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The Volunteer Recovery Support for Adolescents (VRSA) Experiment: Recruiting, Retaining, Training, and Supervising Volunteers to Implement Recovery Monitoring and Support Services

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1. Introduction

Treatment programs for substance use disorders are experiencing a growing workforce crisis fueled by low compensation, challenging work, high turnover rates, shortage of workers, stigma, and the retirement of aging employees (SAMHSA, 2013; Zornitsky, 2014). This issue presents the challenge of providing effective services with less than optimal staffing patterns. Task shifting is the process of moving tasks, when appropriate, from highly qualified staff to staff with less training and fewer qualifications to meet the needs of individuals seeking services and address staff shortages (WHO, 2008). While the concept of task shifting emerged to rapidly increase access to HIV healthcare services in developing countries, its application in the mental health field has potential (Brentlinger et al., 2010; McInnis & Merajver, 2011; Patel, 2009; WHO, 2008; Zachariah et al., 2009). Evidence is beginning to accumulate that non-specialists, lay workers, affected individuals, and caregivers can be trained to effectively deliver interventions and monitor clients with depression, anxiety, and schizophrenia (Bolton et al., 2003, 2007; Chatterjee, Patel, Chatterjee, & Weiss, 2003; Kakuma et al., 2011; Patel et al., 2010; Rahman, Malik, Sikander, Roberts, & Creed, 2008; Ran et al., 2003).

1.1 Task shifting and the use of volunteers

Based on this work, task shifting in the addiction field may be an appropriate method of providing ongoing recovery support services for adolescents receiving treatment for substance use disorders when faced with lack of staff and funding. Volunteers are one potential source of less highly trained individuals who can complement the services that can

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only be delivered by clinicians. The practice of training volunteers to provide recovery support to clients receiving addiction treatment has a long and rich history. Nineteenth century recovery mutual aid organizations, such as the Washingtonians and the Ribbon Reform Clubs, remained exclusively volunteer-based until a cadre of professionalized temperance missionaries emerged from their ranks. Early twentieth century alcoholism clinics similarly relied on the use of “friendly visitors” to support early recovery, and volunteer Alcoholics Anonymous (AA) members were central to the staffing of mid-twentieth century alcoholism programs (White, 2014). While the use of volunteers in addiction treatment programs, particularly by those who were in recovery themselves, was extolled through the 1970s and 1980s (Aiken, LoSciuto, & Ausetts, 1981; Paine & Ferneau, 1974), their participation declined as the field became increasingly professionalized in the 1980s and 1990s (White, 2014). In recent years, renewed interest in non-clinical recovery support services has emerged within the larger efforts to shift addiction treatment from models of acute biopsychosocial stabilization to models of sustained recovery management nested within larger recovery-oriented systems of care (Kelly & White, 2011).

Studies to date suggest that volunteers can play an important role in enhancing treatment for substance use disorders and long-term recovery outcomes. Much of this research has been conducted with peer-based models of recovery support (Bassuk, Hanson, Greene, Molly, & Laudet, 2016; Reif et al., 2014), yet some studies have investigated the effectiveness of training paraprofessionals and individuals from the community to deliver services or become an adjunct to formal interventions for adults and adolescents. Results indicate that volunteers can help increase treatment seeking, improve treatment retention, and improve post-treatment recovery outcomes. Of note, this research demonstrates that volunteers can be trained to provide a wide range of services, including those based in Motivational Enhancement Therapy principles (Boyd et al., 2005), family empowerment (Dembo, Wothke, Livingston, & Schmeidler, 2002), enhanced case management (Grant, Ernst, Streissguth, Phipps, & Gendler, 1996), and behavioral self-management (Leigh, Hodgins, Milne, & Gerrish, 1999). While there are potential benefits to adolescents for volunteers to be in recovery themselves (i.e., mutual identification, elicitation of hope, recovery role-modeling, and linkage to recovery community resources), initial research suggests that student volunteers not in recovery are capable of providing effective support services (Garner, Godley, Passetti, Funk, & White, 2014), a finding that may be useful in situations in which recovering peers are not readily available.

In order to find volunteers for recovery support work, recruitment sources need to be identified. College and university campuses are a readily available and important source of potential volunteers. Some studies have found that up to 80–90% of college students have volunteered in some capacity (Carlo, Okun, Knight, & de Guzman, 2005; Gage & Thapa, 2012). Several advantages exist for both treatment programs and students to collaborate on volunteer opportunities. Treatment programs can increase productiveness and responsiveness by providing additional services to clients, forming relationships with potential future employees, and accessing a relatively low-cost method of delivering services (Hager & Brudney, 2004). Students often volunteer to help others, learn new experiences, obtain career benefits, and improve career prospects, and human services organizations are one of the most important type of organizations to them (Clerkin, Paynter, & Taylor, 2009; Gage &

Thapa, 2012; Garver, Divine, & Spralls, 2009; Moore, Warta, & Erichsen, 2014). They can improve skills related to leadership, teamwork, and time management (Madsen, 2004) and often prefer to volunteer in an activity related to their area of interest (Garver et al., 2009). Of note, while altruism may motivate individuals to volunteer initially, personal benefits motivate them to continue to volunteer (Clary & Snyder, 1999; Ryan, Kaplan, & Grese, 2001), leading to the recommendation for programs to offer awards and/or recognition to volunteers (Gage & Thapa, 2012; Hager & Brudney, 2004). Such recognition does not necessarily need to be tangible as long as it is perceived to have value (Phillips & Phillips, 2010). While the absence of compensation is often implied when someone is labeled a “volunteer,” a wide variety of volunteer opportunities exist, some that have no pay and some that offer a stipend or low pay. As a result, “volunteering” frequently involves a component of exchange (tangible or intangible) and involves a continuum of relative costs and benefits for the volunteer (Bussell & Forbes, 2002).

1.2 Volunteer management

Once volunteers are recruited, effective systems to implement recovery support are key so that treatment programs, volunteers, and clients benefit from the experience. Implementation science research has provided insight for several best practices for training and monitoring individuals in evidence-based interventions. While there is recognition that implementation strategies need to be tailored to the challenges and barriers of the context (Powell, Proctor, & Glass, 2014), a workshop, manual, and supervision are viewed as essential (Sholomskas, Syracuse-Siewert, Rounsaville, Ball, & Nuro, 2005). During training, active (e.g., modeling, role-plays, other behavioral rehearsal techniques) rather than passive learning is thought to help trainees better implement what they learn (Beidas, Cross, & Dorsey, 2014; Cross, Matthieu, Cerel, & Knox, 2007). After training, ongoing model-specific supervision that includes active supervision techniques, evaluation of competencies, and feedback is key for fidelity to and competence in delivering the intervention (Bearman, Schneidman, & Zoloth, 2016; Beidas, Edmunds, Marcus, & Kendall, 2012; Beidas & Kendall, 2010; Edmunds et al., 2013; Herschell, McNeil, & McNeil, 2004; Schwalbe, Oh, & Zweben, 2014). Supervision provides further training of complex skills, continued instruction on core intervention components, problemsolving of implementation barriers, application of training concepts to actual cases, accountability of trainees, and access to additional resources from the supervisor (Nadeem, Gleacher, & Beidas, 2013). Ensuring adequate delivery of an intervention is of critical importance in evaluating its effectiveness, maximizing outcomes, and enabling replication and dissemination efforts (Kirchner, Waltz, Powell, Smith, & Proctor, 2017; Morgenstern, Morgan, McCrady, Keller, & Carroll, 2001; Powell et al., 2012).

1.3 Volunteer Recovery Support for Adolescents (VRSA)

VRSA is a novel recovery monitoring and support service for youth after discharge from an acute substance use treatment episode. The purpose of this paper is to describe (a) the VRSA model, (b) how fidelity was monitored, (c) methods used to recruit, train, supervise, and retain volunteers, (d) how well volunteers were able to implement the model, and (e) how adolescents responded to VRSA. This paper will provide more detail about what “adequate delivery” means and how it was achieved than is typically provided in articles examining

outcomes of interventions in the substance use field (Garner, 2009). Given the encouraging outcomes from a large randomized VRSA trial (Godley, Passetti, Hunter, Greene, & White, under review), the goal of this level of detail is to assist clinical and research teams in replicating the study or conducting additional investigations.

2. Description of the VRSA model and fidelity monitoring

With funding from the National Institute on Alcoholism and Alcohol Abuse, the VRSA experiment began enrollment in 2013 with the overarching goal of testing the effectiveness of recovery monitoring and support for adolescents delivered by trained, supervised volunteers over the telephone. The multi-site experiment randomized 403 adolescents at discharge from 4 residential treatment programs in Arizona and Illinois to receive either 9 months of VRSA (n=201) or recovery support services as usual (SAU; n=201). Study participants were followed up quarterly for 12 months, with the final quarter allowing for post-VRSA assessment of functioning. Participation in the study was voluntary and under the supervision of Chestnut Health Systems' Institutional Review Board.

At intake into residential treatment, the 403 participants were 15.9% female, 48.6% Caucasian, 18.4% African American, 14.1% Hispanic, 16.4% multi-racial, and 2.5% other; 83.9% were involved with the criminal justice system; 85.1% reported weekly substance use, 26.1% weekly alcohol use, 75.7% weekly cannabis use, 11.2% weekly opioid use, 6.0% weekly crack/cocaine use, 8.0% weekly amphetamine use, and 23.6% weekly use of other substances; 79.4% reported symptoms consistent with substance dependence, 15.9% with substance abuse, 55.7% one or more internalizing disorders (e.g., mood disorder, traumatic stress), and 73.7% one or more externalizing disorders (e.g., ADHD, conduct disorder). Average age was 15.95 (SD = 1.25). Study methods and results, presented in a companion paper, provide evidence suggesting that VRSA is a promising recovery support program to improve rates of adolescent substance use, problems, and early full remission (Godley et al., under review).

2.1 The VRSA model

The underlying model of change for VRSA derives from the Community Reinforcement Approach (CRA; Meyers & Smith, 1995) as adapted for adolescents (A-CRA; Godley, Smith, Meyers, & Godley, 2016) and Assertive Continuing Care (ACC; Godley, Godley, Dennis, Funk, & Passetti, 2007; Godley et al., 2014). Specifically, this model focuses on increasing prorecovery peers and activities in the community to compete with, reduce, and eventually replace substance use with constructive prosocial activities that support the development of recovery capital (Best et al., 2012; Cloud & Granfield, 2008; McKay, 2017). Research on A-CRA has demonstrated that it is effective as primary treatment for youth with substance use problems (Henderson et al., 2016; Hogue, Henderson, Becker, & Knight, 2018) and as continuing care recovery support following residential services (Garner, Godley, Funk, Lee, & Garnick, 2010; Godley et al., 2007, 2014).

VRSA uses a small subset of A-CRA procedures to facilitate increasing density of prorecovery community reinforcers: (a) increasing pro-social/pro-recovery behavior (divided into two procedures for VRSA: increasing pro-recovery peers and increasing pro-recovery

activities); (b) positive and brief goal setting; and (c) client-directed homework to achieve goals. Volunteers ask adolescents about their involvement with pro-social activities and peers since the previous support session, praise any efforts at engaging in drug-free activities with pro-recovery people, and identify ways to increase these behaviors while problem-solving barriers to do so. Consistent with A-CRA, volunteers coach adolescents to create goals that are positive, specific, brief, and under the individual's control to complete. Volunteers then explore with adolescents potential barriers to completing homework goals and focus on how to overcome practical issues, such as transportation or negative mood states. Progress on goals is discussed during the next session.

The above procedures were selected by one of A-CRA's model developers based on several factors. First, VRSA is implemented by volunteers rather than clinicians, and these procedures were evaluated as appropriate for delivery by individuals who had not completed formal training in counseling. Second, the literature indicates that involvement with pro-social peers and activities are important influences on post-treatment recovery and that client-directed homework is key to improving clinical outcomes (Brown, Vik, & Creamer, 1989; Dishion & Owen, 2002; Garner, Godley, Funk, Dennis, & Godley, 2007; Garnier & Stein, 2002; Godley et al., 2007; Godley, Kahn, Dennis, Godley, & Funk, 2005; Kazantzis, Whittington, & Dattilio, 2010; Kosterman, Hawkins, Guo, Catalano, & Abbott, 2000; Margolis, Kilpatrick, & Mooney, 2000; Preston & Goodfellow, 2006; Rai et al., 2003; Swadi & Zeitlin, 1988). Third, the procedures were successfully pilot tested with volunteers (Garner et al., 2014).

Sessions were conversational in tone and began with an opportunity for adolescents to talk about how they had been doing since the last contact with the volunteer. Additional recovery monitoring and support procedures covered in sessions, included (a) any use of substances; (b) any relapse triggers that were experienced; (c) the extent of involvement with pro-recovery peers; (d) the extent of engagement in pro-recovery activities; and (e) any upcoming situations that would be high-risk for relapse. Each session resulted in adolescent-defined goals and homework to complete before the next recovery support session. Volunteers provided referrals for further treatment services when adolescents reported relapse or mental health problems. VRSA protocol was designed such that volunteers discussed topics that were most relevant to an adolescent during a given session, rather than trying to artificially force the discussion into a predetermined format.

Adolescents assigned to the VRSA condition received study-provided recovery support services in addition to SAU. Given research recommending an extended period of monitoring, support, and re-intervention, these adolescents were assigned a volunteer who initiated recovery support sessions over the telephone within 1 week of residential discharge and continued calls for a total of 9 months (Dennis & Scott, 2007; McKay, 2005, 2009). For the first 3 months postdischarge, recovery support sessions were scheduled weekly. Following recommendations from McKay (2005), session frequency was adjusted over the subsequent 6 months in response to and in support of each adolescent's individual needs and functioning. Session frequency was maintained at or increased to once per week if a youth reported any of the following since the last contact: (a) any alcohol or other substance use; (b) 1 or more days of alcohol or substance-related problems; (c) worsening of existing

problems; (d) the emergence of new problems; or (e) a request to continue weekly contacts. Frequency of sessions were decreased to or maintained at every other week when a youth reported: (a) no alcohol or other substance use for at least 30 consecutive days; or (b) a request to have contacts less often. Recovery support sessions occurred at times convenient to adolescents and lasted up to 20 minutes in length.

Text messaging was used routinely to remind adolescents of upcoming support sessions, prompt them to answer calls from the volunteer, encourage goal completion, and to check in on birthdays or after special events (e.g., job interview). Additionally, when preferred by the adolescent, support sessions were conducted via text messaging.

2.2 Fidelity monitoring

All recovery support sessions were audio-recorded and uploaded to a secure website. Volunteers also documented information about attempted contacts and completed sessions, including dates, times, procedures covered, and notes about session content using the same website. Project staff, including an A-CRA model developer, the volunteer coordinator, and the project manager, adapted the A-CRA procedure rating manual for use in VRSA. Each procedure delivered during a session was given a rating from 1 to 5 by the volunteer coordinator, project manager, or one other rater with experience providing recovery support sessions. Ratings of “1” were deemed unsatisfactory, while ratings of “5” were excellent. The goal was for all ratings in a session to be at least “3” (average) or higher. Prior research by Garner et al. (2009) and CamposMelady and colleagues (2016) established the relationship between procedure implementation, fidelity, and substance use outcomes with this scoring model. All support sessions by short-term volunteers (1 academic semester or less) were reviewed for the length of their involvement with the project. For longer-term volunteers, random sessions were reviewed after their initial time commitment was surpassed. Feedback was provided to volunteers in written form through the web-based system and orally through weekly supervision. Out of 293 procedures rated by two independent raters, there was 91% agreement on ratings of fidelity to the model.

3. VRSA Implementation

3.1 Volunteer recruitment and retention

Volunteers were primarily recruited from the nursing, social work, and psychology undergraduate and graduate programs at local universities. While students were interested in helping professions, they had limited or no training or counseling experience. Past lived experience of addiction and recovery was not required for volunteers, and only 1 volunteer identified themselves as being in recovery. Their average age was 23 years old, and 86% were female. Eighty-two percent identified as White, 1% as African-American, and less than 1% as Native American or Asian. Nineteen percent were Hispanic. Project staff maintained communication with designated academic program staff who helped identify potential volunteers at the beginning of every semester and summer break. Project staff screened potential volunteers by telephone to review volunteer requirements (e.g., willing to dedicate 4 or more hours per week to the project; ability to be flexible in terms of taking calls from adolescents and attempting to make contact on various days and times), determine volunteer

availability to make calls when adolescents were most likely to be available (i.e., after school hours and on weekends), assess the ability of volunteers to establish and maintain a detailed tracking system of attempted and completed sessions every week, and assess volunteers' telephone and interpersonal skills. Once screening was passed, volunteers were scheduled for a group training. Some academic programs offered course credit for their volunteer work, and 46% of all recruited volunteers were working towards this goal. The remainder volunteered primarily for the experience or to fulfill other academic assignments. All volunteers were required to undergo a background check with the criminal justice system and child protective services, successfully complete the training, commit to a minimum of 4 hours of VRSA work per week, and participate in weekly supervision meetings.

Over the course of 3.5 years, 53 volunteers were recruited. Most were enrolled in an undergraduate social work (n=17), undergraduate psychology (n=13), graduate level social work (n=11), or undergraduate nursing (n=9) program. The remaining volunteers were enrolled in graduate level psychology (n=1), undergraduate criminal justice (n=1), or undergraduate Spanish (n=1) programs. Forty-one volunteers fulfilled their semester-long commitment. Nine of these 41 volunteers continued with the project for multiple semesters, with 1 volunteer making recovery support calls for a total of 12 semesters (note: in this case, there were 3 semesters per year). Of the original 53 volunteers, ten did not complete their commitment due to dropping out of VRSA or leaving after it was determined they were not a good fit for the position (n=2).

3.2 Volunteer training

A 6-hour training in VRSA protocol was manual-based, took place in person at the research facility, and was conducted by an experienced research assistant with a bachelor's degree in psychology who helped develop the rating manual and had prior support call experience. Trainings were scheduled at the beginning of each semester, including summer, to address volunteer turnover that occurred at those times. In line with implementation research on effective training methods (Beidas et al., 2014; Cross et al., 2007), training in all procedures was a combination of interactive and didactic learning, modeling, behavioral rehearsal, and roleplaying. Audio-recorded examples of recovery support sessions were played, and orientation to the fidelity assessment process was conducted. The following topics were covered: (a) overview of the VRSA project, (b) purpose of recovery support, (c) expectations of volunteers, (d) maintaining boundaries, (e) protecting confidentiality, (f) the timing and scheduling of support sessions, (g) caseload assignment (typically about 5–6 adolescents), (h) session preparation, (i) use of project-provided cell phones, (j) confirming adolescents' identities, (k) establishing initial rapport, (l) checking in (i.e., making small talk, asking about adolescents' interests), (m) discussing involvement in pro-social activities, (n) discussing pro-social friends, (o) discussing temptations and triggers, (p) identifying and preparing for high-risk situations, (q) discussing substance use, (r) setting and checking on goals, (s) strategies for contacting adolescents, (t) asking open-ended and follow-up questions, (u) the importance of praise for approximations toward goal achievement, (v) familiarization with a manual of community resources, (w) digital recorders and microphones, (x) the project's web-based system for session documentation and fidelity checks, and (y) the importance of supervision and feedback. Printed crisis procedures were

distributed to volunteers instructing them what to do if an adolescent reported suicidal or homicidal ideation or child abuse. These instructions provided follow-up assessment questions for volunteers to ask, directions for when to call 911 or a crisis line, staff phone numbers to call for immediate assistance, and a prompt to notify a supervisor immediately of any crisis.

Volunteers were instructed to make calls at times they learned were convenient for each adolescent. Therefore, volunteers were assigned agency cell phones and locking briefcases to store project-related material (e.g., notes, digital recorders) that would allow them to make calls when adolescents were available, typically after school, in the evenings, and on weekends. They were trained to identify and use private locations for calls where no one else could overhear the conversation.

3.3 Volunteer supervision

Once training was completed, model-specific weekly supervision (30 minutes to 1 hour in length) was provided to volunteers in person, over the telephone, or via Skype. Project staff provided continuous feedback regarding adherence to the model based on reviews of recorded sessions. Additionally, strategies to contact specific difficult-to-reach adolescents were discussed. Each week, project staff distributed a “tip of the week” email to all volunteers, providing them with helpful advice about different issues related to recovery support and encouraging them to discuss and share their experiences with one another by using the “reply all” email function. The inclusion of active supervision techniques (e.g., role-playing the goalsetting procedure) as well as feedback and evaluation of competencies related to procedure implementation and fidelity is consistent with findings from implementation research and supervision techniques used in prior A-CRA studies (Bearman et al., 2016; Beidas & Kendall, 2010; Beidas et al., 2012; Edmunds et al., 2013; Garner, Barnes & Godley, 2009; Godley, Garner, Smith, Meyers, & Godley, 2011; Herschell et al., 2004; Schwalbe et al., 2014; Smith, Lundy, & Gianini, 2007).

3.4 Volunteer ability to implement VRSA

Based on session completion rates in prior studies of telephone-based recovery support ranging from 32% to 46% (Garner et al., 2014; Godley et al., 2010; McKay et al., 2010), the target VRSA session completion rate was set at 50%. Volunteers in this study completed 2,135 of the expected 4,211 support sessions (51%) with 201 adolescents. One hundred twenty-seven (63%) adolescents were reached within 2 weeks of discharge from residential discharge, and 183 (92%) completed 1 or more sessions. This rate of continuity of care (63%) after discharge from residential treatment compares favorably with rates of 37%–60% reported by Garnick et al. (2002) and of 56% reported for SAU by Garner et al. (2010). VRSA did not perform as well as the more assertive, home-based ACC rate of 78% (Garner et al., 2010).

Table 1 shows the percent of VRSA sessions that contained each procedure and the percent of participants who received each VRSA procedure. Table 2 shows volunteers’ average fidelity rating for each attempted procedure. The most frequently implemented procedures were the check-in, asking about substance use since the last contact, and discussion of

engagement in pro-recovery activities. Across all VRSA procedures, the average fidelity rating was 3.91 out of 5.

3.5 Adolescent response to VRSA

Ninety-nine adolescents (49%) completed 50% or more of expected sessions. Logs indicate that 1 session was completed for every 8.15 attempts to reach the adolescent. Missed sessions were typically due to lack of answering the telephone, lack of returned messages, frequent re-scheduling, and not being available during scheduled appointments. Despite these issues, 92% of youth completed 1+ VRSA sessions. Seventy-six percent of adolescents (153/201) were discharged from VRSA services after 9 months had elapsed. The rest were discharged before 9 months when they refused recovery support sessions (n=20), were incarcerated at a long-term correctional facility (typically related to charges incurred prior to enrollment in VRSA; n=19), no longer had access to a telephone (n=6), were admitted to longterm inpatient treatment for substance use disorders (n=2), or were held by immigration (n=1). At discharge from VRSA, the average number of completed support sessions for all adolescents was 10.62 and was 12.74 for adolescents who had remained open to services for the full 9 months. Finally, over 90% percent of VRSA participants indicated they liked receiving calls from volunteers, found the volunteers helpful, and were satisfied with their recovery support sessions.

4. Discussion

Using evidence-based implementation strategies, college student volunteers were successfully recruited, trained, supervised, and retained to provide the VRSA model of recovery support to adolescents after residential treatment. Volunteers from the nursing, social work, and psychology undergraduate and graduate programs at local universities were recruited, screened, and trained using a training manual at the beginning of each semester. Fidelity to the model was monitored through session data collection in a secure web-based program, review of audiorecorded sessions, and weekly supervision meetings. This protocol revealed that volunteers were able to complete support sessions at a rate better than that found in similar research (Garner et al., 2014; Godley et al., 2010; McKay et al., 2010), reach adolescents within 2 weeks of residential discharge at a rate comparing favorably with other studies (Garnick et al., 2002; Garner et al., 2010), and completed nearly 11 sessions per adolescent. The average fidelity rating of all VRSA procedures was acceptable at nearly 80 percent of the highest possible rating.

Challenges to implementation occurred in three main areas that were addressed by modifying VRSA recruitment, training, and supervision protocols: (a) volunteers' schedules and persistence in reaching adolescents, (b) adequate volunteer coverage and the transition between semesters, and (c) support session length, conversational flow, and goal-setting. Since volunteers were students, multiple demands competed with VRSA volunteer work for their attention. Classes, paying jobs, friends, significant others, studying, internships, academic clubs, sororities/fraternities, visiting home out of town, and applications to graduate school routinely pulled volunteers in different directions. While volunteering for the project involved a 4-hour weekly commitment, those hours were often distributed

unpredictably throughout a given week and not as a single chunk of time, which contributed to the challenge of time management. One week, all youth may have completed their sessions within a few days. The next week, attempts may have been made every day to reach a portion of the caseload. Five minutes could be spent on 1 day leaving messages. Thirty minutes could be spent another day after speaking with family and completing 1 session with an adolescent. Attempts were made to schedule appointments, but adolescents often missed or rescheduled them. On average, 8 attempts to reach an adolescent were needed to complete a recovery support session. Because of the expectations of volunteers to be persistent in their attempts to contact adolescents and complete support sessions, several volunteers struggled with the time management and organization skills required to be successful. At times, especially early in the project, some volunteers were not calling adolescents frequently enough and others had trouble keeping track of which adolescents needed calls to be made on which days and times.

In order to address this challenge, project staff modified the screening procedure to inquire about the weekly schedules of potential volunteers and identify times they had available to make calls. This assisted in determining whether a volunteer candidate had the ability and flexibility to be an effective support caller. For those individuals who were accepted into the project, schedules were re-visited as needed during weekly supervision sessions. Additionally, a tracking log was created and distributed during training events. This log was used by volunteers to track each adolescent on their caseload, when calls were due, and when call attempts and sessions were completed. Challenges to make the needed amount of call attempts were discussed during supervision along with strategies of how to interact with people who answer the telephone or how to leave a message. In this way, ongoing supervision provided problem-solving of implementation barriers and accountability of volunteers (Nadeem et al., 2013). As a result of these adjustments, project staff were successful in identifying volunteers with available times to make calls, coaching volunteers about how to balance demands on their time, and ensuring that there were enough attempts to reach adolescents.

In terms of coverage for recovery support sessions, even though relationships were established between project staff and university faculty, recruiting enough new volunteers was challenging at times, particularly over the summer. The goal was to have a team of 6–7 trained volunteers each semester; however, during any given semester, a university program may have fewer interested or available students, and many students went home over the summer. Another challenge was to ensure that there was volunteer coverage over the gaps in between semesters.

To overcome these barriers, project staff reached out to each collaborating university program every semester to maximize the response rate. If there were not enough student responses, another round of requests was made. One program would reach out to honor students, another identified promising individuals, and another announced the opportunity via a department listserv. To maximize opportunities for volunteer coverage, students were also allowed to bring project materials with them to their home communities over the summer to make calls, participate in supervision via telephone or Skype, and at times, earn course credit. These strategies offered students the opportunity to reduce time,

environmental, and transportation constraints to participation (Gage & Thapa, 2012), more easily earn experience related to their career interests (Clerkin et al., 2009; Gage & Thapa, 2012; Garver et al., 2009; Moore et al., 2014), and possibly earn a non-monetary reward (Bussell & Forbes, 2002; Phillips & Phillips, 2010). To provide continuous coverage, volunteers were asked to make calls until the beginning of the next semester when new volunteers would be trained. In this way, enough volunteers were recruited each semester to successfully carry the overall caseload. On occasion, project staff covered calls for brief periods during student time off or during a 1 to 2 week gap until the next set of volunteers was trained. While volunteer turnover meant that most youth had to form relationships with new volunteers, analyses revealed that there were no significant differences in 9 and 12 month substance outcomes for youth completing sessions with one volunteer versus those completing sessions with multiple volunteers (see Godley et al. under review for a completed description of outcomes of the VRSA experiment).

Another challenge in providing VRSA was that, by virtue of the fact that volunteers were students, most had little prior experience implementing support techniques and struggled with certain parts of the VRSA protocol. Sometimes, especially soon after training, sessions were too short (e.g., 5 minutes) and did not involve much contribution from the adolescent. Other times conversations sounded forced into a pattern designed to extract specified information rather than a natural, supportive interaction. Some volunteers were hesitant to ask too many follow-up questions for fear of being too intrusive. Out of all VRSA procedures, goal-setting presented the most difficulty. Goals set during sessions were not always specific, time-limited, or achievable within 1 week, barriers to achievement were not always identified, and problem-solving to overcome barriers did not always occur.

In response, project staff modified the training and effectively addressed these issues during ongoing supervision to increase the volunteer's potential for success (Nadeem et al., 2013). Trainings were adapted to include additional active learning opportunities (Beidas et al., 2014; Cross et al., 2007) by having trainees practice asking open-ended and follow-up questions to help establish a better conversational flow, probe deeper into adolescent's issues, and encourage the adolescent to talk more during sessions. Volunteers were provided with recordings of actual support sessions to use as models for content and conversational flow. Building a relationship with the adolescent was prioritized over trying to cover all topics into every conversation. Practice setting brief, specific, positive, measurable, and achievable goals was incorporated into trainings, and role-plays were conducted during supervision. Through these training and coaching efforts, the average length of time that a recovery support session lasted was 13 minutes ($sd=6.935$; goal was 15 minutes); volunteers were rated as performing above average across all sessions in maintaining a conversational flow; and volunteers were able to maintain an acceptable average rating in goal-setting (see Table 2; conversational flow was rated as part of the check-in procedure).

In summary, implementation of VRSA can be challenging, but obstacles can be addressed so that treatment programs can meet or exceed implementation expectations (see Table 3). Successful implementation, generalizability, and sustainability, however, involve realistic expectations that while task shifting recovery support work to volunteers is potentially a low cost service option, there is staff effort required to recruit, train, supervise, and retain

volunteers. If college students are targeted, recruitment and training at the beginning of every semester will most likely be needed. Students will need to be screened for and coached on the need to be flexible with their time dedicated to making calls and completing sessions. VRSA volunteers were asked to spend up to 4 hours per week doing project work, and this time commitment was feasible and met regularly. With weekly supervision and monitoring, almost all volunteers were able to meet all expectations. On occasion, paid staff may need to cover calls if a volunteer is unavailable.

Additionally, programs must have clear procedures for how volunteers will handle crisis situations and reports of child abuse or neglect. It is important during training and supervision to emphasize that VRSA is recovery support, not treatment, and that volunteers do not give advice.

4.1 Conclusions and recommendations

VRSA is a flexible, potentially low-cost model for providing recovery support services that is acceptable to adolescents and effective, especially at higher session completion rates (Godley et al., under review). Recruiting, retaining, training, and supervising volunteers proved both feasible and sustainable over nearly 4 years during this research. Students in colleges and universities proved a readily available source of volunteers for VRSA, thus overcoming a typical obstacle to sustaining volunteer service programs over time. Importantly, volunteers (most of who were not in recovery) were able to successfully implement the model with fidelity.

Several implementation science researchers have provided additional guidelines to help future researchers replicate and test VRSA in other settings and contexts. Issues to consider are (a) the culture of the clients to be served; (b) provider and staff attitudes toward VRSA; (c) the presence of a skilled implementation leader; (d) the ability to engage stakeholders; (e) the culture of the organization implementing VRSA; (f) policy and funding structures; (g) who will deliver the implementation strategy; (h) how implementation steps are defined; (i) which staffing patterns need to be modified; and (j) barriers to implementation (Damschroder et al., 2017; Jäger et al., 2016; Ober et al., 2015; Powell et al., 2012, 2017; Proctor, Powell, & McMillen, 2013; Rowe et al., 2013). In addition, recent implementation studies on inter-organizational planning and collaboration (Friedmann et al., 2015; Welsh et al., 2016) suggest that such strategies may be a beneficial area of investigation to engage more youth in VRSA, increase VRSA session dosage across a greater number of youth (Godley et al., under review), and improve assertive linkages of youth back to treatment when indicated.

Other areas of fruitful research may be to identify how best to recruit student volunteers, meaningfully reward and/or recognize volunteers, define and measure volunteer commitment and variables that predict it, investigate if matching gender, race/ethnicity or other variables affect results, find better ways to attract youth and emerging adults to serve as volunteers, and discover ways in which young volunteers can maximize their similarities to youth in order to be compelling role models (e.g., increase experience-based discussions of succeeding in college, job-hunting).

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Highlights

- Volunteer recruitment, training, supervision, and retention are feasible.
- Volunteer Recovery Support for Adolescents (VRSA) is acceptable to adolescents.
- Volunteers can implement VRSA with fidelity.
- VRSA addresses barriers to participation in recovery support services.
- More research is needed to identify optimum implementation strategies.

Table 1.

Summary of Procedure Completion

Procedure	Procedure Completion by Session (n=2135)		Procedure Completion by Participant (n=201)	
	Frequency	Percent	Frequency	Percent
Check-In	2123	99	184	91
Increasing Pro-Recovery Peers (A-CRA)	1639	77	179	89
Increasing Pro-Recovery Activities (A-CRA)	1934	91	181	90
Experience of Relapse Triggers	1546	72	178	88
Upcoming High-Risk Situations	961	45	162	80
Substance Use Since Last Contact	2123	99	184	91
Progress on Previously Assigned Homework (A-CRA)	1525	71	162	80
Goal Setting and Homework (A-CRA)	1895	89	182	90
Referrals	39	2	28	14

Table 2.

Average Fidelity Rating by Procedure

Procedure	N	Mean*	Std. Deviation
Check-In	945	4.63	0.93
Increasing Pro-Recovery Peers (A-CRA)	858	3.98	1.26
Increasing Pro-Recovery Activities (A-CRA)	944	4.38	1.07
Experience of Relapse Triggers	622	3.88	1.21
Upcoming High-Risk Situations	369	3.47	1.29
Substance Use Since Last Contact	1176	3.64	1.42
Progress on Previously Assigned Homework (A-CRA)	777	3.55	1.32
Goal Setting and Homework (A-CRA)	1035	3.06	1.46
Referrals	12	2.58	1.78
Total	7683	3.91	1.33

* 1=Unsatisfactory; 2=Below Average; 3=Average; 4=Above Average; 5=Excellent

Table 3.

Summary of challenges to VRSA implementation and strategies to address them

Challenge	Strategies
Volunteers' schedules and persistence in reaching adolescents	Screen potential volunteers for availability and flexibility; ongoing supervision to problem-solve issues; creation of tracking log
Adequate coverage and the transition between semesters	Ongoing collaboration with university programs to identify ways to find promising students and reach out to them; allowing students flexibility in timing and location of volunteer work and supervision; providing the opportunity to earn course credit; need for occasional paid staff coverage of calls
Support session length, conversational flow, and goal-setting	Provide opportunities during training to practice asking open-ended and follow-up questions, probing deeper into adolescent's issues, encouraging the adolescent to talk more during sessions, and setting goals; play recordings of actual support sessions to use as models for content and conversational flow; prioritize building a relationship with the adolescent over protocol