

Evidence-Based Practices Comparison Chart

This chart compares the lists of evidence-based practices developed by the Centers for Medicare & Medicaid Services, the National Autism Center, and the National Professional Development Center on ASD. Brief descriptions of the practices are also included.

Intervention	Centers for Medicare and Medicaid Services (CMMS)	National Autism Center (NAC) ¹	National Professional Development Center on ASD (NPDC)
Antecedent Package	(0-16) (17-21) Modifications of events that typically precede the occurrence of a target behavior. These alterations are made to increase the likelihood of success or reduce the likelihood of problems occurring.	(3-18) Behavior chain interruption; behavioral momentum; choice; cueing/prompting; environmental enrichment/modification; errorless learning; habit reversal; incorporating echolalia, special interests, thematic activities, or ritualistic/obsessional activities; maintenance interspersal; noncontingent access/reinforcement; priming; stimulus variation; time delay.	<i>Antecedent-based Interventions (EC-MH)</i> Include 1) using highly preferred activities/items to increase interest level, 2) changing schedule/routine, 3) implementing preactivity interventions, 4) offering choices, 5) altering the manner in which instruction is provided, and 6) enriching the environment for access to sensory stimuli that serve the same function as the interfering behavior.
Behavioral Package	(0-16) Interventions designed to reduce problem behavior and teach functional alternative behaviors or skills through the application of basic principles of behavior change.	(0-21) Sleep package; toilet training; chaining; contingency contracting; contingency mapping; delayed contingencies; DR strategies; DTT; FCT; generalization training; mand training; noncontingent escape with fading; progressive relaxation; reinforcement; scheduled awakenings; shaping; stimulus-stimulus pairing with reinforcement; successive approximation; task analysis; token economy.	

¹ Reported exact age – not age or grade range.

Intervention	CMMS	NAC	NPDC
Differential Reinforcement			(EC-H) Reinforcement is provided for desired behaviors, while inappropriate behaviors are ignored.
Extinction			(EC-MH) Based on applied behavior analysis ... is used to reduce or eliminate unwanted behavior. Extinction involves withdrawing or terminating the positive reinforcer that maintains an inappropriate interfering behavior.
Prompting			(EC-MH) Any help given to learners that assist them in using a specific skill.
Reinforcement			(EC-MH) A relationship between learner behavior and a consequence that follows the behavior. This relationship is only considered reinforcement if the consequence increases the probability that a behavior will occur in the future, or at least be maintained.
Time Delay			(E) A practice that focuses on fading the use of prompts during instructional activities. With this procedure, a brief delay is provided between the initial instruction and any additional instructions or prompts.

Intervention	CMMS	NAC	NPDC
Cognitive Behavioral Intervention Package	(0-16) Interventions designed to change negative or unrealistic thought patterns/behaviors to positively influencing emotions/life functioning.		
Comprehensive Behavioral Treatment for Children	(0-16) Interventions involving a combination of instructional and behavior change strategies and a curriculum that addresses core and ancillary symptoms and behaviors of ASD.	(0-8) Using ABA strategies (e.g., DTT, incidental teaching, errorless learning, behavioral momentum, and shaping). Criteria: {a} defined ASD symptoms, {b} treatment manuals, {c} intensive treatment, and {d} measuring program effectiveness.	
Discrete Trial Training			(EC, E) DTT is a one-to-one instructional approach. Used when a learner needs to learn a skill best taught in small repeated steps. Each trial or teaching opportunity has a definite beginning and end. The use of antecedents and consequences is carefully planned and implemented.
Functional Behavior Assessment			(EC-MH) Systematic strategies used to determine underlying behavior function or purpose, so that an effective intervention plan can be developed.

Intervention	CMMS	NAC	NPDC
Joint Attention Intervention	(0-16) Interventions involving teaching a child to respond to the nonverbal social bids of others or to initiate joint attention interactions.	(0-5) Often taught in a DTT format; examples include pointing, showing items/activities to another person, and following eye gaze.	
Modeling	(0-16) Interventions relying on an adult or peer providing a demonstration of the target behavior that should result in an imitation by the person with ASD.	(3-18) Examples include live modeling and video modeling.	<i>See Video Modeling</i>
Multi-component Package	(0-16) These interventions involve a combination of multiple treatment procedures that are derived from different fields of interest or different theoretical orientations. They do not better fit one of the other treatment "packages" in this list nor are they associated with specific programs.		
Naturalistic Teaching Strategies	(0-16) Primarily child-directed interactions to teach functional skills in natural environment. Providing a stimulating environment, modeling how to play, encouraging conversation, providing choices and direct/natural reinforcers, and rewarding reasonable attempts.	(0-9) Different names include focused stimulation, incidental teaching, milieu teaching, embedded teaching, and responsive education and prelinguistic milieu teaching.	(EC-MH) Includes environmental arrangement, interaction techniques, behavioral strategies designed to encourage specific target behaviors. Builds more elaborate learner behaviors that are naturally reinforcing and appropriate to the interaction.

Intervention	CMMS	NAC	NPDC
Parent Implemented Interventions			(EC-E) Parent-implemented Intervention entails parents directly using individualized intervention practices with their child to increase positive learning opportunities and acquisition of important skills.
Peer Training Package	(0-16) These interventions involve teaching children without disabilities strategies to facilitate play and social interactions with children on the autism spectrum. Peers often include classmates or siblings.	(3-14) There are many different peer training programs, including Project LEAP, peer networks, circle of friends, buddy skills package, Integrated Play Groups, peer initiation training, and peer-mediated social interaction training.	(EC-MH) <i>Peer-mediated Instruction/ Intervention</i> Peers are systematically taught ways of engaging learners with ASD in social interactions in both teacher-directed and learner-initiated activities
Picture Exchange Communication System	(0-16) Involves the application of a specific AAC system based on behavioral principles that are designed to teach functional communication to children with limited verbal and/or communication skills.		(EC-E) Learners are taught to give a picture of a desired item to a communicative partner in exchange for the item.
Pivotal Response Treatment	(0-16) Focuses on targeting "pivotal" behavioral areas - such as motivation to engage in social communication, self-initiation, self-management, and responsiveness to multiple cues.	(3-9) This treatment is an expansion of Natural Language Paradigm which is also included in this category.	(EC-MH) <i>Pivotal Response Training</i> Creates a more efficient and effective intervention by enhancing four pivotal variables: motivation, responding to multiple cues, self-management, and self-initiations.

Intervention	CMMS	NAC	NPDC
Response Interruption and Redirection			(EC-MH) RIR contains two main components: (1) response interruption and (2) redirection. During the response interruption component of the intervention, teachers/practitioners stop the learner from engaging in the interfering behavior. Redirection, the second component of the intervention, focuses on prompting the learner to engage in a more appropriate, alternative behavior.
Schedules	(0-16) Interventions involving the presentation of a task that communicates a series of activities or steps required to complete a specific activity.	(3-14) These interventions involve the presentation of a task list that communicates a series of activities or steps required to complete a specific activity.	<i>See Visual Supports</i>
Self-management	(0-16) These interventions involve independence by teaching individuals with ASD to regulate their behavior by recording the occurrence/non-occurrence of the target behavior, and securing reinforcement for doing so.	(3-18) These interventions involve promoting independence by teaching individuals with ASD to regulate their behavior by recording the occurrence/nonoccurrence of the target behavior, and securing reinforcement for doing so.	(EC-MH) With these interventions, learners with ASD are taught to discriminate between appropriate and inappropriate behaviors, accurately monitor and record their own behaviors, and reward themselves for behaving appropriately.

Intervention	CMMS	NAC	NPDC
Social Communication Intervention	(0-16) These psychosocial interventions involve targeting some combination impairments such as pragmatic communication skills, and the inability to successfully read social situations.		
Social Skills Groups			(EC-MH) Social skills groups are used to teach individuals with ASD ways to appropriately interact with typically developing peers. Social skills groups typically involve small groups of two to eight individuals with disabilities and a teacher or adult facilitator. Most social skill group meetings include instruction, role-playing or practice, and feedback ...
Social Skills Package	(0-16) These interventions seek to build social interaction skills by targeting basic responses (e.g., eye contact, name response) to complex social skills (e.g., how to initiate or maintain a conversation). They seek to build social interaction skills in children with ASD by targeting basic responses (e.g., eye contact, name response) to complex social skills (e.g., how to initiate or maintain a conversation).		

Intervention	CMMS	NAC	NPDC
Story-based intervention package	(0-16) These treatments involve a written description of the situations under which specific behaviors are expected to occur. Stories may be supplemented with additional components.	(6-14) Social Stories™ are the most well-known story-based interventions and they seek to answer the “who,” “what,” “when,” “where,” and “why” in order to improve perspective-taking.	
Social Narratives			(EC-MH) Social narratives describe social situations in some detail by highlighting relevant cues and offering examples of appropriate responding.
Speech Generating Devices			(EC-MH) Speech generating devices (SGD) are electronic devices that are portable in nature and can produce either synthetic or digital speech for the user. SGD may be used with graphic symbols, as well as with alphabet keys.
Structured Teaching	(0-16) This intervention involves a combination of procedures that rely on the physical organization of a setting, predictable schedules, and individualized use of teaching methods. These treatment programs may also be referred to as TEACCH.		(EC-MH) <i>Structured Work Systems</i> The individual work system is defined as a visually organized space where learners independently practice skills that have been previously mastered under the direct supervision of an adult. A work system visually communicates at least four pieces of information to the learner.

Intervention	CMMS	NAC	NPDC
Task Analysis			(EC-MH) Breaking a skill into smaller, more manageable steps to teach the skill.
Technology-based Treatment	(0-16) The presentation of instructional materials using the medium of computers or related technologies.		
Computer-aided Instruction			(E-MH) Use of computers to teach academic skills and to promote communication and language development and skills. It includes computer modeling and computer tutors.
Video Modeling	<i>See Modeling</i>	<i>See Modeling</i>	(E-MH) A mode of teaching that uses video recording and display equipment to provide a visual model.
Visual Supports	<i>See Schedules</i>	<i>See Schedules</i>	(EC-MH) Any tool presented visually that supports an individual as he moves through the day. Might include, but are not limited to, pictures, written words, objects, arrangement of the environment or visual boundaries, schedules, maps, labels, organization systems, timelines, and scripts.

Note. EC=early childhood, E=elementary, MH=middle/high school.