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State Policies and Practices in Behavior Supports for Persons With Intellectual and Developmental Disabilities in the United States: A National Survey

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Abstract

Providing effective behavioral supports to decrease challenging behavior and replace it with appropriate alternative skills is essential to meeting the needs of many individuals with intellectual and developmental disabilities (IDD). It is also necessary for fulfilling the requirements of Medicaid-funded individual support plans and is important for moral, ethical, and societal reasons. Unfortunately, there is no national standard for behavioral support practices or source of information on the status of behavior support policies, practices, and services for adults with IDD at either state or national levels. The collection of comprehensive data on state behavior support definitions, provider qualifications, training, and oversight requirements is a necessary starting point for the development of plans to address needed policy and practice changes. This survey is the first national assessment of state policies and practices regarding the definition and delivery of behavior support services to people with intellectual and developmental disabilities receiving publicly financed supports in the United States.

Key Words: *behavior supports; positive behavior support; Medicaid-funded supports; state policies and practices*

Publicly financed service systems for people with intellectual and developmental disabilities (IDD) are significantly challenged in their efforts to support individuals with intensive behavioral needs, their families, and the providers who work with them. Ideally, support strategies and therapeutic approaches are tailored to the specific needs of the individual and function to strengthen his or her ability to live a productive and satisfying life in the community with friends and family. State IDD agencies support a variety of interventions to meet the needs of people with challenging behaviors. A review of the service definitions included in states' home and community-based Medicaid waiver programs furnished under Section 1915(c) of the Social Security Act reveals that virtually every state offers some type of behavioral support service to eligible individuals with IDD. The application of behavioral supports, particularly positive behavior supports, has resulted in significant behavioral and quality of life changes in the lives of many people with IDD (e.g., Carr et al., 1999; Carr et al., 2002; Riechle, Freeman, Davis, & Horner, 1999; Risley, 1996). However, research into the widespread use of behavioral approaches has been hampered by several key obstacles. These include the absence of standard and consistent service definitions and criteria among states and across adult services and education, the lack of widespread licensure for qualified behavioral support providers, and the fact that services are not the sole province or domain of any particular professional group or discipline, but can be offered by people from a variety of different backgrounds and training.

Despite the significant need for effective behavior support interventions, the considerable amount of money spent annually on these supports, and federal regulations requiring states to assure that Medicaid-funded services are furnished through "qualified providers," there is no national source of information on the nature, type, and scope of behavioral support services provided to adults with IDD.

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Service Definitions

The term "behavior supports" was used in this study to capture information on services that include behavioral assessment and intervention to increase appropriate behavior, decrease inappropriate behavior, and teach new skills to replace problem behavior. Such services are referred to in different settings and states as applied behavior analysis, behavior management, behavioral intervention, behavior supports, and/or positive behavior supports. These services can be provided alone or as part of a broader support plan (ideally, person-centered). Depending on a state's service definition, the plan may be called a behavior support plan, behavior intervention plan, positive behavior support plan, or document with some other title.

From a professional perspective, Applied Behavior Analysis (ABA), refers to "the science in which tactics derived from the principles of behavior are applied systematically to improve socially significant behavior and experimentation is used to identify the variables responsible for the improvement in behavior" (Cooper, Heron, & Heward, 2007, p. 20). From a more practical perspective, ABA uses functional assessment and analysis to determine the relationship between a person's behavior and environmental variables, and then makes changes in those variables to improve the occurrence of socially significant behaviors. These changes are then experimentally assessed to verify the impact of the intervention (see Baer, Wolf, & Risley, 1968 for a more complete description).

Many states and treatment programs have begun using the term "positive behavior support" (PBS) to refer to certain types of services available to ameliorate challenging behaviors. The term positive behavior support, originally introduced by Horner et al. (1990), is defined as "a set of research-based strategies used to increase quality of life and decrease problem behavior by teaching new skills and making changes in a person's environment" (Association for Positive Behavior Support [APBS], 2007. It was recently described as an approach that "*grew from the scientific and procedural foundations of applied behavior analysis, benefitting, in particular, from the technologies of functional assessment and analysis*" (Dunlap, Carr, Horner, Zarcone, & Schwartz, 2008, p. 683).

Key literature on PBS has described the approach as emerging from "three major sources: applied behavior analysis, the normalization/inclusion movement, and person-centered values" (Carr et al., 2002, p. 4). Although the practice of PBS has become more fully developed for use with both children and adults over the past twenty years (see, generally, *Journal of Positive Behavior Interventions*), the PBS literature includes a preponderance of studies focused on children (Marquis et al., 2000), particularly within primary and secondary education systems (see apbs.org and the *Journal of Positive Behavior Interventions*). The focus in this paper is on the use of behavior support strategies in publicly funded services for adults with IDD. This study uses the more generic "behavior supports" rather than "positive behavior supports," as "behavior supports" best captures the services and policies currently implemented by state agencies throughout the United States.

Licensure of Qualified Behavioral Support Providers

Regardless of whether behavioral support services are referred to as behavioral supports, behavior management, positive behavior support, or applied behavior analysis, important questions remain regarding the specific nature of the services that are furnished underneath these titles; the qualifications that are required to provide the service; and the methods used to insure, measure, and maintain quality. Expertise in delivery of behavior supports requires specialized study, training, and skill, but the practice does not generally constitute a licensed profession, as is the case with medicine, physical therapy, social work, speech pathology, and other disciplines. Although the recent licensure of behavior analysts in a small number of states may be changing this picture in some areas, for the most part, there is not universal agreement on the professional domain that has the right to provide these services, even though behavior support is based on a foundation of applied behavior analysis.

Professional Qualifications

Confusion over the operational definition of behavior supports, the component practices that constitute appropriate behavior supports, and the type of professional that is competent to provide behavior support services, has existed for many years.

In the late 1990s, three national organizations sought to provide information to address some of the questions surrounding behavior supports. Working collaboratively, the American Association on

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Intellectual and Developmental Disabilities, psychology division (at that time known as the American Association on Mental Retardation); the American Psychological Association Division 33, and the executive council of the Association for Behavior Analysis (now known as Association for Behavior Analysis International) developed and disseminated a web-based document, "What is a behavioral consultant and how do I find the right one?" (Rotholz & Jacobson, 1999) that addressed key issues related to appropriate behavior support delivery. Speaking to the confusion over the type of professional that is competent to provide behavior supports, the authors discussed the conditions under which behavioral intervention for people with IDD could be expected to fall under the disciplines of applied behavior analysis or psychology. The paper referenced several key issues including: the difference between a "behavioral consultant" and a psychologist, the training of psychologists, the relevance of a psychology license to proficiency in behavior supports, the meaning of board certification in behavior analysis, and what to expect from a behavioral consultant. Acknowledging the current disagreement in some states between organizations representing psychology and applied behavior analysis concerning licensing of professionals and limitations on practice, Rotholz and Jacobson (1999) noted that most licensed psychologists do not have training in applied behavior analysis or positive behavior support, nor do they practice in these areas. Likewise, certification in applied behavior analysis does not provide sufficient indication about the certificate holder's qualifications in the broader field of psychology or positive behavior supports. Although there is certainly overlap in professionals practicing applied behavior analysis and psychology, the authors conclude that it would be a mistake to make assumptions about the qualifications of an individual professional based on certification or licensing alone. Complicating matters further, receiving certification in applied behavior analysis does not provide assurance of the certificate holder's experience in the area of IDD. Applied behavior analysis is a broad field and not all practitioners work in the area of IDD.

Method

Purpose of Survey

This study is the first to assess state policies and practices in behavior supports by adult service systems for people with IDD across the United States and was conducted as a collaborative effort of the Center for Disability Resources at the University of South Carolina (UCEDD) and the National Association of State Directors of Developmental Disabilities Services (NASDDDS). The purpose of this study was to assess key issues related to behavior support services across the United States in adult service nonschool settings, paying special attention to service provision strategies, staffing, qualifications, and settings. The study also sought to assess specific training, implementation, and capacity issues that state IDD agencies encounter in their oversight and delivery of behavior support services.

The survey was designed to gather data from state developmental disability agencies (as the purchasers and/or providers of services) on: (a) settings in which behavioral supports are offered; (b) qualifications practitioners must meet to be eligible to provide the service; (c) reimbursement strategies and funding mechanisms; (d) behavior support provider training requirements; and (e) state policies and practices governing the oversight and provision of behavioral supports, quality assurance, availability of behavioral support providers, and the challenges experienced by state agencies in this area. The survey contained 23 questions plus three items on demographics and acknowledgment of participation. A draft version of the survey was provided to a small group of professionals with many years of expertise gathering and analyzing national data on developmental disability services and/or state-level policy and practice experience in behavior supports. Revisions to the draft survey were made based upon their feedback. Further revisions to the draft survey were made to shorten its length and ensure its relevance to state IDD agency directors in an effort to increase their interest in the data and their likelihood of responding to the questionnaire. The question of relevance was especially important to the authors, considering that many state agencies were undergoing significant budget cuts and staff reductions during the period of data collection as a result of the national economic recession and had little interest in responding to external surveys that did not furnish them with actionable information that they could use to improve service delivery.

In late 2010, a request for participation in this survey was e-mailed to the directors of the state agency or operational entity responsible for the

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delivery and management of services to people with IDD in all 50 states plus the District of Columbia. This request came from the National Association of State Directors of Developmental Disabilities Services (NASDDDS) under the signatures of its associate executive director and the director of the Center for Disability Resources (UCEDD) at the University of South Carolina.

Following the initial request, several states completed the online survey hosted by a commercial survey organization. Because the initial response rate was low, the research team contacted state agencies over the following months, with additional prompts for participation. The second outreach, in February 2011, went to all states that had yet to respond. It consisted of a phone call and follow-up email to each state's IDD agency director with a reminder of the original request, the survey's intent, an electronic "print" version of the survey, and the web address for survey responses. After the second prompt, a few additional agencies completed the survey. A third outreach e-mail was sent in April 2011 to both the state IDD agency director and the manager of the state's Medicaid waiver programs for people with IDD in nonresponding states. A "last and final call" e-mail was sent to both the state IDD agency director and the Medicaid waiver program manager in June 2011.

Survey response data were taken directly from the commercial survey host site in a format that included response frequencies, percentages, and, as applicable, comments. As the data were drawn for inclusion in this report, all frequencies and percentages were independently reviewed by the first and third author for accuracy and interrater reliability. In the event of a disagreement, the figures were rechecked by comparing them to the data on the survey host site, whose information was taken as the accurate source. All calculations of data, as noted later in this paper, were similarly and independently checked by the same two authors.

Results

All survey questions were answered by the 45 respondents (44 states plus the District of Columbia; see Table 1) representing 88% of the total potential respondents. Results are provided with states as the unit of analysis across all questions and tables, with the percentage of participating state responses shown (i.e., based on $N = 45$). No surveys contained responses to fewer than all questions since the survey was formatted so a respondent could not proceed through the list of questions without providing a response to each. The 45 respondents were primarily senior administrative staff, such as the waiver program manager, IDD program manager, or policy staff (43%); and senior clinical staff including the chief behavior analyst, director of psychological and behavioral supports, clinical director and others (36%). Executive staff, such as a developmental disabilities director, assistant deputy director, or long-term care bureau chief accounted for 18% of respondents. Additionally one respondent (2%) was a training director and one (2%) did not report his or her title.

Service Settings and Provider Qualifications

Survey questions began with those related to the settings in which behavior supports were offered, the required qualifications to be permitted to write behavior support plans, and the processes used to qualify providers.

Table 1
States, Plus the District of Columbia, That Participated in the Survey

Alabama	Hawaii	Michigan	New York	Tennessee
Arizona	Idaho	Minnesota	North Dakota	Texas
Arkansas	Illinois	Missouri	Ohio	Utah
California	Indiana	Montana	Oklahoma	Vermont
Colorado	Iowa	Nebraska	Oregon	Virginia
Connecticut	Kentucky	Nevada	Pennsylvania	Washington
Delaware	Louisiana	New Hampshire	Rhode Island	West Virginia
District of Columbia	Maryland	New Jersey	South Carolina	Wisconsin
Georgia	Massachusetts	New Mexico	South Dakota	Wyoming

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Service Provision Settings

States reported that behavior supports were provided in settings operated by local provider agencies (98%), in family or private homes (96%), and in state operated facilities (80%). It is important to note that the state operated facilities were not necessarily large institutional settings; rather they were any setting operated directly by the state. There are several states that no longer operate large institutional settings yet some reported providing behavior supports in state operated facilities (for a listing of state operated facilities see Larson, Ryan, Salmi, Smith, & Wuorio, 2012, p. 74). Additionally, respondents reported that state employees provided behavior support services across settings, with 18% of states reporting their employees serving in settings operated by local provider agencies, and 20% reporting such employees serving in family/private home settings.

Qualifications

The survey asked respondents to indicate whether the state's requirements for education, training, and/or licensure needed to write behavior support plans varied according to the restrictiveness of the procedures included in the behavior support plan. Seventy-three percent (73%) of states responded that the requirements do not vary, while 27% reported that they were different.

The minimum requirements for a person to write a behavior support plan for a person with IDD were also assessed. Types of requirements from which respondents could select included psychology license, Board Certification in Behavior Analysis (BCBA), doctoral degree, master's degree, Qualified Mental Retardation Professional (QMRP), BA/BS under professional supervision, BA/BS with no supervision, not applicable, and other. Forty-seven percent (47%) of states reported that a master's degree was the minimum requirement, followed by other (33%) (see comments below), QMRP (29%), psychology license (29%), BA/BS under professional supervision (22%), BA/BS without supervision (16%), BCBA (13%), and doctoral degree (13%; see Table 2).

As noted above, one third of the respondents reported having other minimum requirements for a person to write a behavior support plan that were not among the alternatives included in the survey form. Approximately 2% of states indicated that a person must be a "PBS specialist certified by the University Center for Excellence," 4% of states indicated the requirement of BCBA, and 4% of states reported having no minimum requirements. The comments also listed additional qualifications such as master's degree in psychology, special education, social work, or counseling, and licensure as a psychologist, mental health counselor, physician, nurse, or social worker. Although one state requires that the licensed professional have "competencies in applied behavior analysis, positive behavior support, ethics, co-occurring mental disorders, and neurocognitive disorders," most did not. The comments provided by respondents indicated that a majority of states required qualifications that include training, experience, skills and/or licensure in areas that do not necessarily reflect competence in applied behavior analysis or positive behavior support. The overall responses and comments also indicated that a majority of states do not have minimal requirements for practitioners regarding specific skills to provide effective, evidence-based, behavior support services.

Table 2
Percentage of States Reporting Specific Requirements to Provide Behavior Support Services

Educational requirement	% of States reporting the requirement
Master's degree	47
Other	33
QMRP	29
Psychology license	29
BA/BS with supervision	22
BA/BS with no supervision	16
BCBA	13
Doctoral degree	13

States were asked whether they have a qualification process that behavior support plan authors are required to meet before the person can provide behavior supports. Thirty-six percent (36%) of states reported that they do not have a qualification process, while 64% reported that they did have such a process.

Another question on the qualification process sought information on whether states require a written work sample of a behavior support plan for a person with IDD that is based on a functional assessment or functional analysis of behavior. Twenty-four percent (24%) of states responded

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that they had this requirement for nonstate employees, while the lower rate of 18% was reported for state employees.

The minimum number of years of experience developing and implementing behavior support plans with people who have IDD required in the qualification process was also evaluated. For state employees, the most frequent response was N/A by 24% of states, followed by zero years reported by 22%, two years reported by 20%, and one year reported by 16%. For nonstate employees the most frequent response was zero years, which was reported by 29% of states, followed by two years reported by 24%, N/A reported by 22%, one year reported by 16%, and three or more years reported by 2%.

The last question on qualifications asked respondents to identify those skills required as part of the qualification process to provide behavior supports from a list of 16 items. The question was additionally designed to capture differences in the qualifications required for state employees as compared to nonstate employees. It is important to know which skills are required by states since they are central to applied behavior analysis and/or positive behavior support and thus, can have a major impact on the effective and appropriate provision of behavior supports for persons with IDD.

Information from this question revealed that a minority of states required key ABA or PBS skills as part of a qualification process for behavior support providers (Table 3). Only one key practitioner skill—the ability to conduct a functional assessment or functional analysis—was required by more than half of states (51%) for nonstate employees in their qualification process, but less often (36%) for state employees. None of the 16 skills in Table 3 were required by more than 38% of states for state employees to provide behavior supports. It was evident in responses to this question that for 15 of the 16 skills listed, states reported having consistently lower qualification requirements for state employees that provide behavior supports than for staff who are nonstate employees.

The assessment of consumer satisfaction and quality of life were identified as the least required skills in the list. Assessment of quality of life was required by 18% states for both state employees and nonstate employees and assessment of consumer satisfaction was required by 20% of states for state employees and by 18% of states for nonstate employees.

Training

Four questions in the survey focused on training related to behavior supports. The first asked whether training is provided by the state agency or its contractors to develop/implement high quality behavior supports. Forty-two percent (42%) of states reported that they do provide such training, and 22% of states reported that they do not. Additionally, 36% of states reported that they do provide such training but not in a statewide manner.

An additional question asked states to identify the format of the training that is regularly provided on behavior supports. The most frequent response to this question was a one-day (or shorter) workshop, with 73% of states reporting this format. The other formats reported, in decreasing order, were: multiday workshops (e.g., 2–5 days) in 40% of states, N/A (not provided) in 20% of states, course sequence approved by the Behavior Analyst Certification Board® in 9% of states, full-semester courses in 7% of states, and multisemester course sequences in 4% of states.

Because our interest was in overall provision of behavior supports and not just in those services directly billed by professionals, states were also asked about who receives the behavior support training. Training recipients identified by states in descending order were direct support professionals (73%), supervisors (64%), behavior support plan authors (60%), management staff (53%), family members (44%), and others (4%).

When asked if a training curriculum is used to teach skills in behavior support, 44% of states indicated that they do use a set curriculum and 56% responded that they do not. In addition, there were comments from 47% of states on this question. The comments revealed a widely varied use of training curricula related to behavior supports. Twenty-seven percent (27%) mentioned a specific curriculum or training approach by name, with 7% of states mentioning assorted approaches. Two curricula that are published and generally available were identified by name: the College of Direct Support (CDS) modules were mentioned by two states, and one state mentioned the AAIDD Positive Behavior Support Training Curriculum.

State Policies

The first of several questions on policies asked whether procedural requirements for behavior support services differed between Intermediate Care

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Table 3
Differences in State Behavior Support Provider Qualifications: Required Skills for State and Nonstate Employees by Percentage of States

Skills	State employees (% of states)	Nonstate employees (% of states)
Conducting functional assessment or functional analysis of behavior (FBA)	36	51
Defining behavior in objective terms	38	49
Development of behavioral support plan based on FBA results	33	49
Analysis of data to determine function and assess progress	33	47
Objective(s) and data reporting on target behaviors to BOTH increase and decrease behavior	33	44
Training caregivers	33	44
Design of data collection systems	31	44
Specific procedures to teach/increase replacement behavior	33	42
Assessment of consumer's interests and preferences	31	40
Conducting consumer interview	36	38
Conducting staff interviews	33	38
Working collaboratively with a team	33	38
Person-centered planning	29	31
Graphing of behavioral data	20	27
Assessment of consumer satisfaction	20	18
Assessment of quality of life	18	18

Facility for Individuals with Intellectual Disabilities (ICF/IID) and home and community based settings (HCBS). Fifty-six percent (56%) of states indicated that such requirements differ across settings, with 36% of states whose requirements differed indicating that the requirements were less stringent in HBCS.

When asked if they have a policy on the development, implementation and/or review and approvals for behavior support plans, 91% of states responded that they have such a policy and 9% indicated that they did not.

Nine states (20%) indicated that their policies permit the use of aversive interventions "that are designed to cause discomfort or pain for behavior reduction" and 80% responded that they do not. Of these nine states, seven reported having a required qualification process for behavior support providers but two do not. Of these same nine states whose policies allow aversive interventions, seven have no minimum number of years of required experience developing and implementing behavior support plans prior to providing this service, while one of the states requires one year of experience and one state requires two years. Lastly, of the nine states that permit the use of aversive interventions, two indicated that they provide training to develop/implement high quality behavior supports, five indicated that they do provide such training but not on a statewide basis, and two of the nine states reported that they do not provide this type of training.

Regarding the presence of a requirement that behavior support plans be reviewed by a state-, regional-, or county-level review committee, the responses varied depending on the type of support plan. Respondents were able to indicate if their state had a review committee for the following types of behavior support plans: (a) all plans, (b) nonrestrictive plans, (c) restrictive plans, and (d) aversive plans. Thirteen percent (13%) of states indicated that they had a committee that reviewed all behavior support plans. This was the same response rate found for nonrestrictive behavior support plans. Sixty-two percent (62%) of states responded that they had a committee to review restrictive behavior support plans. Twenty percent (20%) indicated that they had a committee to review behavior support plans that contained aversive interventions. Interestingly, of the 20%

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of states that indicated on a previous question that they permitted the use of aversive interventions, 89% reported that they had a committee to review such procedures and one indicated N/A on their response.

The other question on review committees sought information on the qualifications of committee members. States were asked if they had a committee to review behavior support plans, and if so, if it included a member with expertise in applied behavior analysis and/or positive behavior support. Of the states reporting that they had a review committee, 4% reported that a member was a board certified behavior analyst. An additional 40% reported that their review committee included a member with expertise, but who was not a board certified behavior analyst. The overall result on this question was that 44% of states had a review committee with the expertise one would look for in a professionally qualified review, while 56% either had no review committee or a committee without a member with expertise in applied behavior analysis and/or positive behavior support.

States were asked if their agency uses the term "positive behavior supports" in its policy or training efforts. Eighty-seven percent (87%) of states reported such use of this term. Those responding yes to this question were asked to provide an indication of how positive behavior supports is defined in their state. However, only 62% of the states that reported using the term positive behavior supports provided a definition. Of those states that did provide information on their state's definition of positive behavior supports, very few included information reflecting even a minimal number of the components that comprise this approach (e.g., addressing the function of the problem behavior, focus on teaching skills to replace problem behavior, increasing quality of life). In fact, many of the responses regarding states' use of the term positive behavior supports indicated that the state (a) did not have a definition of PBS, (b) that the definition is currently under development, (c) that the term is loosely defined, or (d) that the term is defined differently depending on the audience.

Funding

One hundred percent (100%) of respondents indicated that the state's Medicaid waiver is used to reimburse this service. Additionally, these services were reported to be provided/reimbursed in 80% of states through ICF/IID sources, 47% of states through non-Medicaid state funded sources, and 38% of states through the Medicaid State Plan.

Quality Assurance

Two questions were devoted to quality assurance practices. The first asked if there is a mechanism for reviewing the quality of a behavior support plan author's work. Fifty-one percent (51%) of states reported having such a requirement, 13% reported that there was a quality assurance mechanism but that it was voluntary, and 36% reported that they had no quality assurance mechanism for behavior supports.

The second question on quality assurance asked if the QA review has an impact on the behavior support plan author's ability to continue providing behavior support services. Forty-seven percent (47%) of states reported that their QA process does have such an impact, while 20% reported that it does not. The other states responded N/A to indicate that they did not have a QA process. When asked if there are enough high-quality providers of behavior supports in their state, 82% responded no and 18% responded yes.

Finally, states were asked if they "could change something to improve the quality of behavior supports received by people with IDD in their state, what would that be?" Five choices plus other were the options available to select (multiple categories could be selected). Results are provided in Table 4. The most frequently reported quality improvement alternative listed as other was the need to increase professional requirements. The need to increase reimbursement rates for this service was also reported.

Discussion

This survey provides the first national assessment of state policies and practices in behavior supports in the United States. The information from this assessment provides a current view of behavior supports in the adult service sector and identifies areas for improvement (see Table 5).

Provider Qualifications

In the area of provider qualifications, several findings warrant attention. While it is encouraging that 64% of states reported having a qualification process before a person can provide behavior

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Table 4
Strategies Identified by States to Improve Quality of Behavior Supports

Topical area	% of States
Regular review of behavior support plans to ensure quality	64
More frequent training	62
Higher quality training	60
Quality assurance/improvement review of provider staff	56
Improved policy	47
Other	22

supports, it is important to note that a qualification process that includes a written work sample based on a functional assessment or functional analysis of problem behavior was required by relatively few states, 24% at most, depending on type of provider. The importance of a work sample review is that it provides the opportunity for an applicant to demonstrate that his or her work addresses key aspects of the service the state wishes to see implemented. This may be unique to behavior supports given the lack of relevant licensure and a relatively new certification for behavior analysts that unfortunately does not reflect positive behavior support. Furthermore, the qualifications required for behavior support providers in a majority of states are minimal and do not reflect what is needed to provide effective, evidence-based behavior support services. Possession of a master's degree (most frequently reported), QMRP status, or a psychology license does not necessarily guarantee that the author of a behavior support plan possesses education, training, or supervised experience in the area of behavior support. Over one-third (36%) of states reported having no qualification process for providers of this service. Clearly there are important improvements that can be made to the qualification process (or lack thereof) to provide behavior supports.

Training

State IDD agencies utilize a number of strategies to provide or ensure the provision of training. Although the Medicaid program does not have a dedicated payment or reimbursement structure to permit states to claim federal matching funds for the costs of staff training, expenditures related to necessary staff training and development are allowed to be included in provider agency reimbursement rates for each type of service. Provider agencies assert that the current approach does not allow them to maintain needed training and skills development over time. They observe that although funding may be adequate when payment levels are initially established, rate reductions, expenditure freezes and budget cutbacks significantly diminish the value of the effort over time, particularly during economic downturns, and additional funding must be provided. Many state IDD agencies do provide statewide training through contracts with training entities, university centers on disabilities, private contractors and through other means. Questions related to behav-

Table 5
Summary Findings on Key Areas of State Behavior Support Policy and Practice

Area	% of States
States that use Medicaid waiver to fund behavior supports	100
States with a behavior support qualification process	64
States that have a quality assurance process for behavior supports	51
States that provide training to develop/implement high quality behavior supports	42
States that require 0 years of experience developing and implementing behavior support plans in qualification process	31
States whose policies permit the use of procedures intended to cause pain or discomfort for behavior reduction	20

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ior supports training reveal that most states provide training to some extent, but not in a statewide manner. It was clear too, that the scale, format, and intended audience for training on behavior supports vary widely across states. The fact that state disability agencies expend resources on training, even in an era of significant budget cuts, highlights two key issues. First, behavior supports is an area of service important enough to warrant training provided or funded by the state agency. Second, the authors believe this can be interpreted to mean that professional organizations and institutions of higher education are not providing this training sufficiently to meet the need for this service, especially when an overwhelming majority of states reported that they do not have enough high quality providers of behavior supports.

Terminology

The wide use of the term "positive behavior support" also deserves attention. Eighty-seven percent (87%) of states reported using the term positive behavior supports in policy and/or training efforts. On the surface this appears to be highly encouraging, but a closer inspection reveals cause for concern. Although requested, most states either did not provide a definition, provided a definition that did not reflect positive behavior support, provided a "definition response" that indicated they did not have a definition or were developing one, or reported that multiple definitions were used by their state agency. Use of the term PBS directly implies implementation of supports that use educational and systems change methods (research-based strategies) to first enhance the person's quality of life and, second, to minimize problem behavior (APBS, 2007; Carr et al., 2002). The appropriate definition of positive behavior support "renders problem behavior irrelevant, inefficient, and ineffective by helping an individual achieve his or her goals in a socially acceptable manner, thus reducing, or eliminating altogether, episodes of problem behavior" (Carr et al., 2002, p. 5). Thus, it is quite possible that "definition creep" is occurring in many states, if not nationally, regarding the use of the term positive behavior support. That is, the term is being used by state IDD agencies in a manner that does not reflect the *actual implementation* of PBS practices.

Aversive and Restrictive Interventions

Policies that state IDD agencies implement can provide the philosophical perspective, overall framework and requirements for services. Responses to survey questions on policies identified several important trends: (a) a large majority of states (80%), do not allow the use of aversive interventions (defined in the survey as procedure designed to cause discomfort or pain for behavior reduction); (b) procedural requirements regarding the provision of behavior supports are more stringent in ICF/IID than HBCS in the 36% of states that reported differing requirements across settings, (c), a majority of states (76%) have established committees to review restrictive and/or all behavior support plans, and (d) many states with such committees (22%) reported that they did not include a member with expertise in applied behavior analysis and/or positive behavior support.

The responses to the policy questions in this survey, as a starting point in examination of states' practices in behavior supports, highlight many important issues that warrant attention by state and federal policymakers. The current survey indicates that only nine states permit the use of procedures intended to cause discomfort or pain for behavior reduction. Since the overwhelming majority of states appear not to allow such interventions, one must ask whether or not the application of such measures in any state is warranted.

State Requirements Across Treatment Settings

As noted above, states' requirements for providing behavior supports were found to be more stringent in ICFs/IID than in HCBS. Although a significant proportion of the individuals served in institutional settings are in need of behavior support services, the overwhelming majority of adults receiving services funded by state developmental disability agencies, including those with significantly challenging behaviors, are being supported in local communities and settings (Larson, Scott, Salmi, & Lakin, 2009). Indeed, 12 states have closed all of their public institutions for people with IDD and have shifted the base of service delivery to the community. The movement of significant numbers of individuals with intensive needs to the community raises questions regarding the appropriateness of the less stringent requirements in community programs regarding the provision of behavior

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supports, provider qualifications, and state oversight responsibilities.

A discrepancy in qualification requirements between state and nonstate employees was also evident (e.g., Table 3), with key skills more often required for nonstate employees. While we cannot say that this discrepancy results from the progression from public to private settings as the primary choice for services, it certainly raises the question as to why the requirements should differ. This discrepancy is particularly important since most people with IDD are supported in community settings (i.e., HCBS) and these individuals experience behavioral and other challenges just as serious and complex as those served in ICF/IID programs. Thus a key question is why many states have different requirements for ICF/IID programs and HCBS and how best to insure appropriate requirements in the HCBS. It would also be appropriate to more closely examine issues that influence the policy and procedural requirements that states reported varied across state and nonstate settings and the higher qualification requirements for nonstate employees who most often provide behavior supports in nonstate settings.

Although a majority of states have a committee to review behavior support plans for individual consumers of this service, 29% of states reported not having such a committee, even for plans that contain restrictive interventions. When combined with the information that a majority of the states that do have review committees do not include a member with appropriate professional expertise (56% of states), there is cause for concern that the delivery of behavioral support services is not receiving proper professional oversight.

Quality Management

Each state is required to develop and implement a comprehensive quality management program as a condition of participation in the state's Section 1915(c) Medicaid home and community based waiver program. Similar requirements exist for states participating in the ICF/IID program. It is essential that state's systems of quality assurance be carefully designed to assess provider performance and capacity with respect to the delivery of behavior support services, ensuring that the service is implemented with the intended level of quality. In response to two survey questions on quality assurance, we found just over half (51%) of states require a quality assurance process that assesses the quality of a behavior support plan author's work and that an additional 13% of states have a voluntary process. Moreover, less than half (47%) of states reported that this process has an impact on the provider's ability to continue providing services. The United States Department of Health and Human Services Centers for Medicare and Medicaid Services (CMS) requires states to assure that mechanisms are in place to, on an ongoing basis, identify, address, and seek to prevent abuse, neglect, and exploitation as a condition of participation in the Section 1915(c) Medicaid waiver program. Activities and processes must be in place to "discover" or monitor services furnished through the program and "remediate" problem areas and activities (Application for §1915(c) Home and Community Based Waiver [V. 3.5] Instructions, Technical Guide and Review Criteria; U.S. Department of Health and Human Services, 2008). This requirement extends to all services furnished under a state's waiver program, including behavior support services. Such review is essential in guaranteeing both the quality and effectiveness of services. Furthermore, the possibility of behavior support plan authors implementing services that do not meet the practice standards set by a majority of states calls into question the effectiveness, appropriateness, and overall quality of behavior support services provided to many individuals with IDD that have behavior support needs.

State IDD agencies are challenged in their efforts to develop and maintain high standards in provider qualifications, training, and quality assurance. While in most areas of professional practice (e.g., medicine) clear professional requirements set the minimum qualifications for practitioners with respect to education, training, supervised experience, and licensure necessary to insure "industry standards of quality," this is not the case in behavior supports. The lack of a rigorous, professionally endorsed national standard such as medical licensure that applies to behavior supports for people with IDD raises significant questions regarding the ability of states and provider agencies to set practice criteria and assure the quality and appropriateness of the services being provided. Although it is worth noting that there is a national certification in applied behavior analysis from the Behavior Analyst Certification Board, that certification does not address the skills required for positive behavior support that go beyond applied

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behavior analysis. At present, it appears that states interested in ensuring provision of positive behavior supports may need to take direct action to meet this obligation.

The finding that behavior supports are furnished by all states responding to the survey underscores the importance of this key service. But the data also reveal the many challenges that state IDD agencies experience in the delivery and oversight of behavior supports and behavior support providers. The vast majority, 82% of states, indicated that they did not have enough high quality providers of behavior supports. This shortage plus the lack of a national consensus or standard regarding staff qualifications, service definitions, professional oversight, and quality assurance underscores the need to address these issues at both the state and national levels.

The top areas identified by states to improve the quality of their behavioral support services were: (a) regular review of behavior support plans, (b) quality assurance reviews of behavioral providers, (c) more frequent and higher quality training, and (d) improved policy. These are achievable and practical changes that can be made with a well-informed and carefully planned effort (see Table 4).

An additional issue for consideration is the finding that few states reported requiring skills in the areas of quality of life assessment (18%) and consumer satisfaction (20%). This may reflect either a low rate of consideration for quality of life issues, or that states believe that they assess quality of life through other approaches that extend across the range of supports offered. While the data from this study cannot be used to determine which of the above interpretations may be accurate (if any), they do serve to highlight the need for further examination of the issues in future studies.

This study provides the first national assessment of state policies and practices in behavior support for persons with IDD. The following limitations should be noted as one considers how best to use the results. Responses provided by state IDD agencies reflected policies and practices for their overall services and are not limited to Medicaid recipients. Additionally, while all state IDD agencies serve adults, many also support children with IDD in a variety of nonschool settings (e.g., family home, respite, alternative placement). The data reported in this study likely reflect the services provided to those children as well. It is also important to note that the term "aversive" intervention was narrowly defined in this study as an "intervention intended to cause discomfort or pain for behavior reduction" and, thus, is not the same as a "restrictive" intervention. It is unclear whether respondents interpreted "aversives" as including the use of restraint, seclusion, or timeout. The question of how most states provide services without the use of aversive interventions remains an important one, but one that the current data cannot answer. This would be an important area for future research. Other areas for future research should include: a more in-depth study of the provider qualification process (e.g., procedures and requirements); examination of how states evaluate outcomes of behavior support services; and how the 18% of states that reported not needing more qualified providers of behavior supports have succeeded in this effort.

This study is intended to be a starting point from which appropriately informed and coordinated quality improvement efforts in behavior supports can be made. By providing information that is national in scope and specific to IDD agency efforts across states, we believe that the first step has been taken. Hopefully the next step is for collaborative efforts to improve policy and, most importantly, practice in the area of behavior supports in all states. With this in mind, it is appropriate to mention that following the presentation of the survey results with the directors of state IDD systems at the directors' forum of their 2012 annual meeting, plans were made to create a group focused specifically on the issues raised in this study. The committee, composed of selected state IDD agency directors and their representatives, the first and second authors of this article, and others as needed, will be charged with further review of the study results, additional consideration of information and perspectives from their state agencies and development of a set of policy and practice recommendations.

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