56	0.839 ^a
Creating partnerships with mental health and substance use treatment providers	41	53	18	62	23	48	0.228 ^a

	Overall (N = 77)		# of Residences				P- value
			1 Residence		2+ Residences		
			(N = 29)		(N = 48)		
Creating partnerships with other recovery homes and recovery support providers	33	43	14	48	19	40	0.455 ^a
Understanding the Fair Housing Act	30	39	10	34	20	42	0.531 ^a
Understanding and addressing NIMBY (Not In My Back Yard) sentiment	24	31	10	34	14	29	0.626 ^a
Services TA Type ^c							
Incorporating evidence-based best practices into your recovery planning model	50	65	18	62	32	67	0.682 ^a
Incorporating trauma informed care into recovery practices	46	60	15	52	31	65	0.265 ^a
Understanding and incorporating recovery capital into recovery models	41	53	12	41	29	60	0.105 ^a
Supporting various special populations	35	45	16	55	19	40	0.183 ^a
Understanding the social recovery model	34	44	12	41	22	46	0.703 ^a
Creating accountability standards and processes	31	40	11	38	20	42	0.746 ^a
Establishing home-like residential environment	16	21	8	28	8	17	0.252 ^a
Notes: ^a = Pearson's chi-square test; ^b = Fisher's exact test; ^c = Categories are not mutually exclusive							

Table 2 summarizes the results related to the respondents' interest in specific areas of technical assistance overall, and by the number of residences operated. Regarding training in the area of business policies, the most frequent areas of TA need include policies related to establishing recovery house sustainability funding plans/models (70% of all respondents), with owners/operators of multiple recovery residences expressing more interest than owners/operators of single residences (75% vs. 62%, respectively). Training interest on the establishment or incorporation of quality standards and best practices for recovery was expressed by over one-half of all respondents (58%), equivalent between the owners/operators of single recovery residences, and owners/operators of multiple residences. More operators of only one residence expressed interest in TA pertaining to primary house operations, such as risk management ($p < 0.25$), and general house management ($p < 0.25$). More operators with more than one residence expressed interest in TA related to sustainability funding models ($p < 0.25$), and policies pertaining to prescription medication use ($p < 0.25$).

Regarding community engagement training needs, the technical assistance areas of greatest overall interest were creating partnerships with state and local government stakeholders (60%), other referral agencies (57%), and mental health and substance use treatment providers (53%). Respondents were also interested in technical assistance related to participating in local and statewide conversations among systems of care providers (57% overall). Single residence respondents were more interested in receiving technical assistance focused on creating partnerships with mental health and substance use treatment providers ($p < 0.25$) compared to owners/operators of multiple residences.

Overall, the most commonly endorsed technical assistance focus areas related to service delivery were for training on how to incorporate evidence-based practices (65%), trauma-informed care (60%), and recovery capital (53%) into resident recovery planning. More owners/operators of single residences were interested in TA related to supporting special populations ($p < 0.25$), while more owners/operators of multiple recovery residences wanted TA related to incorporating recovery capital into their residences' recovery practices ($p < 0.25$).

Table 3 summarizes common themes in respondent responses related to their community's response to recovery housing, operator challenges, and need for additional resources. Most respondents shared that their respective communities responded positively to their residence(s) (53%). The majority of single-residence respondents expressed mostly positive responses from the community (72%), whereas respondents with two or more residences were evenly split between positive (42%) and mixed/negative (46%) responses. Indeed, more owners/operators of multiple recovery residences reported experiencing "not in my backyard" (NIMBY) sentiment more than single residence respondents (21% vs. 14%, respectively). For example, one operator of multiple recovery residences shared that while opening a new recovery residence, residents in the community expressed concern over "*a decline in property values, increased crime, and safety of children.*" This underscores the greater interest in technical assistance on NIMBY by respondents with multiple residences as shown in Table 2.

Table 3
Identification of common community response themes, challenges, and resources among survey respondents, 2019

	Overall (N = 77)		# of Residences			
			1 Residence (N = 29)		2+ Residences (N = 48)	
	N	%	N	%	N	%
Community Response						
Attitude toward residence						
Positive	41	53	21	72	20	42
Mixed	21	27	5	17	16	33
Negative	8	10	2	7	6	13
Missing Data	7	9	1	3	6	13
Not in My Backyard (NIMBY) sentiment	14	18	4	14	10	21
Education to build awareness of RRs	25	32	9	31	16	33
Challenges						
Lack of sustainable funding for operations	31	40	9	31	22	46
Lack of sustainable funding for residents	22	29	8	28	14	29
Difficulty in linkage to and collaboration with established systems of care	20	26	11	38	9	19
Absence of RR best practices	26	34	8	28	18	38
Resources						
Need for increased funding for RRs	33	43	10	35	23	48
Need for financial assistance for residents	13	17	6	21	7	15
Need for technology to increase awareness and utilization of RRs	11	14	5	17	6	13
Need for technical assistance/training	14	18	4	14	10	21

For both single and multiple residence respondents, community education was critical to building initial awareness, counteracting NIMBYism, and garnering community support for their recovery residence(s) (data not shown). One owner/operator shared that the key to fostering community support was “*building relationships with key agencies, and not being secretive yet protecting residents, allowing them to remain anonymous, but also greeting our neighbors, letting them know what we are doing...*” Several other

respondents mentioned using house tours and hosting community events as successful methods to engage and educate their communities about the purpose of recovery residence(s). However, some respondents reported they had implemented avoidance strategies, such as initially keeping a low profile and avoiding commercial zones as effective methods for avoiding a negative response from their community.

Three primary themes emerged from respondents' description of the challenges they face: funding, development and implementation of best practices, and linkage to established systems of care. More multi-residence respondents than single residents respondents emphasized that the current lack of sustainable funding available for housing operations is a major barrier (46% vs. 31%, respectively). As stated by one respondent, *"sustainable funding has been a challenge and my organization has been in business for 58 years... without sustainability, there is no opportunity for growth."* This correlates with the greater interest expressed by multiple residence respondents in establishing recovery housing sustainability funding models compared to single residence owners/operators (Table 2). Both single and multiple residence respondents identified a lack of sustainable funding for incoming and current residents. Some respondents highlighted the need for specific resources such as monthly scholarships for vulnerable populations (e.g., prison re-entry, homeless, pregnant) and additional funding needed to assist recovery residents with transitioning to permanent housing. Similar to the results reported in Table 2, compared with single residence respondents, more of those with multiple residences expressed concern over the current absence of best practices for recovery housing operations (38% vs. 28%, respectively).

Single residence respondents more so than multiple residence respondents expressed difficulty in linking to and collaborating with established systems of care during and after a recovery resident's stay (38% vs. 19%, respectively). This mirrors the greater interest in training related to creating partnerships with mental health and substance use treatment providers expressed by single residence respondents (Table 2). Specifically, respondents expressed that they felt that they were competing with addiction treatment systems, and that RRs were often rejected as a critical element within the continuum of care by key stakeholders: *"those that have had the lead for so long need to be educated in recovery support services."* Single residence respondents shared difficulties in collaborating with established systems of care or being able to identify appropriate community partners from the outset of the establishment of their residence.

Related to the resources that respondents perceived a need for, more multi-residence respondents emphasized increased state and federal funding dedicated to RRs, while single residence respondents were interested in direct financial assistance to residents. The need for technical assistance related to the development of house manager training materials, medication policies and instruction, effective intake processes, and developing *"responsible provider communities"* were expressed equally by single- and multi-residence respondents. Additionally, both groups expressed a need for technology that can support awareness and use of RRs among individuals with SUD as well as other key stakeholders, and that can improve recruitment of new residents and tracking of both resident and house outcomes. For example,

one respondent recommended creating a database “*where people could find a facility that best fit their individual needs*”. Another respondent expressed a need for “*some sort of centralized component that provides training, support and oversight of practice*.”

Discussion

The results of this survey demonstrate an overall interest in, and need for, targeted technical assistance among both single- and multi-residence survey respondents. We also observed differences in the need for TA across respondent types. Single-residence respondents indicated greater interest in training related to essential RR functions such as establishing effective intake processes and effective risk management. More multi-residence respondents indicated that their houses were NARR certified, suggesting that general house management policies were already in place by owners/operators of multiple residences compared to single-residence owners/operators. NARR certification establishes house management policy standards that address four domains: administrative and operational, physical environment, recovery support, and good neighbor domains. (22) TA on the NARR standards directed to single residence owners/operators may be considered to fill this TA gap identified in the survey.

Owners/operators of single residences were also more interested in training on linkage to, and collaboration with, established systems of care. To fill this gap in need, targeted training to single residence owners/operators on identification of local community mental health and substance use treatment providers, and integration of those provider services (including reimbursement policies that also address their resident financial assistance needs) into the RR model should be considered. While our results were constrained by the limited sample size, it is also possible that operators located in rural communities have a particularly difficult experience collaborating with external partners due to the limited infrastructure nearby. Training could also address medication-assisted treatment (MAT) integrated with primary care and recovery housing.

Multi-residence owners/operators were most interested in training on complex challenges such as developing financial sustainability models and identifying and implementing best practices such as prescription medication policies, and good neighbor policies that reduce community residents’ concerns related to the perceived impacts that recovery residences can have on the neighborhood. Targeted training to multi-residence owners/operators may include the use of braided funding from existing state and local funding sources to cover recovery residence expansion and current day-to-day operational costs, and to obtain long-term sustainability funding. Best practice implementation training targeted to owners/operators of multiple residences (and single residences) could cover topics such as adopting state RR quality standards, medication for opioid use disorder (MOUD) treatment integrated with recovery care, syringe management and exchange, and naloxone training and distribution.

There are several limitations of this study. The number of individuals who responded to the survey was relatively small and may not be representative of all owners/operators of both single residences and multiple residences across the US. While we used a convenience sample to identify potential respondents,

this sample was drawn from participants in a national best practices summit attended by owners/operators from across the US. The small sample size also limited the statistical power of this analysis, increasing the odds of false negative findings. However, we attempted to address this by relaxing the significance level to $p < 0.25$ in the quantitative data analysis and by performing qualitative analysis of the open-ended questions to identify common themes. The themes we identified in the qualitative analysis correlated fairly well with the quantitative survey results. Despite these limitations, this study addresses an important gap in the literature regarding the training and technical assistance needs of recovery residence operators. These results underscore the importance of and need for evidence-based practices to assist operators in supporting their residents. Our findings can inform the field as to the differing training and technical assistance needs of recovery residence owners and operators based on the number of residences operated.

Conclusion

Recovery housing owners and operators desire targeted training and technical assistance to best support their residents' needs. NARR has developed best practices for operating recovery residences and offers training to operators that seek to become NARR certified, but these resources are available only in states with a NARR affiliate. To expand the development of new opportunities for and extend the reach of existing training and technical assistance, particularly in rural communities, the Health Resources and Services Administration funded a rural center of excellence with a focus on recovery housing (RCOE-RH) in 2019. The goal of this center is to develop and deliver training and technical assistance that supports recovery housing owners and operators at no cost to training participants. The RCOE-RH, NARR, and other state-level NARR-like agencies should play a significant role in the development, implementation, dissemination and evaluation of evidence-based, evidence-informed, and promising practices and policies that can be offered to recovery residence owners and operators.

Abbreviations

NSDUH: National Survey on Drug Use and Health; SUD: substance use disorder; RR: recovery residence; NARR: National Alliance for Recovery Residences; REDCap: Research Electronic Data Capture; SAMHSA: Substance Abuse Mental Health Services Administration; HRSA: Health Resources and Services Administration; RCOE-RH: rural center of excellence with a focus on recovery housing; MOUD: medication for opioid use disorder

Declarations

Ethics approval and consent to participate: This research was approved by the University of Kentucky's Institutional Review Board. The recruitment, consent, and survey protocol were included in the approval. Participants gave consent electronically prior to providing their responses.

Consent for publication: Not applicable.

Availability of data: The dataset used and analyzed during the current study are available from the corresponding author upon reasonable request.

Competing interests: Dave Sheridan is the Executive Director of the National Alliance for Recovery Residences, and Jennifer Miles is on the Board of Directors for the National Alliance for Recovery Residences. All other authors declare that they have no competing interests.

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Authors' contributions:

JM contributed to the development of the survey, assisted with subject recruitment, developed the quantitative analytic plan, conducted the quantitative data analyses, and contributed to writing the manuscript. TB contributed to the development of the survey and plan for subject recruitment, assisted with the development of the analytic plan, and contributed to the writing of the manuscript. AK contributed to the development of the survey, assisted with subject recruitment, developed the qualitative analytic plan, conducted the qualitative data analyses, and contributed to writing the manuscript. TJ contributed to the development of the survey, oversaw the management and collection of survey responses, and assisted with subject recruitment. TW contributed to the development of the survey and plan for subject recruitment. DJ contributed to the development of the survey, subject recruitment strategy, and provided substantial feedback to the manuscript. DS contributed to the survey development and subject recruitment strategy. EF contributed to the development of the survey and subject recruitment strategy. All authors read and approved the final manuscript.

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Supplementary Files

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- [TANeedsSurveyQuestionnaire.pdf](#)