

## Supplemental Information

**SUPPLEMENTAL TABLE 1** Exact Terms for All Searches Considered in the Full AHRQ Report, PubMed Search Strategy (November 4, 2016): Key Question 1

Set No.	Terms
1	“Attention Deficit Disorder with Hyperactivity”[Mesh] OR “attention deficit hyperactivity disorder”[tiab] OR “ADHD”[tiab] OR “attention deficit disorder”[tiab]
2	“Pediatrics”[Mesh] OR “Adolescent”[Mesh] OR “Infant”[Mesh] OR “Child”[Mesh] OR child[tiab] OR children[tiab] OR infant[tiab] OR infants[tiab] OR preschool[tiab] OR preschooler[tiab] OR pediatric[tiab] OR teenager[tiab] OR teenagers[tiab] OR teenaged[tiab] OR teen[tiab] OR teens[tiab] OR adolescent[tiab] OR adolescents[tiab] OR adolescence[tiab] OR youth[tiab]
3	“Attention Deficit and Disruptive Behavior Disorders/diagnosis”[Majr] OR mass screening[mesh] OR questionnaires[mesh] OR Interviews as Topic[Mesh] OR Psychometrics[Mesh] OR Psychiatric Status Rating Scales[Mesh] OR diagnosis[mesh:noexp] OR “Diagnostic Techniques and Procedures”[Mesh] OR “Diagnostic and Statistical Manual of Mental Disorders”[Mesh] OR “Referral and Consultation”[Mesh] OR questionnaire[tiab] OR questionnaires[tiab] OR screening[tiab] OR screen[tiab] OR scale[tiab] OR instrument[tiab] OR instruments[tiab] OR interview[tiab] OR interviews[tiab] OR DSM*[tiab] OR diagnosis[tiab] OR diagnostic[tiab] OR diagnosed[tiab] OR (Vanderbilt[tiab] AND scale[tiab]) OR conners[tiab] OR cprs[tiab] OR ctrs[tiab] OR cprs[tiab] OR crs[tiab] OR “snap-IV”[tiab] OR “snap-4”[tiab] OR “basc-2”[tiab] OR “behavioral assessment system for children”[tiab] OR dbdrs[tiab] OR “disruptive behavior disorder rating scale”[tiab] OR adhd-rs[tiab] OR “adhd rating scale”[tiab] OR ksads[tiab] OR k-sads[tiab] OR kiddie-sads[tiab] OR DISC[tiab] OR “dominance inducement submission and compliance”[tiab] OR “diagnostic interview schedule for children”[tiab] OR “diagnostic inventory for screening children”[tiab] OR “mini-kid”[tiab] OR “Mini Interational Neuropsychiatric interview”[tiab] OR “iva-2”[tiab] OR “iva-qs”[tiab] OR “iva-ae2”[tiab] OR tova[tiab] OR “test of variables of attention”[tiab] OR “neuropsychiatric eeg-based assessment aid”[tiab] OR neba[tiab]
4	“Sensitivity and Specificity”[Mesh] OR “Diagnostic Errors”[Mesh] OR sensitivity[tiab] OR specificity[tiab] OR accuracy[tiab] OR accurate[tiab] OR accurately[tiab] OR misdiagnos*[tiab] OR (randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR randomized[tiab] OR randomization[tiab] OR randomization[tiab] OR placebo[tiab] OR randomly[tiab] OR trial[tiab] OR groups[tiab] OR Clinical trial[pt] OR “clinical trial”[tiab] OR “clinical trials”[tiab] OR “evaluation studies”[pt] OR “evaluation studies as topic”[MeSH] OR “evaluation study”[tiab] OR evaluation studies[tiab] OR “intervention studies”[MeSH] OR “intervention study”[tiab] OR “intervention studies”[tiab] OR “case-control studies”[MeSH] OR “case-control”[tiab] OR “cohort studies”[MeSH] OR cohort[tiab] OR “longitudinal studies”[MeSH] OR “longitudinal”[tiab] OR longitudinally[tiab] OR “prospective”[tiab] OR prospectively[tiab] OR “retrospective studies”[MeSH] OR “retrospective”[tiab] OR “Cross-Sectional Studies”[Mesh] OR cross-sectional[tiab] OR “comparative study”[pt] OR “comparative study”[tiab] OR systematic[sb] OR “meta-analysis”[pt] OR “meta-analysis as topic”[MeSH] OR “meta-analysis”[tiab] OR “meta-analyses”[tiab] NOT (Editorial[ptyp] OR Letter[pt] OR Case Reports[pt] OR Comment[pt]) NOT (animals[mh] NOT humans[mh]) AND English[la]
5	#1 AND #2 AND #3 AND #4 Publication date from January 1, 2009

**SUPPLEMENTAL TABLE 2** Exact Terms for All Searches Considered in the Full AHRQ Report, PubMed Search Strategy (November 4, 2016): Key Question 2

Set No.	Terms
1	“Attention Deficit Disorder with Hyperactivity”[Mesh] OR “attention deficit hyperactivity disorder”[tiab] OR “ADHD”[tiab] OR “attention deficit disorder”[tiab]
2	“Pediatrics”[Mesh] OR “Adolescent”[Mesh] OR “Infant”[Mesh] OR “Child”[Mesh] OR child[tiab] OR children[tiab] OR infant[tiab] OR infants[tiab] OR preschool[tiab] OR preschooler[tiab] OR pediatric[tiab] OR teenager[tiab] OR teenagers[tiab] OR teenaged[tiab] OR teen[tiab] OR teens[tiab] OR adolescent[tiab] OR adolescents[tiab] OR adolescence[tiab] OR youth[tiab]
3	#1 AND #2
4	“Attention Deficit Disorder with Hyperactivity/drug therapy”[Majr] OR “Central Nervous System Stimulants”[MeSH] OR “Methylphenidate”[MeSH] OR “Dexmethylphenidate”[MeSH] OR “Dextroamphetamine”[MeSH] OR “Adderall”[Supplementary Concept] OR “lisdexamfetamine dimesylate”[Supplementary Concept] OR “Amphetamine”[MeSH] OR “Guanfacine”[MeSH] OR “Sympatholytics”[MeSH] OR “Clonidine”[MeSH] OR “Adrenergic Uptake Inhibitors”[MeSH] OR “Adrenergic Uptake Inhibitors”[Pharmacological Action] OR “Receptors, Adrenergic, alpha-2”[MeSH] OR “Adrenergic alpha-Agonists”[Mesh] OR “Adrenergic alpha-2 Receptor Agonists”[Mesh] OR “atomoxetine”[Supplementary Concept] OR “Antidepressive Agents, Tricyclic”[MeSH] OR “Desipramine”[MeSH] OR “Dopamine Uptake Inhibitors”[MeSH] OR “Sympathomimetics”[MeSH] OR “modafinil”[Supplementary Concept] OR “Serotonin Uptake Inhibitors”[MeSH] OR “Serotonin Uptake Inhibitors”[Pharmacological Action] OR “duloxetine” [Supplementary Concept] OR “Monoamine Oxidase Inhibitors”[MeSH] OR “Monoamine Oxidase”[MeSH] OR “Selegiline”[MeSH] OR “Bupropion”[MeSH] OR “armodafinil” [Supplementary Concept] OR “venlafaxine”[Supplementary Concept] OR “Receptors, N-Methyl-D-Aspartate”[MeSH] OR “Memantine”[MeSH] OR “Amantadine”[MeSH] OR “duloxetine”[Supplementary Concept] OR “Central Nervous System Stimulants” [Pharmacological Action] OR “Adrenergic alpha-2 Receptor Agonists” [Pharmacological Action] OR “Antidepressive Agents, Tricyclic” [Pharmacological Action] OR “Dopamine Uptake Inhibitors” [Pharmacological Action] OR “Monoamine Oxidase Inhibitors” [Pharmacological Action] OR “Central Nervous System Stimulants”[tiab] OR “psychostimulant”[tiab] OR “Methylphenidate”[tiab] OR “Methylphenidate Hydrochloride”[tiab] OR “Aptensio”[tiab] OR “Concerta”[tiab] OR “Ritalin”[tiab] OR “Ritalin LA”[tiab] OR “Medikinet”[tiab] OR “Equasym”[tiab] OR “Quillivant”[tiab] OR “Metadate”[tiab] OR “Daytrana”[tiab] OR “Dexmethylphenidate”[tiab] OR “Dexmethylphenidate Hydrochloride”[tiab] OR “Focalin”[tiab] OR “Dextroamphetamine”[tiab] OR “Dexedrine”[tiab] OR “Dextrostat”[tiab] OR “ProCentra”[tiab] OR “Zenedi”[tiab] OR “mixed amphetamine salts”[tiab] OR “Adderall” [tiab] OR “lisdexamfetamine”[tiab] OR “lisdexamfetamine dimesylate”[tiab] OR “Vyvanse”[tiab] OR “Venvanse”[tiab] OR “Elvanse”[tiab] OR “Tyvense”[tiab] OR “Dyanavel”[tiab] OR “Evekeo”[tiab] OR “Guanfacine”[tiab] OR “Sympatholytics”[tiab] OR “Central alpha-2 Adrenergic Agonist”[tiab] OR “Clonidine”[tiab] OR “Intuniv”[tiab] OR “Estulic”[tiab] OR “Tenex”[tiab] OR “Catapres”[tiab] OR “Clophelin”[tiab] OR “Kapvay”[tiab] OR “Nexiclon”[tiab] OR “Duraclon”[tiab] OR “Norepinephrine Reuptake Inhibitors”[tiab] OR “Selective Norepinephrine Reuptake Inhibitors”[tiab] OR “Adrenergic Uptake Inhibitors”[tiab] OR “atomoxetine”[tiab] OR “Strattera”[tiab] OR “Tricyclic antidepressants”[tiab] OR “Desipramine”[tiab] OR “Norpramin”[tiab] OR “Nortriptyline”[tiab] OR “Pamelor”[tiab] OR “Dopamine Reuptake Inhibitors”[tiab] OR “modafinil”[tiab] OR “Provigil”[tiab] OR “Armodafinil”[tiab] OR “Norepinephrine-dopamine Reuptake Inhibitors”[tiab] OR “Bupropion”[tiab] OR “Wellbutrin”[tiab] OR “Forfivo”[tiab] OR “Cymbalta”[tiab] OR “venlafaxine”[tiab] OR “reboxetine”[tiab] OR “Monoamine Oxidase Type B inhibitors”[tiab] OR “Selegiline”[tiab] OR “Eldepryl”[tiab] OR “Zelapar”[tiab] OR “NMDA receptors”[tiab] OR “N-Methyl-D-aspartate receptor Antagonists”[tiab] OR “Amantadine”[tiab] OR “Memantine”[tiab] OR “Pertofrane”[tiab] OR “Nuvigil”[tiab] OR “Cymbalta”[tiab] OR “duloxetine”[tiab] OR “Effexor”[tiab] OR “Eldepryl”[tiab] OR “Emsam”[tiab] OR “Trevilor”[tiab] OR “Symmetrel”[tiab] OR “Namenda”[tiab] OR “Zelapar”[tiab]

TABLE 2 Continued

Set No.	Terms
5	<p>“Attention Deficit Disorder with Hyperactivity/diet therapy”[Majr] OR “Attention Deficit Disorder with Hyperactivity/rehabilitation”[Majr] OR “Psychotherapy”[MeSH] OR “Behavior Therapy”[MeSH] OR “Parent-Child Relations”[MeSH] OR “Play Therapy”[MeSH] OR “Cognitive Therapy”[MeSH] OR “Time Management”[MeSH] OR “Computer-Assisted Instruction”[MeSH] OR “Diet Therapy”[MeSH] OR “Fatty Acids, Omega-3/therapeutic use”[MeSH] OR “Vitamins/administration and dosage”[Mesh] OR “Vitamins/therapeutic use”[MeSH] OR “Food Additives/adverse effects”[MeSH] OR “Probiotics/therapeutic use”[MeSH] OR “Acupuncture Therapy”[MeSH] OR “Remedial Teaching”[MeSH] OR “Early Intervention (Education)”[MeSH] OR “Complementary Therapies”[MeSH] OR “Combined Modality Therapy”[MeSH] OR “psychosocial therapy”[tiab] OR “psychosocial intervention”[tiab] OR “psychosocial interventions”[tiab] OR “psychosocial approach”[tiab] OR “psychosocial approaches”[tiab] OR “psychosocial treatment”[tiab] OR “psychosocial support”[tiab] OR “psychoeducation”[tiab] OR “nonpharmacologic therapy”[tiab] OR “nondrug therapy”[tiab] OR “non-drug therapy”[tiab] OR “Play Therapy”[tiab] OR “cognitive behavioral therapy”[tiab] OR “cognitive behavior therapy”[tiab] OR “cognitive behavioural therapy”[tiab] OR “cognitive behaviour therapy”[tiab] OR Mindfulness[tiab] OR complementary[tiab] OR “alternative medicine”[tiab] OR “alternative therapy”[tiab] OR “alternative therapies”[tiab] OR “Interpersonal skills training”[tiab] OR “Parent-Child Interaction Therapy”[tiab] OR “parent training”[tiab] OR “parent engagement”[tiab] OR “parent management”[tiab] OR “parenting skills”[tiab] OR “parenting intervention”[tiab] OR “parenting interventions”[tiab] OR “Barkley’s defiant child”[tiab] OR “Teacher-Child Interaction Training”[tiab] OR “Incredible Years”[tiab] OR “New Forest Parenting”[tiab] OR “Triple P”[tiab] OR “Helping the Noncompliant Child”[tiab] OR “child life and attention skills”[tiab] OR “clas”[tiab] OR PCIT[tiab] OR “parent child interaction therapy”[tiab] OR “Summer Treatment Program”[tiab] OR “Daily Report Card”[tiab] OR “organization skills”[tiab] OR “organizational skills”[tiab] OR “time management”[tiab] OR “homework intervention”[tiab] OR braintrain[tiab] OR “memory training”[tiab] OR “Captain’s log mindpower builder”[tiab] OR “memory gyms”[tiab] OR “attention gym”[tiab] OR “smartdriver plus”[tiab] OR “smartmind pro”[tiab] OR “RoboMemo”[tiab] OR “play attention”[tiab] OR metronome[tiab] OR brainmaster[tiab] OR mindmed[tiab] OR “attention lab”[tiab] OR (activate[tiab] AND c8[tiab]) OR “attention training”[tiab] OR “CogniPlus”[tiab] OR cogmed[tiab] OR “working memory training”[tiab] OR biofeedback[tiab] OR neurofeedback[tiab] OR neuroagility[tiab] OR neurooptimal[tiab] OR acupuncture[tiab] OR “vision training”[tiab] OR “visual training”[tiab] OR “vision therapy”[tiab] OR “education intervention”[tiab] OR “cognitive remediation”[tiab] OR neurotherapy[tiab] OR “elimination diet”[tiab] OR “diet therapy”[tiab] OR (“low carb” OR “low carbohydrate” OR “low carbohydrates”[tiab] OR “gluten free”) AND diet[tiab]) OR “feingold diet”[tiab] OR “red dye”[tiab] OR ((vitamin[tiab] OR vitamins[tiab]) AND (supplement[tiab] OR supplements[tiab])) OR “herbal supplement”[tiab] OR “herbal supplements”[tiab] OR probiotics[tiab] OR “omega 3”[tiab] OR “slow cortical potentials”[tiab] OR “few foods diet”[tiab] OR “oligoantigenic diet”[tiab] OR “restriction diet”[tiab] OR “food intolerance”[tiab] OR “food allergy”[tiab] OR “food allergies”[tiab] OR “food sensitivity”[tiab] OR “food sensitivities”[tiab] OR “multimodal treatment”[tiab] OR homeopathy[tiab] OR homeopathic[tiab] OR chiropractic[tiab] OR chiropractor[tiab]</p>
6	#4 OR #5
7	#3 AND #6
8	<p>(randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR randomized[tiab] OR randomization[tiab] OR randomization[tiab] OR placebo[tiab] OR randomly[tiab] OR trial[tiab] OR groups[tiab] OR Clinical trial[pt] OR “clinical trial”[tiab] OR “clinical trials”[tiab] OR “evaluation studies”[pt] OR “evaluation studies as topic”[MeSH] OR “evaluation study”[tiab] OR “evaluation studies”[tiab] OR “intervention studies”[MeSH] OR “intervention study”[tiab] OR “intervention studies”[tiab] OR “case-control studies”[MeSH] OR “case-control”[tiab] OR “cohort studies”[MeSH] OR cohort[tiab] OR “longitudinal”[tiab] OR longitudinally[tiab] OR “prospective”[tiab] OR prospectively[tiab] OR “retrospective”[tiab] OR “comparative study”[pt] OR “comparative study”[tiab] OR systematic[sb] OR “meta-analysis”[pt] OR “meta-analysis as topic”[MeSH] OR “meta-analysis”[tiab] OR “meta-analyses”[tiab] NOT (Editorial[ptyp] OR Letter[pt] OR Case Reports[pt] OR Comment[pt]) NOT (animals[mh] NOT humans[mh]) AND English[la]</p>
9	#7 AND #8
	Publication date from January 1, 2009

**SUPPLEMENTAL TABLE 3** Exact Terms for All Searches Considered in the Full AHRQ Report, PubMed Search Strategy (November 4, 2016): Key Question 3

Set No.	Terms
1	"Attention Deficit Disorder with Hyperactivity"[Mesh] OR "attention deficit hyperactivity disorder"[tiab] OR "ADHD"[tiab] OR "attention deficit disorder"[tiab]
2	"Pediatrics"[Mesh] OR "Adolescent"[Mesh] OR "Infant"[Mesh] OR "Child"[Mesh] OR child[tiab] OR children[tiab] OR infant[tiab] OR infants[tiab] OR preschool[tiab] OR preschooler[tiab] OR pediatric[tiab] OR teenager[tiab] OR teenagers[tiab] OR teenaged[tiab] OR teen[tiab] OR teens[tiab] OR adolescent[tiab] OR adolescents[tiab] OR adolescence[tiab] OR youth[tiab]
3	"Secondary Care"[Mesh] OR "Comprehensive Health Care"[Mesh] OR "primary care"[tiab] OR monitor[tiab] OR monitored[tiab] OR monitoring[tiab] OR "follow up"[tiab] OR "followed up"[tiab] OR visit[tiab] OR visits[tiab] OR session[tiab] OR sessions[tiab] OR appointment[tiab] OR appointments[tiab]
4	(randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR randomized[tiab] OR randomization[tiab] OR randomization[tiab] OR placebo[tiab] OR randomly[tiab] OR trial[tiab] OR groups[tiab] OR Clinical trial[pt] OR "clinical trial"[tiab] OR "clinical trials"[tiab] OR "evaluation studies"[pt] OR "evaluation studies as topic"[MeSH] OR "evaluation study"[tiab] OR "evaluation studies"[tiab] OR "intervention studies"[MeSH] OR "intervention study"[tiab] OR "intervention studies"[tiab] OR "case-control studies"[MeSH] OR "case-control"[tiab] OR "cohort studies"[MeSH] OR cohort[tiab] OR "longitudinal"[tiab] OR longitudinally[tiab] OR "prospective"[tiab] OR prospectively[tiab] OR "retrospective"[tiab] OR "comparative study"[pt] OR "comparative study"[tiab] OR systematic[sb] OR "meta-analysis"[pt] OR "meta-analysis as topic"[MeSH] OR "meta-analysis"[tiab] OR "meta-analyses"[tiab]) NOT (Editorial[ptyp] OR Letter[pt] OR Case Reports[pt] OR Comment[pt]) NOT (animals[mh] NOT humans[mh]) AND English[la]
5	#1 AND #2 AND #3 AND #4 Publication date from January 1, 2009

**SUPPLEMENTAL TABLE 4** Exact Terms for All Searches Considered in the Full AHRQ Report, Embase Search Strategy (November 7, 2016): Key Question 1

Set No.	Terms
1	'attention deficit disorder'/exp OR "attention deficit hyperactivity disorder":ab,ti OR "ADHD":ab,ti OR "attention deficit disorder":ab,ti
2	'pediatrics'/exp OR 'adolescent'/exp OR 'infant'/exp OR 'child'/exp OR child:ab,ti OR children:ab,ti OR infant:ab,ti OR infants:ab,ti OR preschool:ab,ti OR preschooler:ab,ti OR pediatric:ab,ti OR teenager:ab,ti OR teenagers:ab,ti OR teenaged:ab,ti OR teen:ab,ti OR teens:ab,ti OR adolescent:ab,ti OR adolescents:ab,ti OR adolescence:ab,ti OR youth:ab,ti
3	'attention deficit disorder'/exp/mj/dm_di OR 'screening'/exp OR 'interview'/exp OR 'psychometry'/exp OR 'psychological rating scale'/exp OR 'diagnosis'/exp OR 'assessment of humans'/exp OR 'checklist'/exp OR 'clinical assessment tool'/exp OR 'clinical observation'/exp OR 'Diagnostic and Statistical Manual of Mental Disorders'/exp OR 'patient referral'/exp OR questionnaire:ab,ti OR questionnaires:ab,ti OR screening:ab,ti OR screen:ab,ti OR scale:ab,ti OR instrument:ab,ti OR instruments:ab,ti OR interview:ab,ti OR interviews:ab,ti OR DSM*:ab,ti OR diagnosis:ab,ti OR diagnostic:ab,ti OR diagnosed:ab,ti OR (Vanderbilt:ab,ti AND scale:ab,ti) OR conners:ab,ti OR cps:ab,ti OR ctrs:ab,ti OR cps:ab,ti OR crs:ab,ti OR "snap-IV":ab,ti OR "snap-4":ab,ti OR "baso-2":ab,ti OR "behavioral assessment system for children":ab,ti OR dbdrs:ab,ti OR "disruptive behavior disorder rating scale":ab,ti OR adhd-rs:ab,ti OR "adhd rating scale":ab,ti OR ksads:ab,ti OR k-sads:ab,ti OR kiddie-sads:ab,ti OR DISC:ab,ti OR "dominance inducement submission and compliance":ab,ti OR "diagnostic interview schedule for children":ab,ti OR "diagnostic inventory for screening children":ab,ti OR "mini-kid":ab,ti OR "Mini Interational Neuropsychiatric interview":ab,ti OR "iva-2":ab,ti OR "iva-qs":ab,ti OR "iva-ae2":ab,ti OR tova:ab,ti OR "test of variables of attention":ab,ti OR "neuropsychiatric eeg-based assessment aid":ab,ti OR neba:ab,ti
4	('sensitivity and specificity'/exp OR 'predictive value'/exp OR 'diagnostic error'/exp OR sensitivity:ab,ti OR specificity:ab,ti OR accuracy:ab,ti OR accurate:ab,ti OR accurately:ab,ti OR misdiagnos*:ab,ti OR 'randomized controlled trial'/exp OR 'crossover procedure'/exp OR 'double-blind procedure'/exp OR 'single blind procedure'/exp OR random*:ab,ti OR factorial*:ab,ti OR crossover*:ab,ti OR (cross NEAR/1 over*):ab,ti OR placebo*:ab,ti OR (doubl* NEAR/1 blind*):ab,ti OR (singl* NEAR/1 blind*):ab,ti OR assign*:ab,ti OR allocat*:ab,ti OR volunteer*:ab,ti OR 'clinical study'/exp OR 'clinical trial':ti,ab OR 'clinical trials':ti,ab OR 'controlled study'/exp OR 'evaluation'/exp OR 'evaluation study':ab,ti OR 'evaluation studies':ab,ti OR 'intervention study':ab,ti OR 'intervention studies':ab,ti OR 'case control':ab,ti OR 'cohort analysis'/exp OR cohort:ab,ti OR longitudinal*:ab,ti OR prospective:ab,ti OR prospectively:ab,ti OR retrospective:ab,ti OR 'follow up'/exp OR 'follow up':ab,ti OR 'comparative effectiveness'/exp OR 'comparative study'/exp OR 'comparative study':ab,ti OR 'comparative studies':ab,ti OR 'evidence based medicine'/exp OR 'systematic review':ab,ti OR 'meta-analysis':ab,ti OR 'meta-analyses':ab,ti) NOT ('case report'/exp OR 'case study'/exp OR 'editorial'/exp OR 'letter'/exp OR 'note'/exp)
5	#1 AND #2 AND #3 AND #4
6	#5 AND [embase]/lim NOT [medline]/lim
7	#6 AND [humans]/lim AND [2009-2015]/py

**SUPPLEMENTAL TABLE 5** Exact Terms for All Searches Considered in the Full AHRQ Report, Embase Search Strategy (November 7, 2016): Key Question 2

Set No.	Terms
1	'attention deficit disorder'/exp OR "attention deficit hyperactivity disorder":ab,ti OR "ADHD":ab,ti OR "attention deficit disorder":ab,ti
2	'pediatrics'/exp OR 'adolescent'/exp OR 'infant'/exp OR 'child'/exp OR child:ab,ti OR children:ab,ti OR infant:ab,ti OR infants:ab,ti OR preschool:ab,ti OR preschooler:ab,ti OR pediatric:ab,ti OR teenager:ab,ti OR teenagers:ab,ti OR teenaged:ab,ti OR teen:ab,ti OR teens:ab,ti OR adolescent:ab,ti OR adolescence:ab,ti OR adolescence:ab,ti OR youth:ab,ti
3	#1 AND #2
4	'attention deficit disorder'/exp/mj/dm_dt OR 'central stimulant agent'/exp OR 'psychostimulant agent'/exp OR 'guanfacine'/exp OR 'adrenergic receptor affecting agent'/exp OR 'atomoxetine'/exp OR 'antidepressant agent'/exp OR 'dopamine uptake inhibitor'/exp OR 'n methyl dextro aspartic acid receptor'/exp OR 'memantine'/exp OR 'amantadine'/exp OR 'dopamine uptake inhibitor'/exp OR 'Central Nervous System Stimulants':ab,ti OR 'psychostimulant':ab,ti OR 'Methylphenidate':ab,ti OR 'Methylphenidate Hydrochloride':ab,ti OR 'Aptensio':ab,ti OR 'Concerta':ab,ti OR 'Ritalin':ab,ti OR 'Ritalin LA':ab,ti OR 'Medikinet':ab,ti OR 'Equasym':ab,ti OR 'Quillivant':ab,ti OR 'Metadate':ab,ti OR 'Daytrana':ab,ti OR 'Dexmethylphenidate':ab,ti OR 'Dexmethylphenidate Hydrochloride':ab,ti OR 'Focalin':ab,ti OR 'Dextroamphetamine':ab,ti OR 'Dexedrine':ab,ti OR 'Dextrostat':ab,ti OR 'ProCentra':ab,ti OR 'Zenedi':ab,ti OR 'mixed amphetamine salts':ab,ti OR 'Adderall':ab,ti OR 'lisdexamfetamine':ab,ti OR 'lisdexamfetamine dimesylate':ab,ti OR 'Vyvanse':ab,ti OR 'Venvanse':ab,ti OR 'Elvanse':ab,ti OR 'Tyvanse':ab,ti OR 'Dyanavel':ab,ti OR 'Evekeo':ab,ti OR 'Guanfacine':ab,ti OR 'Sympatholytics':ab,ti OR 'Central $\alpha$ -2 Adrenergic Agonist':ab,ti OR 'Clonidine':ab,ti OR 'Intuniv':ab,ti OR 'Estulic':ab,ti OR 'Tenex':ab,ti OR 'Catapres':ab,ti OR 'Clophelin':ab,ti OR 'Kapvay':ab,ti OR 'Nexiclon':ab,ti OR 'Duraclon':ab,ti OR 'Norepinephrine Reuptake Inhibitors':ab,ti OR 'Selective Norepinephrine Reuptake Inhibitors':ab,ti OR 'Adrenergic Uptake Inhibitors':ab,ti OR 'atomoxetine':ab,ti OR 'Strattera':ab,ti OR 'Tricyclic antidepressants':ab,ti OR 'Desipramine':ab,ti OR 'Norpramin':ab,ti OR 'Nortriptyline':ab,ti OR 'Pamelor':ab,ti OR 'Dopamine Reuptake Inhibitors':ab,ti OR 'modafinil':ab,ti OR 'Provigil':ab,ti OR 'Armodafinil':ab,ti OR 'Norepinephrine-dopamine Reuptake Inhibitors':ab,ti OR 'Bupropion':ab,ti OR 'Wellbutrin':ab,ti OR 'Forfivo':ab,ti OR 'Cymbalta':ab,ti OR 'venlafaxine':ab,ti OR 'reboxetine':ab,ti OR 'Monoamine Oxidase Type B inhibitors':ab,ti OR 'Selegiline':ab,ti OR 'Eldepryl':ab,ti OR 'Zelapar':ab,ti OR 'NMDA receptors':ab,ti OR 'N-Methyl-D-aspartate receptor Antagonists':ab,ti OR 'Amantadine':ab,ti OR 'Memantine':ab,ti OR 'Pertofrane':ab,ti OR 'Nuvigil':ab,ti OR 'Cymbalta':ab,ti OR 'duloxetine':ab,ti OR 'Effexor':ab,ti OR 'Eldepryl':ab,ti OR 'Emsam':ab,ti OR 'Trevilor':ab,ti OR 'Symmetrel':ab,ti OR 'Namenda':ab,ti OR 'Zelapar':ab,ti
5	'attention deficit disorder'/exp/mj/dm_rh,dm_dm OR 'psychotherapy'/exp OR 'child psychiatry'/exp OR 'child parent relation'/exp OR 'time management'/exp OR 'feedback system'/exp OR 'teaching'/exp OR 'adaptive behavior'/exp OR 'diet therapy'/exp OR 'omega 3 fatty acid'/exp OR 'vitamin'/exp/dd_do,dd_dt,dd_ad OR 'food additive'/exp/dd_ae OR 'probiotic agent'/exp OR 'acupuncture'/exp OR 'early childhood intervention'/exp OR 'alternative medicine'/exp OR 'psychosocial therapy':ab,ti OR 'psychosocial intervention':ab,ti OR 'psychosocial interventions':ab,ti OR 'psychosocial approach':ab,ti OR 'psychosocial approaches':ab,ti OR 'psychosocial treatment':ab,ti OR 'psychosocial support':ab,ti OR 'psychoeducation':ab,ti OR 'nonpharmacologic therapy':ab,ti OR 'non-drug therapy':ab,ti OR 'non-drug therapy':ab,ti OR 'Play Therapy':ab,ti OR 'cognitive behavioral therapy':ab,ti OR 'cognitive behavior therapy':ab,ti OR 'cognitive behavioral therapy':ab,ti OR 'cognitive behavior therapy':ab,ti OR 'Mindfulness':ab,ti OR 'complementary':ab,ti OR 'alternative medicine':ab,ti OR 'alternative therapy':ab,ti OR 'alternative therapies':ab,ti OR 'Interpersonal skills training':ab,ti OR 'Parent-Child Interaction Therapy':ab,ti OR 'parent training':ab,ti OR 'parent engagement':ab,ti OR 'parent management':ab,ti OR 'parenting skills':ab,ti OR 'parenting intervention':ab,ti OR 'parenting interventions':ab,ti OR 'Barkleys defiant child':ab,ti OR 'Teacher-Child Interaction Training':ab,ti OR 'Incredible Years':ab,ti OR 'New Forest Parenting':ab,ti OR 'Triple P':ab,ti OR 'Helping the Noncompliant Child':ab,ti OR 'child life and attention skills':ab,ti OR 'clas':ab,ti OR PCIT:ab,ti OR 'parent child interaction therapy':ab,ti OR 'Summer Treatment Program':ab,ti OR 'Daily Report Card':ab,ti OR 'organization skills':ab,ti OR 'organizational skills':ab,ti OR 'time management':ab,ti OR 'homework intervention':ab,ti OR 'braintrain':ab,ti OR 'memory training':ab,ti OR 'Captains log mindpower builder':ab,ti OR 'memory gyms':ab,ti OR 'attention gym':ab,ti OR 'smartdriver plus':ab,ti OR 'smartmind pro':ab,ti OR 'RoboMemo':ab,ti OR 'play attention':ab,ti OR 'metronome':ab,ti OR 'brainmaster':ab,ti OR 'mindmed':ab,ti OR 'attention laboratory':ab,ti OR (activate:ab,ti AND c8:ab,ti) OR 'attention training':ab,ti OR 'CogniPlus':ab,ti OR 'cogmed':ab,ti OR 'working memory training':ab,ti OR 'biofeedback':ab,ti OR 'neurofeedback':ab,ti OR 'neuroagility':ab,ti OR 'neurooptimal':ab,ti OR 'acupuncture':ab,ti OR 'vision training':ab,ti OR 'visual training':ab,ti OR 'vision therapy':ab,ti OR 'education intervention':ab,ti OR 'cognitive remediation':ab,ti OR 'neurotherapy':ab,ti OR 'elimination diet':ab,ti OR 'diet therapy':ab,ti OR (('low carb' OR 'low carbohydrate' OR 'low carbohydrates':ab,ti OR 'gluten free') AND diet:ab,ti) OR 'feingold diet':ab,ti OR 'red dye':ab,ti OR ((vitamin:ab,ti OR vitamins:ab,ti) AND (supplement:ab,ti OR supplements:ab,ti)) OR 'herbal supplement':ab,ti OR 'herbal supplements':ab,ti OR 'probiotics':ab,ti OR 'omega 3':ab,ti OR 'slow cortical potentials':ab,ti OR 'few foods diet':ab,ti OR 'oligoantigenic diet':ab,ti OR 'restriction diet':ab,ti OR 'food intolerance':ab,ti OR 'food allergy':ab,ti OR 'food allergies':ab,ti OR 'food sensitivity':ab,ti OR 'food sensitivities':ab,ti OR 'multimodal treatment':ab,ti OR 'homeopathy':ab,ti OR 'homeopathic':ab,ti OR 'chiropractic':ab,ti OR 'chiropractor':ab,ti
6	#4 OR #5
7	#3 AND #6
8	('randomized controlled trial'/exp OR 'crossover procedure'/exp OR 'double-blind procedure'/exp OR 'single blind procedure'/exp OR random*:ab,ti OR factorial*:ab,ti OR crossover*:ab,ti OR (cross NEAR/1 over*):ab,ti OR placebo*:ab,ti OR (doubl* NEAR/1 blind*):ab,ti OR (singl* NEAR/1 blind*):ab,ti OR assign*:ab,ti OR allocat*:ab,ti OR volunteer*:ab,ti OR 'clinical study'/exp OR 'clinical trial':ab,ti OR 'clinical trials':ab,ti OR 'controlled study'/exp OR 'evaluation'/exp OR 'evaluation study':ab,ti OR 'evaluation studies':ab,ti OR 'intervention study':ab,ti OR 'intervention studies':ab,ti OR 'case control':ab,ti OR 'cohort analysis'/exp OR 'cohort':ab,ti OR 'cohort study':ab,ti OR 'longitudinal':ab,ti OR 'prospectively':ab,ti OR 'retrospective':ab,ti OR 'follow up'/exp OR 'follow up':ab,ti OR 'comparative effectiveness'/exp OR 'comparative study'/exp OR 'comparative study':ab,ti OR 'comparative studies':ab,ti OR 'evidence based medicine'/exp OR 'systematic review':ab,ti OR 'meta-analysis':ab,ti OR 'meta-analyses':ab,ti) NOT ('case report'/exp OR 'case study'/exp OR 'editorial'/exp OR 'letter'/exp OR 'note'/exp)
#9	#7 AND #8
#10	#9 AND [embase]/lim NOT [medline]/lim
#11	#10 AND [humans]/lim AND [2009-2015]/py

**SUPPLEMENTAL TABLE 6** Exact Terms for All Searches Considered in the Full AHRQ Report, Embase Search Strategy (November 7, 2016): Key Question 3

Set No.	Terms
1	'attention deficit disorder'/exp OR "attention deficit hyperactivity disorder":ab,ti OR "ADHD":ab,ti OR "attention deficit disorder":ab,ti
2	'pediatrics'/exp OR 'adolescent'/exp OR 'infant'/exp OR 'child'/exp OR child:ab,ti OR children:ab,ti OR infant:ab,ti OR infants:ab,ti OR preschool:ab,ti OR preschooler:ab,ti OR pediatric:ab,ti OR teenager:ab,ti OR teenagers:ab,ti OR teenaged:ab,ti OR teen:ab,ti OR teens:ab,ti OR adolescent:ab,ti OR adolescents:ab,ti OR adolescence:ab,ti OR youth:ab,ti
3	'evaluation and follow up'/exp OR 'primary health care'/exp OR 'secondary health care'/exp OR 'clinical handover'/exp OR 'patient monitoring'/exp OR monitor:ab,ti OR monitored:ab,ti OR monitoring:ab,ti OR "follow up":ab,ti OR "followed up":ab,ti OR visit:ab,ti OR visits:ab,ti OR session:ab,ti OR sessions:ab,ti OR appointment:ab,ti OR appointments:ab,ti
4	('randomized controlled trial'/exp OR 'crossover procedure'/exp OR 'double-blind procedure'/exp OR 'single blind procedure'/exp OR random*:ab,ti OR factorial*:ab,ti OR crossover*:ab,ti OR (cross NEAR/1 over*):ab,ti OR placebo*:ab,ti OR (doubl* NEAR/1 blind*):ab,ti OR (singl* NEAR/1 blind*):ab,ti OR assign*:ab,ti OR allocat*:ab,ti OR volunteer*:ab,ti OR 'clinical study'/exp OR 'clinical trial':ti,ab OR 'clinical trials':ti,ab OR 'controlled study'/exp OR 'evaluation'/exp OR 'evaluation study':ab,ti OR 'evaluation studies':ab,ti OR 'intervention study':ab,ti OR 'intervention studies':ab,ti OR 'case control':ab,ti OR 'cohort analysis'/exp OR cohort:ab,ti OR longitudinal*:ab,ti OR prospective:ab,ti OR prospectively:ab,ti OR retrospective:ab,ti OR 'follow up'/exp OR 'follow up':ab,ti OR 'comparative effectiveness'/exp OR 'comparative study'/exp OR 'comparative study':ab,ti OR 'comparative studies':ab,ti OR 'evidence based medicine'/exp OR 'systematic review':ab,ti OR 'meta-analysis':ab,ti OR 'meta-analyses':ab,ti) NOT ('case report'/exp OR 'case study'/exp OR 'editorial'/exp OR 'letter'/exp OR 'note'/exp)
5	#1 AND #2 AND #3 AND #4
6	#5 AND [humans]/lim AND [2009-2015]/py
7	#6 AND [embase]/lim NOT [medline]/lim

**SUPPLEMENTAL TABLE 7** Exact Terms for All Searches Considered in the Full AHRQ Report, PsycINFO Search Strategy (November 7, 2016): Key Question 1

Set No.	Terms
1	DE "Attention Deficit Disorder with Hyperactivity" OR TI ("attention deficit hyperactivity disorder" OR ADHD OR "attention deficit disorder") OR AB ("attention deficit hyperactivity disorder" OR ADHD OR "attention deficit disorder")
2	AG (childhood OR adolescence) OR DE "Pediatrics" OR TI (child OR children OR infant OR infants OR preschool OR preschooler OR pediatric OR teenager OR teenagers OR teenaged OR teen OR teens OR adolescent OR adolescents OR adolescence OR youth) OR AB (child OR children OR infant OR infants OR preschool OR preschooler OR pediatric OR teenager OR teenagers OR teenaged OR teen OR teens OR adolescent OR adolescents OR adolescence OR youth)
3	DE "Screening" OR DE "Health Screening" OR DE "Questionnaires" OR DE "Screening Tests" OR DE "Psychological Screening Inventory" OR DE "Psychiatric Evaluation" OR DE "Psychodiagnosis" OR DE "Psychodiagnostic Interview" OR DE "Psychometrics" OR DE "Rating Scales" OR DE "Diagnosis" OR DE "Diagnostic and Statistical Manual" OR DE "Professional Referral" OR DE "Diagnostic Interview Schedule" OR DE "Behavioral Assessment" OR TI (questionnaire OR questionnaires OR screening OR screen OR scale OR instrument OR instruments OR interview OR interviews OR DSM* OR diagnosis OR diagnostic OR diagnosed OR (Vanderbilt AND scale) OR conners OR cprs OR ctrs OR cprs OR crs OR "snap-IV" OR "snap-4" OR "bas-2" OR "behavioral assessment system for children" OR dbdrs OR "disruptive behavior disorder rating scale" OR adhd-rs OR "adhd rating scale" OR ksads OR k-sads OR kiddie-sads OR DISC OR "dominance inducement submission and compliance" OR "diagnostic interview schedule for children" OR "diagnostic inventory for screening children" OR "mini-kid" OR "Mini Interational Neuropsychiatric interview" OR "iva-2" OR "iva-qs" OR "iva-ae2" OR tova OR "test of variables of attention" OR "neuropsychiatric eeg-based assessment aid" OR neba) OR AB (questionnaire OR questionnaires OR screening OR screen OR scale OR instrument OR instruments OR interview OR interviews OR DSM* OR diagnosis OR diagnostic OR diagnosed OR (Vanderbilt AND scale) OR conners OR cprs OR ctrs OR cprs OR crs OR "snap-IV" OR "snap-4" OR "bas-2" OR "behavioral assessment system for children" OR dbdrs OR "disruptive behavior disorder rating scale" OR adhd-rs OR "adhd rating scale" OR ksads OR k-sads OR kiddie-sads OR DISC OR "dominance inducement submission and compliance" OR "diagnostic interview schedule for children" OR "diagnostic inventory for screening children" OR "mini-kid" OR "Mini Interational Neuropsychiatric interview" OR "iva-2" OR "iva-qs" OR "iva-ae2" OR tova OR "test of variables of attention" OR "neuropsychiatric eeg-based assessment aid" OR neba)
4	(DE "Misdiagnosis" OR ZC "longitudinal study" OR ZC "empirical study" OR ZC "followup study" OR ZC "longitudinal study" OR ZC "meta analysis" OR ZC "prospective study" OR ZC "retrospective study" OR ZC "systematic review" OR ZC "treatment outcome/clinical trial" OR DE "Clinical Trials" OR DE "Cohort Analysis" OR DE "Followup Studies" OR DE "Longitudinal Studies" OR DE "Prospective Studies" OR DE "Meta Analysis" OR TI (sensitivity OR specificity OR accuracy OR accurate OR accurately OR misdiagnos* OR randomized OR randomized OR randomization OR randomization OR randomly OR trial OR groups OR trials OR "evaluation study" OR evaluation studies OR "intervention study" OR "intervention studies" OR "case-control" OR cohort OR "cross-sectional" OR longitudinal OR longitudinally OR prospective OR prospectively OR retrospective OR "comparative study" OR "meta-analysis" OR "meta-analyses") OR AB (sensitivity OR specificity OR accuracy OR accurate OR accurately OR misdiagnos* OR randomized OR randomized OR randomization OR randomization OR randomly OR trial OR groups OR trials OR "evaluation study" OR evaluation studies OR "intervention study" OR "intervention studies" OR "case-control" OR cohort OR "cross-sectional" OR longitudinal OR longitudinally OR prospective OR prospectively OR retrospective OR "comparative study" OR "meta-analysis" OR "meta-analyses")) AND (ZZ "journal article")
5	#1 AND #2 AND #3 AND #4
6	#5, since 2009, English

**SUPPLEMENTAL TABLE 8** Exact Terms for All Searches Considered in the Full AHRQ Report, PsycINFO Search Strategy (November 7, 2016): Key Question 2

Set No.	Terms
1	DE "Attention Deficit Disorder with Hyperactivity" OR TI ("attention deficit hyperactivity disorder" OR ADHD OR "attention deficit disorder") OR AB ("attention deficit hyperactivity disorder" OR ADHD OR "attention deficit disorder")
2	AG (childhood OR adolescence) OR DE "Pediatrics" OR TI (child OR children OR infant OR infants OR preschool OR preschooler OR pediatric OR teenager OR teenagers OR teenaged OR teen OR teens OR adolescent OR adolescents OR adolescence OR youth) OR AB (child OR children OR infant OR infants OR preschool OR preschooler OR pediatric OR teenager OR teenagers OR teenaged OR teen OR teens OR adolescent OR adolescents OR adolescence OR youth)
3	#1 AND #2
4	DE "CNS Stimulating Drugs" OR DE "Methylphenidate" OR DE "Dextroamphetamine" OR DE "Amphetamine" OR DE "Clonidine" OR DE "Serotonin Norepinephrine Reuptake Inhibitors" OR DE "Atomoxetine" OR DE "Tricyclic Antidepressant Drugs" OR DE "Desipramine" OR DE "Nortriptyline" OR DE "Bupropion" OR DE "Serotonin Norepinephrine Reuptake Inhibitors" OR DE "Venlafaxine" OR DE "Monoamine Oxidase Inhibitors" OR DE "Amantadine" OR TI (psychostimulants OR "CNS stimulating" OR "Central Nervous System stimulants" OR methylphenidate OR Dexmethylphenidate OR Dextroamphetamine OR lisdexamfetamine OR Amphetamine OR aptensio OR concerta OR Ritalin OR methylin OR medikinet OR equasym OR quillivant OR metadate OR daytrana OR focalin OR Dexedrine OR dextrostat OR procentra OR zenedi OR Adderall OR vyvanse OR elvanse OR tyvense OR dyanavel OR evekeo OR "alpha-2 agonists" OR guanfacine OR intuniv OR tenex OR estulic OR afken OR clonidine OR catapres OR clophelin OR kapvay OR nexiclon OR duraclon OR "Serotonin Norepinephrine Reuptake Inhibitors" OR Strattera OR atomoxetine OR "Tricyclic Antidepressants" OR "Desipramine" OR "Nortriptyline" OR norpramin OR pertofrane OR pamelor OR "dopamine reuptake inhibitors" OR modanifil OR Provigil OR alertec OR modavigil OR modiodal OR modalert OR armodafinil OR nuvigil OR "norepinephrine-dopamine reuptake inhibitors" OR bupropion OR Wellbutrin OR zyban OR forfivo OR "Serotonin Norepinephrine Reuptake Inhibitors" OR duloxetine OR Cymbalta OR "serotonin norepinephrine dopamine reuptake inhibitors" OR "Venlafaxine" OR Effexor OR trevilor OR (Monoamine Oxidase AND Inhibitors) OR selegiline OR eldepryl OR emsam OR selgene OR zelapar OR "n methyl d aspartate receptor agonists" OR "Amantadine" OR symmetrel OR memantine OR Namenda) OR AB (psychostimulants OR "CNS stimulating" OR "Central Nervous System stimulants" OR methylphenidate OR Dexmethylphenidate OR Dextroamphetamine OR lisdexamfetamine OR Amphetamine OR aptensio OR concerta OR Ritalin OR methylin OR medikinet OR equasym OR quillivant OR metadate OR daytrana OR focalin OR Dexedrine OR dextrostat OR procentra OR zenedi OR Adderall OR vyvanse OR elvanse OR tyvense OR dyanavel OR evekeo OR "alpha-2 agonists" OR guanfacine OR intuniv OR tenex OR estulic OR afken OR clonidine OR catapres OR clophelin OR kapvay OR nexiclon OR duraclon OR "Serotonin Norepinephrine Reuptake Inhibitors" OR Strattera OR atomoxetine OR "Tricyclic Antidepressants" OR "Desipramine" OR "Nortriptyline" OR norpramin OR pertofrane OR pamelor OR "dopamine reuptake inhibitors" OR modanifil OR Provigil OR alertec OR modavigil OR modiodal OR modalert OR armodafinil OR nuvigil OR "norepinephrine-dopamine reuptake inhibitors" OR bupropion OR Wellbutrin OR zyban OR forfivo OR "Serotonin Norepinephrine Reuptake Inhibitors" OR duloxetine OR Cymbalta OR "serotonin norepinephrine dopamine reuptake inhibitors" OR "Venlafaxine" OR Effexor OR trevilor OR (Monoamine Oxidase AND Inhibitors) OR selegiline OR eldepryl OR emsam OR selgene OR zelapar OR "n methyl d aspartate receptor agonists" OR "Amantadine" OR symmetrel OR memantine OR Namenda)

**TABLE 8** Continued

Set No.	Terms
5	<p>DE “Psychotherapy” OR DE “Adolescent Psychotherapy” OR DE “Multisystemic Therapy” OR DE “Behavior Therapy” OR DE “Dialectical Behavior Therapy” OR DE “Brief Psychotherapy” OR DE “Child Psychotherapy” OR DE “Play Therapy” OR DE “Client Centered Therapy” OR DE “Cognitive Behavior Therapy” OR DE “Group Psychotherapy” OR DE “Therapeutic Community” OR DE “Integrative Psychotherapy” OR DE “Psychotherapeutic Counseling” OR DE “Family Therapy” OR DE “Supportive Psychotherapy” OR DE “Cognitive Therapy” OR DE “Parent Training” OR DE “Parent Child Relations” OR DE “Time Management” OR DE “Mindfulness” OR DE “School Based Intervention” OR DE “Memory Training” OR DE “Biofeedback Training” OR DE “Biofeedback” OR DE “Computer Assisted Instruction” OR DE “Intelligent Tutoring Systems” OR DE “Diets” OR DE “Dietary Supplements” OR DE “Food Additives” OR DE “Fatty Acids” OR DE “Acupuncture” OR DE “Remedial Education” OR DE “Early Intervention” OR DE “Alternative Medicine” OR TI (“psychosocial therapy” OR “psychosocial intervention” OR “psychosocial interventions” OR “psychosocial approach” OR “psychosocial approaches” OR “psychosocial treatment” OR “psychosocial support” OR “psychoeducation” OR “nonpharmacologic therapy” OR “nondrug therapy” OR “non-drug therapy” OR “Play Therapy” OR “cognitive behavioral therapy” OR “cognitive behavior therapy” OR “cognitive behavioural therapy” OR “cognitive behaviour therapy” OR Mindfulness OR complementary OR “alternative medicine” OR “alternative therapy” OR “alternative therapies” OR “Interpersonal skills training” OR “Parent-Child Interaction Therapy” OR “parent training” OR “parent engagement” OR “parent management” OR “parenting skills” OR “parenting intervention” OR “parenting interventions” OR “Barkley’s defiant child” OR “Teacher-Child Interaction Training” OR “Incredible Years” OR “New Forest Parenting” OR “Triple P” OR “Helping the Noncompliant Child” OR “child life and attention skills” OR “clas” OR PCIT OR “parent child interaction therapy” OR “Summer Treatment Program” OR “Daily Report Card” OR “organization skills” OR “organizational skills” OR “time management” OR “homework intervention” OR braintrain OR “memory training” OR “Captain’s log mindpower builder” OR “memory gyms” OR “attention gym” OR “smartdriver plus” OR “smartmind pro” OR “RoboMemo” OR “play attention” OR metronome OR brainmaster OR mindmed OR “attention lab” OR (activate AND c8) OR “attention training” OR “CogniPlus” OR cogmed OR “working memory training” OR biofeedback OR neurofeedback OR neuroagility OR neurooptimal OR acupuncture OR “vision training” OR “visual training” OR “vision therapy” OR “education intervention” OR “cognitive remediation” OR neurotherapy OR “elimination diet” OR “diet therapy” OR (“low carb” OR “low carbohydrate” OR “low carbohydrates” OR “gluten free”) AND diet OR “feingold diet” OR “red dye” OR (vitamin OR vitamins) AND (supplement OR supplements)) OR “herbal supplement” OR “herbal supplements” OR probiotics OR “omega 3” OR “slow cortical potentials” OR “few foods diet” OR “oligoantigenic diet” OR “restriction diet” OR “food intolerance” OR “food allergy” OR “food allergies” OR “food sensitivity” OR “food sensitivities” OR “multimodal treatment” OR homeopathy OR homeopathic OR chiropractic OR chiropractor) OR AB (“psychosocial therapy” OR “psychosocial intervention” OR “psychosocial interventions” OR “psychosocial approach” OR “psychosocial approaches” OR “psychosocial treatment” OR “psychosocial support” OR “psychoeducation” OR “nonpharmacologic therapy” OR “nondrug therapy” OR “non-drug therapy” OR “Play Therapy” OR “cognitive behavioral therapy” OR “cognitive behavior therapy” OR “cognitive behavioural therapy” OR “cognitive behaviour therapy” OR Mindfulness OR complementary OR “alternative medicine” OR “alternative therapy” OR “alternative therapies” OR “Interpersonal skills training” OR “Parent-Child Interaction Therapy” OR “parent training” OR “parent engagement” OR “parent management” OR “parenting skills” OR “parenting intervention” OR “parenting interventions” OR “Barkley’s defiant child” OR “Teacher-Child Interaction Training” OR “Incredible Years” OR “New Forest Parenting” OR “Triple P” OR “Helping the Noncompliant Child” OR “child life and attention skills” OR “clas” OR PCIT OR “parent child interaction therapy” OR “Summer Treatment Program” OR “Daily Report Card” OR “organization skills” OR “organizational skills” OR “time management” OR “homework intervention” OR braintrain OR “memory training” OR “Captain’s log mindpower builder” OR “memory gyms” OR “attention gym” OR “smartdriver plus” OR “smartmind pro” OR “RoboMemo” OR “play attention” OR metronome OR brainmaster OR mindmed OR “attention lab” OR (activate AND c8) OR “attention training” OR “CogniPlus” OR cogmed OR “working memory training” OR biofeedback OR neurofeedback OR neuroagility OR neurooptimal OR acupuncture OR “vision training” OR “visual training” OR “vision therapy” OR “education intervention” OR “cognitive remediation” OR neurotherapy OR “elimination diet” OR “diet therapy” OR (“low carb” OR “low carbohydrate” OR “low carbohydrates” OR “gluten free”) AND diet OR “feingold diet” OR “red dye” OR (vitamin OR vitamins) AND (supplement OR supplements)) OR “herbal supplement” OR “herbal supplements” OR probiotics OR “omega 3” OR “slow cortical potentials” OR “few foods diet” OR “oligoantigenic diet” OR “restriction diet” OR “food intolerance” OR “food allergy” OR “food allergies” OR “food sensitivity” OR “food sensitivities” OR “multimodal treatment” OR homeopathy OR homeopathic OR chiropractic OR chiropractor)</p>
6	#4 OR #5
7	#3 AND #6
8	<p>ZC “longitudinal study” OR ZC “empirical study” OR ZC “followup study” OR ZC “longitudinal study” OR ZC “meta analysis” OR ZC “prospective study” OR ZC “retrospective study” OR ZC “systematic review” OR ZC “treatment outcome/clinical trial” OR DE “Clinical Trials” OR DE “Cohort Analysis” OR DE “Followup Studies” OR DE “Longitudinal Studies” OR DE “Prospective Studies” OR DE “Meta Analysis” OR TI (randomized OR randomized OR randomization OR randomization OR randomly OR trial OR groups OR trials OR “evaluation study” OR evaluation studies OR “intervention study” OR “intervention studies” OR “case-control” OR cohort OR longitudinal OR longitudinally OR prospective OR prospectively OR retrospective OR “comparative study” OR “meta-analysis” OR “meta-analyses”) OR AB (randomized OR randomized OR randomization OR randomization OR randomly OR trial OR groups OR trials OR “evaluation study” OR evaluation studies OR “intervention study” OR “intervention studies” OR “case-control” OR cohort OR longitudinal OR longitudinally OR prospective OR prospectively OR retrospective OR “comparative study” OR “meta-analysis” OR “meta-analyses”) AND (ZZ “journal article”)</p>
9	#7 AND #8
10	#9, since 2009



**SUPPLEMENTAL TABLE 9** Exact Terms for All Searches Considered in the Full AHRQ Report, PsycINFO Search Strategy (November 7, 2016): Key Question 3

Set No.	Terms
1	DE "Attention Deficit Disorder with Hyperactivity" OR TI ("attention deficit hyperactivity disorder" OR ADHD OR "attention deficit disorder") OR AB ("attention deficit hyperactivity disorder" OR ADHD OR "attention deficit disorder")
2	AG (childhood OR adolescence) OR DE "Pediatrics" OR TI (child OR children OR infant OR infants OR preschool OR preschooler OR pediatric OR teenager OR teenagers OR teenaged OR teen OR teens OR adolescent OR adolescents OR adolescence OR youth) OR AB (child OR children OR infant OR infants OR preschool OR preschooler OR pediatric OR teenager OR teenagers OR teenaged OR teen OR teens OR adolescent OR adolescents OR adolescence OR youth)
3	((((DE "Continuum of Care") OR (DE "Outpatient Treatment")) OR (DE "Primary Health Care")) OR (DE "Monitoring")) OR (DE "Community Psychiatry") OR TI ("primary care" OR monitor OR monitored OR monitoring OR "follow up" OR "followed up" OR visit OR visits OR session OR sessions OR appointment OR appointments) OR AB ("primary care" OR monitor OR monitored OR monitoring OR "follow up" OR "followed up" OR visit OR visits OR session OR sessions OR appointment OR appointments)
4	ZC "longitudinal study" OR ZC "empirical study" OR ZC "followup study" OR ZC "longitudinal study" OR ZC "meta analysis" OR ZC "prospective study" OR ZC "retrospective study" OR ZC "systematic review" OR ZC "treatment outcome/clinical trial" OR DE "Clinical Trials" OR DE "Cohort Analysis" OR DE "Followup Studies" OR DE "Longitudinal Studies" OR DE "Prospective Studies" OR DE "Meta Analysis" OR TI (randomized OR randomized OR randomization OR randomization OR randomly OR trial OR groups OR trials OR "evaluation study" OR evaluation studies OR "intervention study" OR "intervention studies" OR "case-control" OR cohort OR longitudinal OR longitudinally OR prospective OR prospectively OR retrospective OR "comparative study" OR "meta-analysis" OR "meta-analyses") OR AB (randomized OR randomized OR randomization OR randomization OR randomly OR trial OR groups OR trials OR "evaluation study" OR evaluation studies OR "intervention study" OR "intervention studies" OR "case-control" OR cohort OR longitudinal OR longitudinally OR prospective OR prospectively OR retrospective OR "comparative study" OR "meta-analysis" OR "meta-analyses") AND (ZZ "journal article")
5	#1 AND #2 AND #3 AND #4
6	#5, since 2009 and English

**SUPPLEMENTAL TABLE 10** Exact Terms for All Searches Considered in the Full AHRQ Report, Cochrane Search Strategy (November 7, 2016), Platform: Wiley, and Database Searched: Cochrane Database of Systematic Reviews: Key Question 1

Set No.	Terms
1	[mh "Attention Deficit Disorder with Hyperactivity"]
2	"attention deficit hyperactivity disorder":ab,ti OR "ADHD":ab,ti OR "attention deficit disorder":ab,ti
3	#1 OR #2
4	[mh Pediatrics] OR [mh Adolescent] OR [mh Infant] OR [mh Child]
5	child:ab,ti OR children:ab,ti OR infant:ab,ti OR infants:ab,ti OR preschool:ab,ti OR preschooler:ab,ti OR pediatric:ab,ti OR teenager:ab,ti OR teenagers:ab,ti OR teenaged:ab,ti OR teen:ab,ti OR teens:ab,ti OR adolescent:ab,ti OR adolescents:ab,ti OR adolescence:ab,ti OR youth:ab,ti
6	#4 OR #5
7	[mh "Attention Deficit Disorder with Hyperactivity"/DI] OR [mh "mass screening"] OR [mh questionnaires] OR [mh "Interviews as Topic"] OR [mh Psychometrics] OR [mh "Psychiatric Status Rating Scales"] OR [mh ^diagnosis] OR [mh "Diagnostic Techniques and Procedures"] OR [mh "Diagnostic and Statistical Manual of Mental Disorders"] OR [mh "Referral and Consultation"]
8	questionnaire:ab,ti OR questionnaires:ab,ti OR screening:ab,ti OR screen:ab,ti OR scale:ab,ti OR instrument:ab,ti OR instruments:ab,ti OR interview:ab,ti OR interviews:ab,ti OR DSM*:ab,ti OR diagnosis:ab,ti OR diagnostic:ab,ti OR diagnosed:ab,ti OR (Vanderbilt:ab,ti AND scale:ab,ti) OR conners:ab,ti OR cprs:ab,ti OR ctrs:ab,ti OR cprs:ab,ti OR crs:ab,ti OR "snap-IV":ab,ti OR "snap-4":ab,ti OR "bas-2":ab,ti OR "behavioral assessment system for children":ab,ti OR dbdrs:ab,ti OR "disruptive behavior disorder rating scale":ab,ti OR adhd-rs:ab,ti OR "adhd rating scale":ab,ti OR ksads:ab,ti OR k-sads:ab,ti OR kiddie-sads:ab,ti OR DISC:ab,ti OR "dominance inducement submission and compliance":ab,ti OR "diagnostic interview schedule for children":ab,ti OR "diagnostic inventory for screening children":ab,ti OR "mini-kid":ab,ti OR "Mini Interational Neuropsychiatric interview":ab,ti OR "iva-2":ab,ti OR "iva-qs":ab,ti OR "iva-ae2":ab,ti OR tova:ab,ti OR "test of variables of attention":ab,ti OR "neuropsychiatric eeg-based assessment aid":ab,ti OR neba:ab,ti
9	#7 OR #8
10	#3 AND #6 AND #9
11	#10, since 2009, in CDSR only

CDSR, Cochrane Database of Systematic Reviews.

**SUPPLEMENTAL TABLE 11** Exact Terms for All Searches Considered in the Full AHRQ Report, Cochrane Search Strategy (November 7, 2016), Platform: Wiley, and Database Searched: Cochrane Database of Systematic Reviews: Key Question 2

Set No.	Terms
1	[mh "Attention Deficit Disorder with Hyperactivity"]
2	"attention deficit hyperactivity disorder":ab,ti OR "ADHD":ab,ti OR "attention deficit disorder":ab,ti
3	#1 OR #2
4	[mh Pediatrics] OR [mh Adolescent] OR [mh Infant] OR [mh Child]
5	child:ab,ti OR children:ab,ti OR infant:ab,ti OR infants:ab,ti OR preschool:ab,ti OR preschooler:ab,ti OR pediatric:ab,ti OR teenager:ab,ti OR teenagers:ab,ti OR teenaged:ab,ti OR teen:ab,ti OR teens:ab,ti OR adolescent:ab,ti OR adolescents:ab,ti OR adolescence:ab,ti OR youth:ab,ti
6	#4 OR #5
7	[mh "Attention Deficit Disorder with Hyperactivity"/DT] OR [mh "Central Nervous System Stimulants"] OR [mh Methylphenidate] OR [mh Dexmethylphenidate] OR [mh Dextroamphetamine] OR [mh Amphetamine] OR [mh Guanfacine] OR [mh Sympatholytics] OR [mh Clonidine] OR [mh "Adrenergic Uptake Inhibitors"] OR [mh "alpha-2 Adrenergic Receptors"] OR [mh "Adrenergic alpha-Agonists"] OR [mh "Adrenergic alpha-2 Receptor Agonists"] OR [mh "Tricyclic Antidepressive Agents"] OR [mh Desipramine] OR [mh "Dopamine Uptake Inhibitors"] OR [mh Sympathomimetics] OR [mh "Serotonin Uptake Inhibitors"] OR [mh "Monoamine Oxidase Inhibitors"] OR [mh "Monoamine Oxidase"] OR [mh Selegiline] OR [mh Bupropion] OR [mh "N-Methyl-D-Aspartate Receptors"] OR [mh Memantine] OR [mh Amantadine]
8	"Central Nervous System Stimulants":ab,ti OR "psychostimulant":ab,ti OR "Methylphenidate":ab,ti OR "Methylphenidate Hydrochloride":ab,ti OR "Aptensio":ab,ti OR "Concerta":ab,ti OR "Ritalin":ab,ti OR "Ritalin LA":ab,ti OR "Medikinet":ab,ti OR "Equasym":ab,ti OR "Quillivant":ab,ti OR "Metadate":ab,ti OR "Daytrana":ab,ti OR "Dexmethylphenidate":ab,ti OR "Dexmethylphenidate Hydrochloride":ab,ti OR "Focalin":ab,ti OR "Dextroamphetamine":ab,ti OR "Dexedrine":ab,ti OR "Dextrostat":ab,ti OR "ProCentra":ab,ti OR "Zenzedi":ab,ti OR "mixed amphetamine salts":ab,ti OR "Adderall":ab,ti OR "lisdexamfetamine":ab,ti OR "lisdexamfetamine dimesylate":ab,ti OR "Vyvanse":ab,ti OR "Venvanse":ab,ti OR "Elvanse":ab,ti OR "Tyvense":ab,ti OR "Dyanavel":ab,ti OR "Evekeo":ab,ti OR "Guanfacine":ab,ti OR "Sympatholytics":ab,ti OR "Central alpha-2 Adrenergic Agonist":ab,ti OR "Clonidine":ab,ti OR "Intuniv":ab,ti OR "Estulic":ab,ti OR "Tenex":ab,ti OR "Catapres":ab,ti OR "Clophelin":ab,ti OR "Kapvay":ab,ti OR "Nexiclon":ab,ti OR "Duraclon":ab,ti OR "Norepinephrine Reuptake Inhibitors":ab,ti OR "Selective Norepinephrine Reuptake Inhibitors":ab,ti OR "Adrenergic Uptake Inhibitors":ab,ti OR "atomoxetine":ab,ti OR "Strattera":ab,ti OR "Tricyclic antidepressants":ab,ti OR "Desipramine":ab,ti OR "Norpramin":ab,ti OR "Nortriptyline":ab,ti OR "Pamelor":ab,ti OR "Dopamine Reuptake Inhibitors":ab,ti OR "modafinil":ab,ti OR "Provigil":ab,ti OR "Armodafinil":ab,ti OR "Norepinephrine-dopamine Reuptake Inhibitors":ab,ti OR "Bupropion":ab,ti OR "Wellbutrin":ab,ti OR "Forfivo":ab,ti OR "Cymbalta":ab,ti OR "venlafaxine":ab,ti OR "reboxetine":ab,ti OR "Monoamine Oxidase Type B inhibitors":ab,ti OR "Selegiline":ab,ti OR "Eldepryl":ab,ti OR "Zelapar":ab,ti OR "NMDA receptors":ab,ti OR "N-Methyl-D-aspartate receptor Antagonists":ab,ti OR "Amantadine":ab,ti OR "Memantine":ab,ti OR "Pertofrane":ab,ti OR "Nuvigil":ab,ti OR "Cymbalta":ab,ti OR "duloxetine":ab,ti OR "Effexor":ab,ti OR "Eldepryl":ab,ti OR "Emsam":ab,ti OR "Trevilor":ab,ti OR "Symmetrel":ab,ti OR "Namenda":ab,ti OR "Zelapar":ab,ti
9	#7 OR #8
10	[mh "Attention Deficit Disorder with Hyperactivity"/DH] OR [mh "Attention Deficit Disorder with Hyperactivity"/RH] OR [mh Psychotherapy] OR [mh "Behavior Therapy"] OR [mh "Parent-Child Relations"] OR [mh "Play Therapy"] OR [mh "Cognitive Therapy"] OR [mh "Time Management"] OR [mh "Computer-Assisted Instruction"] OR [mh "Diet Therapy"] OR [mh "Omega-3 Fatty Acids"/TU] OR [mh Vitamins/AD] OR [mh Vitamins/TU] OR [mh "Food Additives"/AE] OR [mh Probiotics/TU] OR [mh "Acupuncture Therapy"] OR [mh "Remedial Teaching"] OR [mh "Early Intervention (Education)"] OR [mh "Complementary Therapies"] OR [mh "Combined Modality Therapy"]
11	"psychosocial therapy":ab,ti OR "psychosocial intervention":ab,ti OR "psychosocial interventions":ab,ti OR "psychosocial approach":ab,ti OR "psychosocial approaches":ab,ti OR "psychosocial treatment":ab,ti OR "psychosocial support":ab,ti OR "psychoeducation":ab,ti OR "nonpharmacologic therapy":ab,ti OR "nondrug therapy":ab,ti OR "non-drug therapy":ab,ti OR "Play Therapy":ab,ti OR "cognitive behavioral therapy":ab,ti OR "cognitive behavior therapy":ab,ti OR "cognitive behavioural therapy":ab,ti OR "cognitive behaviour therapy":ab,ti OR "Mindfulness":ab,ti OR "complementary":ab,ti OR "alternative medicine":ab,ti OR "alternative therapy":ab,ti OR "alternative therapies":ab,ti OR "interpersonal skills training":ab,ti OR "Parent-Child Interaction Therapy":ab,ti OR "parent training":ab,ti OR "parent engagement":ab,ti OR "parent management":ab,ti OR "parenting skills":ab,ti OR "parenting intervention":ab,ti OR "parenting interventions":ab,ti OR "Barkley's defiant child":ab,ti OR "Teacher-Child Interaction Training":ab,ti OR "Incredible Years":ab,ti OR "New Forest Parenting":ab,ti OR "Triple P":ab,ti OR "Helping the Noncompliant Child":ab,ti OR "child life and attention skills":ab,ti OR "clas":ab,ti OR PCIT:ab,ti OR "parent child interaction therapy":ab,ti OR "Summer Treatment Program":ab,ti OR "Daily Report Card":ab,ti OR "organization skills":ab,ti OR "organizational skills":ab,ti OR "time management":ab,ti OR "homework intervention":ab,ti OR braintrain:ab,ti OR "memory training":ab,ti OR "Captain's log mindpower builder":ab,ti OR "memory gyms":ab,ti OR "attention gym":ab,ti OR "smartdriver plus":ab,ti OR "smartmind pro":ab,ti OR "RoboMemo":ab,ti OR "play attention":ab,ti OR metronome:ab,ti OR brainmaster:ab,ti OR mindmed:ab,ti OR "attention lab":ab,ti OR (activate:ab,ti AND c8:ab,ti) OR "attention training":ab,ti OR "CogniPlus":ab,ti OR cogmed:ab,ti OR "working memory training":ab,ti OR biofeedback:ab,ti OR neurofeedback:ab,ti OR neuroagility:ab,ti OR neuroptimal:ab,ti OR acupuncture:ab,ti OR "vision training":ab,ti OR "visual training":ab,ti OR "vision therapy":ab,ti OR "education intervention":ab,ti OR "cognitive remediation":ab,ti OR neurotherapy:ab,ti OR "elimination diet":ab,ti OR "diet therapy":ab,ti OR ("low carb" OR "low carbohydrate" OR "low carbohydrates":ab,ti OR "gluten free") AND diet:ab,ti) OR "feingold diet":ab,ti OR "red dye":ab,ti OR (vitamin:ab,ti OR vitamins:ab,ti) AND (supplement:ab,ti OR supplements:ab,ti) OR "herbal supplement":ab,ti OR "herbal supplements":ab,ti OR probiotics:ab,ti OR "omega 3":ab,ti OR "slow cortical potentials":ab,ti OR "few foods diet":ab,ti OR "oligoantigenic diet":ab,ti OR "restriction diet":ab,ti OR "food intolerance":ab,ti OR "food allergy":ab,ti OR "food allergies":ab,ti OR "food sensitivity":ab,ti OR "food sensitivities":ab,ti OR "multimodal treatment":ab,ti OR homeopathy:ab,ti OR homeopathic:ab,ti OR chiropractic:ab,ti OR chiropractor:ab,ti
12	#10 OR #11
13	#12 OR #9
14	#3 AND #6 AND #13
15	#14, since 2009, limited to CDSR

CDSR, Cochrane Database of Systematic Reviews.

**SUPPLEMENTAL TABLE 12** Exact Terms for All Searches Considered in the Full AHRQ Report, Cochrane Search Strategy (November 7, 2016), Platform: Wiley, and Database Searched: Cochrane Database of Systematic Reviews: Key Question 3

Set No.	Terms
1	[mh "Attention Deficit Disorder with Hyperactivity"]
2	"attention deficit hyperactivity disorder":ab,ti OR "ADHD":ab,ti OR "attention deficit disorder":ab,ti
3	#1 OR #2
4	[mh Pediatrics] OR [mh Adolescent] OR [mh Infant] OR [mh Child]
5	child:ab,ti OR children:ab,ti OR infant:ab,ti OR infants:ab,ti OR preschool:ab,ti OR preschooler:ab,ti OR pediatric:ab,ti OR teenager:ab,ti OR teenagers:ab,ti OR teenaged:ab,ti OR teen:ab,ti OR teens:ab,ti OR adolescent:ab,ti OR adolescents:ab,ti OR adolescence:ab,ti OR youth:ab,ti
6	#4 OR #5
7	[mh "Secondary Care"] OR [mh "Comprehensive Health Care"]
8	"primary care":ab,ti OR monitor:ab,ti OR monitored:ab,ti OR monitoring:ab,ti OR "follow up":ab,ti OR "followed up":ab,ti OR visit:ab,ti OR visits:ab,ti OR session:ab,ti OR sessions:ab,ti OR appointment:ab,ti OR appointments:ab,ti
9	#7 OR #8
10	#3 AND #6 AND #9
11	#10, since 2009, limit to CDSR

CDSR, Cochrane Database of Systematic Reviews.

**SUPPLEMENTAL TABLE 13** Exact Terms for All Searches Considered in the Full AHRQ Report, Gray Literature Searches: ClinicalTrials.gov (November 28, 2016)

Conditions	ADHD OR "attention deficit"
Recruitment	Completed studies
Study results	All studies
Study type	Interventional studies
Age group	Child
Phase	Phase 2, Phase 3, Phase 4

Total number of results for screening: 377.

**SUPPLEMENTAL TABLE 14** Exact Terms for All Searches Considered in the Full AHRQ Report, World Health Organization: International Clinical Trials Registry Platform Search Portal (November 28, 2016)

Conditions	ADHD OR "attention deficit"
Recruiting status	All

**SUPPLEMENTAL TABLE 15** Exact Terms for All Searches Considered in the Full AHRQ Report, National Guidelines Clearinghouse (November 28, 2016): Platform: www.guideline.gov

Keywords	ADHD OR "attention deficit disorder" OR "attention deficit hyperactivity disorder"
Age of target population	Adolescent (13–18 y), child (2–12 y), infant (1–23 mo), infant, newborn (to 1 mo)
Publication y	2009, 2010, 2011, 2012, 2013, 2014, 2015

Total number of results: 37.

**SUPPLEMENTAL TABLE 16** Inclusion and Exclusion Criteria for All Key Questions Considered in the Full AHRQ Report

PICOTS Element	Inclusion Criteria	Exclusion Criteria
Populations	<p>KQ 1: individuals birth through 17 y of age without the diagnosis of ADHD, divided by subquestion as follows</p> <p>KQ 1a considers the initial diagnosis of individuals under 7 y of age</p> <p>KQ 1b considers the initial diagnosis of individuals through 17 y of age using EEG, imaging, or executive function approaches</p> <p>KQs 1c and 1d consider both populations</p> <p>KQ 2: individuals birth through 17 y of age with a diagnosis of ADHD</p> <p>KQ 3: individuals birth through 17 y of age who have previously begun treatment of ADHD</p> <p>Subgroups of interest for KQs 1–3</p> <p>The general population of children and adolescents: ages &lt;4, 4–6, 7–12, and 13–17 y</p> <p>When data are available, findings are separately evaluated by sex or specific risk factors (prenatal tobacco, alcohol, or substance abuse; prematurity or low birth wt; and family history); ADHD presentation; comorbidity; race and/or ethnicity; socioeconomic status; insurance status; geographic location</p>	<p>Individuals 18 y of age or older. Note that studies with individuals &gt;18 y of age are included as long as findings are reported separately for individuals ≤18 y, or if the mean patient age plus the SD is not &gt;21 y of age. Also note that for long-term studies, the age of the individuals may be &gt;18, but these studies are only considered for inclusion if the age at enrollment in the study was ≤18 y.</p> <p>Administrative claims data used for diagnosis of ADHD</p>
Interventions	<p>KQ 1: any standard ADHD diagnostic strategy, including clinician interview or standardized instrument (eg, Vanderbilt scales, the Conner scales, and the SNAP-IV rating score) for individuals &lt;7 y of age. The use of EEG-based systems, imaging, or assessment of executive function were evaluated in the diagnosis of ADHD in individuals through 17 y of age.</p> <p>KQ 2: any pharmacologic or nonpharmacologic treatment of ADHD, alone or in combination</p> <p>Pharmacologic treatments considered are brand name and generic formulations of the following medications<sup>a</sup>:</p> <p>Psychostimulants</p> <ul style="list-style-type: none"> <li>Methylphenidate (MPH)</li> <li>Dexmethylphenidate (D-TMP)</li> <li>Dextroamphetamine (DEX)</li> <li>Lisdexamfetamine (LDX)</li> <li>Mixed amphetamine salts (MAS)</li> <li>Amphetamine</li> </ul> <p>Tricyclic antidepressants</p> <ul style="list-style-type: none"> <li>*Desipramine</li> <li>*Nortriptyline</li> </ul> <p>Selective norepinephrine reuptake inhibitors</p> <ul style="list-style-type: none"> <li>Atomoxetine (ATX)</li> </ul> <p>Alpha-2 agonists</p> <ul style="list-style-type: none"> <li>Clonidine</li> <li>Guanfacine extended release (GXR)</li> <li>*Guanfacine immediate release (GIR)</li> </ul> <p>Dopamine reuptake inhibitors</p> <ul style="list-style-type: none"> <li>*Modafinil</li> <li>*Armodafinil</li> </ul> <p>Norepinephrine-dopamine reuptake inhibitors</p> <ul style="list-style-type: none"> <li>*Bupropion</li> </ul> <p>Serotonin-norepinephrine reuptake inhibitors</p> <ul style="list-style-type: none"> <li>*Duloxetine</li> </ul> <p>Serotonin-norepinephrine-dopamine reuptake inhibitors</p> <ul style="list-style-type: none"> <li>*Venlafaxine</li> </ul> <p>Monoamine oxidase type B inhibitors</p> <ul style="list-style-type: none"> <li>*Selegiline</li> </ul> <p>N-methyl-D-aspartate receptor antagonists</p> <ul style="list-style-type: none"> <li>*Amantadine</li> </ul>	<p>KQ 1: validation studies or diagnosis conducted by using a nonvalidated instrument</p> <p>KQ 2: studies in which pharmacologic agents approved by the FDA for the treatment of ADHD are compared and that have enrollment of &lt;100 patients with ADHD, or &lt;6 mo of follow-up</p>

TABLE 16 Continued

PICOTS Element	Inclusion Criteria	Exclusion Criteria
	<p>*Memantine</p> <p>Nonpharmacologic therapies considered include psychosocial interventions, behavioral interventions, CBT, play therapy, mindfulness-based therapies, school interventions, cognitive training therapies, biofeedback or neurofeedback, parent behavior training, dietary supplements (eg, omega-3 fatty acids, vitamins, herbal supplements, probiotics), homeopathy, acupuncture, elimination diets, vision training, exercise, and chiropractic treatment.</p>	
Comparators	<p>KQ 3: follow-up visits in primary care with various methods and within times (monthly to annually) for repeat monitoring independent of treatment.</p> <p>KQ 1: confirmation of diagnosis by a specialist (gold standard), including psychologist or psychiatrist or other care provider using a well-validated and reliable process of confirming the diagnosis of ADHD according to the DSM 4 or DSM 5.</p> <p>KQ 2: specific treatments compared with other treatments as described above or to no treatment.</p> <p>KQ 3: follow-up compared with differing durations of follow-up or differing settings of follow-up.</p>	KQ 1: comparison with diagnosis with a nonvalidated instrument
Outcomes	<p>KQ 1:</p> <p>Accuracy of diagnostic strategy, as measured by:</p> <ul style="list-style-type: none"> <li>Diagnostic concordance of primary care provider with specialist</li> <li>Interrater reliability</li> <li>Internal consistency</li> <li>Test-retest</li> <li>Sensitivity</li> <li>Specificity</li> <li>Positive predictive value</li> <li>Negative predictive value</li> <li>False-positives</li> <li>False-negatives</li> </ul> <p>Risk of missed condition that can appear as ADHD (ie, misdiagnosis)</p> <p>Labeling is any measure of stigma after diagnosis comparing those with and without ADHD.</p> <p>KQ 2:</p> <p>Intermediate outcomes:</p> <ul style="list-style-type: none"> <li>Changes on standardized symptom scores or progress toward patient-identified goals. Standardized symptom scores include narrow-band-focused instruments (Vanderbilt RSs, ADHD RS) and broad-band scales (CBCL and teacher report form; behavior assessment system for children; Conners' RSs, revised; Conners' 3 parent; Conners' 3 teacher)</li> <li>Acceptability of treatment</li> <li>Functional impairment (assessed using the CGI scale or the impairment RS)</li> </ul> <p>Final outcomes include the following:</p> <ul style="list-style-type: none"> <li>Academic performance <ul style="list-style-type: none"> <li>Academic performance RS</li> <li>Academic Competency Evaluation Scale</li> <li>(Actual) school grades</li> <li>Grade retention/not being promoted</li> <li>Vanderbilt teacher form academic performance subscale</li> <li>Standardized achievement tests (WIAT, WJ, WRAT)</li> </ul> </li> <li>Workforce participation</li> <li>Quality of peer relationships</li> <li>Divorce or relationship status</li> <li>Motor vehicle collisions or other accidents</li> <li>Motor vehicle violations</li> <li>Risk-taking behaviors</li> <li>Incarceration or other interactions with the legal system (juvenile detention, probation, court-mandated interventions, need for residential placement)</li> <li>Obesity</li> <li>Tobacco use</li> </ul>	—

**TABLE 16** Continued

PICOTS Element	Inclusion Criteria	Exclusion Criteria
	<ul style="list-style-type: none"> <li>Substance abuse</li> <li>Mood disorders</li> <li>Depression or anxiety</li> <li>Self-injurious nonsuicidal behavior</li> <li>Suicide (attempted or completed)</li> <li>Suicidal ideation</li> <li>Mortality</li> <li>Adverse effects of treatment, including the following:                             <ul style="list-style-type: none"> <li>Changes in appetite</li> <li>Growth suppression</li> <li>Weight decrease</li> <li>Sleep disturbance</li> <li>Gastrointestinal symptoms</li> <li>Elevated blood pressure</li> <li>Increased heart rate</li> <li>Risk of sudden cardiac death</li> <li>Cardiac arrhythmias</li> <li>Conduction abnormalities</li> <li>Tics or other movement disorders</li> <li>Behavior changes</li> <li>Hallucination</li> <li>Aggression</li> <li>Suicide (attempted or completed)</li> <li>Suicidal ideation</li> <li>Overtreatment</li> <li>Diversion of pharmacotherapy</li> <li>Parental stress</li> <li>Personality change</li> <li>Time demands and/or opportunity cost</li> <li>Loss of spontaneity</li> <li>Chemical leukoderma</li> <li>Priapism</li> </ul> </li> <li>KQ 3:                             <ul style="list-style-type: none"> <li>Changes in treatment or dose</li> <li>Adverse effects of treatment as described under KQ 2</li> <li>Changes in intermediate outcomes (eg, standardized symptom scores, progress toward patient-identified goals, functional impairment) as described under KQ 2</li> </ul> </li> </ul>	
Timing	<ul style="list-style-type: none"> <li>KQ 1:                             <ul style="list-style-type: none"> <li>For assessment of diagnostic accuracy: diagnostic follow-up must be within 4 mo of the initial evaluation and must be completed before treatment is initiated</li> <li>For labeling: any time after the ADHD diagnosis</li> </ul> </li> <li>KQs 2 and 3: any</li> </ul>	—
Settings	<ul style="list-style-type: none"> <li>KQ 1: primary or specialty care settings</li> <li>KQs 2 and 3: any</li> </ul>	None

TABLE 16 Continued

PICOTS Element	Inclusion Criteria	Exclusion Criteria
Study design	<p>Original data</p> <p>Randomized trials, prospective and retrospective observational studies with comparator; for diagnostic accuracy, cross-sectional studies are acceptable if they include patients with diagnostic uncertainty and direct comparison of diagnosis in primary care to diagnosis by a specialist</p> <p>RCTs with sample size:</p> <p>≥20 subjects for KQs 1 and 3</p> <p>≥50 subjects for KQ 2 (or 100 subjects for studies in which 2 or more pharmacologic treatments approved by the FDA for the treatment of ADHD are compared)</p> <p>Observational studies with sample size:</p> <p>≥20 subjects for KQs 1 and 3</p> <p>≥50 subjects for KQ 2 (or 100 subjects for studies in which 2 or more pharmacologic treatments approved by the FDA for the treatment of ADHD are compared)</p>	<p>Editorials, nonsystematic reviews, letters, case series, case reports, abstract only, pre-post studies</p> <p>Because studies with &lt;20 subjects are often pilot studies or studies of lower quality, we excluded them from our review. Given the large evidence base for comparative pharmacologic treatment studies in KQ 2, we increased this sample size limit to 50 subjects for KQ 2 and to 100 subjects for studies in which 2 or more pharmacologic treatments approved by the FDA for the treatment of ADHD were compared. These sample size limits were seen as representing population study sizes that would be needed to substantially impact the assessment of the existing evidence base.</p>
Publications	<p>English-language publications only</p> <p>Published on or after January 1, 2009</p> <p>Relevant systematic reviews, meta-analyses, or methods articles (used for background only)<sup>c</sup></p>	<p>Non-English language articles<sup>b</sup></p>

DSM, Diagnostic and Statistical Manual of Mental Disorders; KQ, key question; PICOTS, Populations, Interventions, Comparators, Outcomes, Timing, Settings; SNAP-IV, Swanson, Nolan and Pelham Revision IV; WIAT, Wechsler Individual Achievement Test; WJ, Woodcock-Johnson; WRAT, Wide Range Achievement Test. —, not applicable.

<sup>a</sup> Pharmacologic treatments listed are FDA-approved for an indication of ADHD, with the exception of those marked with an asterisk, which are available within the United States and are FDA-approved but not specifically approved for ADHD.

<sup>b</sup> Non-English language articles were excluded due to the following: (1) the high volume of literature available in English language publications, (2) the focus of our review on applicability to populations in the United States, and (3) the scope of our KQs.

<sup>c</sup> Systematic reviews and meta-analyses were excluded from direct abstraction; those representing key sources were hand-searched as potential sources of additional citations to consider in the review.

SUPPLEMENTAL TABLE 17 Definition of Quality Assessment Ratings

Rating	Definition
Good (low risk of bias)	These studies had the least bias, and the results were considered valid. These studies adhered to the commonly held concepts of high quality, including the following: a clear description of the population, setting, approaches, and comparison groups; appropriate measurement of outcomes; appropriate statistical and analytical methods and reporting; no reporting errors; a low dropout rate; and clear reporting of dropouts.
Fair	These studies were susceptible to some bias but not enough to invalidate the results. They did not meet all the criteria required for a rating of good quality because they had some deficiencies, but no flaw was likely to cause major bias. The study may have been missing information, making it difficult to assess limitations and potential problems.
Poor (high risk of bias)	These studies had significant flaws that might have invalidated the results. They had serious errors in design, analysis, or reporting; large amounts of missing information; or discrepancies in reporting.

**SUPPLEMENTAL TABLE 18** Changes in Standardized Scores on Neurofeedback Interventions for ADHD

Study (Companion); <i>N</i> ; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic Gevensleben et al <sup>64</sup> Neurofeedback training (Gevensleben et al <sup>65</sup> ; Wangler et al <sup>75</sup> ) 102 Good RCT Children aged 7–17 y	Neurofeedback	Attention skills training	2 mo	German ADHD RS  Mean within group change = -0.39 (SD = 0.37)	German ADHD RS  Mean within group change = -0.1 (SD = 0.44)	<i>P</i> < .005
Moreno-García et al <sup>65</sup> 57 Fair RCT Children aged 7–17 y	Neurofeedback	Behavioral treatment	NR	IVA/CPT: full-scale attention  Mean = 2.1 (SD = 16.88)	IVA/CPT: full-scale attention  Mean = 3.88 (SD = 16.24)	<i>P</i> = .013
Steiner et al <sup>69</sup> (Steiner et al <sup>68</sup> ) 104 Good RCT Children aged 7–17 y	Neurofeedback	Cognitive training	5 mo	Conners 3: parent inattention  Within-group effect size = -0.8	Conners 3: parent inattention  Within-group effect size = -0.46	<i>P</i> < .05
Nonpharmacologic versus pharmacologic Duric et al <sup>25</sup> (Duric et al <sup>26</sup> ) 91 Poor RCT Children aged 7–17 y	MPH (dose not reported) MPH and neurofeedback	Neurofeedback	10 wk	Conners 3: parent executive functioning Within-group effect size = -0.49 Conners 3: parent global index Within-group effect size = -0.37 Conners 3: teacher inattention Within-group effect size = -0.25	Conners 3: parent executive functioning Within-group effect size -0.12 Conners 3: parent global index Within-group effect size = -0.09 Conners 3: teacher inattention Within-group effect size = -0.24	NS  <i>P</i> < .05  <i>P</i> < .05
Nonpharmacologic versus placebo, usual care, or waitlist	MPH (dose not reported) MPH and neurofeedback	Neurofeedback	10 wk	Neurofeedback: total Barkley RS for parents  Mean within-group change = 10.7; 95% CI = 7.6 to 13.8	MPH and neurofeedback: total Barkley RS for parents  Mean w/in group change = 8.6; 95% CI = 5.0 to 12.2  MPH: total Barkley RS for parents Mean within group change = 7.9; 95% CI = 4.5 to 11.4	<i>P</i> = .31



TABLE 18 Continued

Study (Companion); N Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Bink et al <sup>19</sup> 90 Good RCT	Neurofeedback plus treatment as usual	Treatment as usual	Baseline	ADHD RS: inattention Mean = 4.4 (SD = 2.49) ADHD RS: hyperactivity and/or inattention Mean = 3.44 (SD = 2.12) Youth self-report total score Mean = 48.5 (SD = 22.01) CBCL total score Mean = 60.81 (SD = 28.57) ADHD RS: inattention Mean = 2.84 (SD = 2.59) ADHD RS: hyperactivity and/or inattention Mean = 2.36 (SD = 2.16) Youth self-report total score Mean = 40.43 (SD = 18.24) CBCL total score Mean = 53.35 (SD = 27.55) IVA/CPT: full-scale attention Mean = 2.1 (SD = 16.88)	ADHD RS: inattention Mean = 5.27 (SD = 2.16) ADHD RS: hyperactivity and/or inattention Mean = 3.27 (SD = 2.01) Youth self-report total score Mean = 52.58 (SD = 18.89) CBCL total score Mean = 63.77 (SD = 27) ADHD RS: inattention Mean = 3.62 (SD = 2.45) ADHD RS: hyperactivity and/or inattention Mean = 2.38 (SD = 2.14) Youth self-report total score Mean = 46.12 (SD = 20.17) CBCL total score Mean = 52.81 (SD = 30.28) IVA/CPT: full-scale attention Mean = -28.57 (SD = 11.67)	NS
Moreno-García et al <sup>65</sup> 57 Fair RCT	Neurofeedback	Standard pharmacologic treatment	NR			P = .002
Children aged 7–17 y						
Steiner et al <sup>69</sup> 104 Good RCT	Neurofeedback	Waitlist control	5 mo	Conners 3: parent inattention Within-group effect size = -0.8 Conners 3: parent executive functioning Within-group effect size = -0.49 Conners 3: parent global index Within-group effect size = -0.37 Conners 3: teacher inattention Within-group effect size = -0.25	Conners 3: parent inattention Within-group effect size = -0.15 Conners 3: parent executive functioning Within-group effect size = -0.09 Conners 3: parent global index Within-group effect size = -0.05 Conners 3: teacher inattention Within-group effect size = 0	P < .001 P < .001 P < .001 NS
Children aged 7–17 y						

CI, confidence interval; MPH, methylphenidate; NR, not recorded; NS, not significant.

<sup>a</sup> See "Quality and Applicability Assessment of Individual Studies" for definitions of quality assessment ratings.

**SUPPLEMENTAL TABLE 19** Findings on Neurofeedback Interventions for ADHD

Study (Companion); <i>M</i> : Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic Acceptability of treatment Gevensleben et al <sup>54</sup> (Gevensleben et al <sup>55</sup> Wangler et al <sup>75</sup> ) 102 Good RCT	Neurofeedback training	Attention skills training	2 mo	Effectiveness of treatment  Mean = 3.19 (SD = 0.82)  Parent rated motivation of their children to participate in treatment  Mean = 0.64 (SD = 0.77)	Effectiveness of treatment  Mean = 3.13 (SD = 0.90)  Parent rated motivation of their children to participate in treatment  Mean = 0.56 (SD = 1.13)	<i>P</i> = .77
Children aged 7–17 y						
Behavior changes Geladé et al <sup>53</sup>	Neurofeedback training	Physical activity	12 wk	SWAN: inattention (parent)  Mean = -0.52 (95% CI: -0.53 to -0.10) SWAN: hyperactivity and/or impulsiveness (parent) Mean = -0.29 (95% CI: -0.50 to -0.07) SWAN: inattention (teacher) Mean = -0.10 (95% CI: -0.31 to -0.11) SWAN: hyperactivity and/or impulsiveness (teacher) Mean = -0.03 (95% CI: -0.28 to 0.23)	SWAN: inattention (parent)  Mean = -0.17 (95% CI: -0.37 to 0.02) SWAN: hyperactivity and/or impulsiveness (parent) Mean = -0.21 (95% CI: -0.41 to -0.01) SWAN: inattention (teacher) Mean = -0.05 (95% CI: -0.23 to -0.12) SWAN: hyperactivity and/or impulsiveness (teacher) Mean = -0.02 (95% CI: -0.18 to 0.13)	NS
103 Good RCT						NS
Children aged 7–17 y						NS
Sleep disturbance Geladé et al <sup>53</sup>	Neurofeedback training	Physical activity	12 wk	SDSC  Mean = -2.16 (95% CI: -4.82 to 0.51)	SDSC  Mean = -1.03 (95% CI: -2.86 to 0.80)	NS
103 Good RCT						NS
Children aged 7–17 y						
Nonpharmacologic versus pharmacologic Sleep disturbance Geladé et al <sup>53</sup>	Neurofeedback training	MPH	12 wk	SDSC  Mean = -2.16 (95% CI: -4.82 to 0.51)	SDSC  Mean = -0.54 (95% CI: -2.90 to 1.81)	<i>P</i> = .06
112 Good RCT						
Children aged 7–17 y						
Behavior changes Geladé et al <sup>53</sup>	Neurofeedback training	MPH	12 wk	SWAN: inattention (parent)  Mean = -0.52 (95% CI: -0.53 to -0.10)	SWAN: inattention (parent)  Mean = -0.78 (95% CI: -1.03 to -0.53)	<i>P</i> < .001
112						

TABLE 19 Continued

Study (Companion); <i>N</i> ; Quality <sup>a</sup> ; Design; Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Age Category					
Good			SWAN: hyperactivity and/or impulsiveness (parent) Mean = -0.29 (95% CI: -0.50 to -0.07)	SWAN: hyperactivity and/or impulsiveness (parent) Mean = -0.52 (95% CI: -0.74 to -0.30)	<i>P</i> < .001
RCT			SWAN: inattention (teacher) Mean = -0.10 (95% CI: -0.31 to -0.11)	SWAN: inattention (teacher) Mean = -0.95 (95% CI: -1.23 to -0.68)	<i>P</i> < .001
Children aged 7–17 y			SWAN: hyperactivity and/or impulsiveness (teacher) Mean = -0.03 (95% CI: -0.28 to 0.23)	SWAN: hyperactivity and/or impulsiveness (teacher) Mean = -0.70 (95% CI: -1.05 to -0.34)	<i>P</i> = .001
Nonpharmacologic versus placebo, usual care, or waitlist (NA)					

CI, confidence interval; MPH, methylphenidate; NA, not available; NS, not significant; SDSC, Sleep Disturbance Scale for Children; SWAN, Strengths and Weaknesses of ADHD Symptoms and Normal Behavior Rating Scale.

<sup>a</sup> See Supplemental Table 17 for the definition of quality assessment ratings.

**SUPPLEMENTAL TABLE 20** Changes in Standardized Scores on Cognitive Training Interventions for ADHD

Study (Companion); <i>M</i> ; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
<b>Nonpharmacologic versus nonpharmacologic</b>						
Chacko et al <sup>25</sup>	Cogmed working memory training with difficulty titrated to a user's ability	Cogmed working memory training with difficulty not titrated to a user's ability	3 wk post	Parent disruptive behavior disorder RS: inattention symptoms Parent disruptive behavior disorder RS: hyperactive symptoms Teacher disruptive behavior disorder RS: inattention symptoms Teacher disruptive behavior disorder RS: hyperactive	Parent disruptive behavior disorder RS: inattention symptoms Parent disruptive behavior disorder RS: hyperactive symptoms Teacher disruptive behavior disorder RS: inattention symptoms Teacher disruptive behavior disorder RS: hyperactive	Effect = 1.98 (SE = 1.17) <i>P</i> = .2 Effect = 1.88 (SE = 1.15) <i>P</i> = .2 Effect = 1.84 (SE = 1.49) <i>P</i> = .22 Effect = 1.94 (SE = 1.54) <i>P</i> = .21
RCT Children aged 7–17 y						
Dovis et al <sup>24</sup>	Braingame Brian (computerized, home-based executive functioning training)	Braingame Brian in training mode and the working memory task in placebo mode	3 mo	Parent DBDRS: inattention Mean = 12.9 (SD = 4.1) Parent DBDRS: hyperactivity and/or impulsivity Mean = 12.6 (SD = 6.4) Teacher DBDRS: inattention Mean = 12.2 (SD = 5.8) Teacher DBDRS: hyperactivity and/or impulsivity Mean = 9.3 (SD = 4.9)	Parent DBDRS: inattention Mean = 14.6 (SD = 5.3) Parent DBDRS: hyperactivity and/or impulsivity Mean = 13 (SD = 5.1) Teacher DBDRS: inattention Mean = 13.3 (SD = 6.6) Teacher DBDRS: hyperactivity and/or impulsivity Mean = 11.5 (SD = 7)	NS NS NS NS
Good RCT Children aged 7–17 y		All tasks in training mode (overall easier)				NS
<b>van Dongen-Boomsma et al<sup>2</sup></b>						
51 Good RCT Children of all ages ≤17 y	Cogmed training program	Cogmed training program without adjustment for patient skill level (control group)	5 wk	ADHD RS: total investigator score  Mean = 32.4 (SE = 5.7) ADHD RS: teacher Mean = 27.5 (SE = 10.1)	Parent DBDRS: inattention Mean = 14.1 (SD = 4.7) Parent DBDRS: hyperactivity and/or impulsivity Mean = 12.5 (SD = 5.7) Teacher DBDRS: inattention Mean = 11.3 (SD = 5.1) Teacher DBDRS: hyperactivity and/or impulsivity Mean = 6 (SD = 9.1) ADHD RS: total investigator score	NS NS NS NS NS
<b>Van der Donk et al<sup>71</sup></b>						
105 Fair RCT Children aged 7–17 y	Cogmed working memory training	Paying attention in class (experimental, combined working memory and compensatory training)	6 wk	CBCL: attention problems scale	CBCL: attention problems scale	NR
<b>Nonpharmacologic versus pharmacologic (NA)</b>						
			6 mo	CBCL: externalizing problems scale	CBCL: externalizing problems scale	NR

TABLE 20 Continued

Study (Companion); <i>N</i> ; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus placebo, usual care, or waitlist						
Egeland et al <sup>28</sup>	Cogmed	Waitlist control	8 mo	ADHD RS: total score teacher Mean = 20.1 (SD = 9.8) ADHD RS: parent Mean = 27 (SD = 11.5)	ADHD RS: total score teacher Mean = 22.6 (SD = 12.3) ADHD RS: parent Mean = 28.1 (SD = 11)	NS
Hovik et al <sup>41</sup>	RoboMemo program					NS
Good RCT						
Children aged 7–17 y						
Beck et al <sup>18</sup>	Computer-based working memory intervention	Waitlist control	Baseline, follow-up	ADHD index parent mean = 71.7 (SD = 8.82); mean = 62.78 (SD = 9.55) Conners cognitive problems and/or inattention Parent mean = 67.96 (SD = 9.55) Mean = 59.89 (SD = 9.15)	ADHD index parent mean = 69.92 (SD = 7.86); mean = 67.33 (SD = 7.33) Conners cognitive problems and/or inattention Parent mean = 65.38 (SD = 9.22) Mean = 64.75 (SD = 10.22)	<i>P</i> = .01 <i>P</i> < .01
Fair Observational						
Children aged 7–17 y						
				Conners hyperactivity parent Mean = 68.37 (SD = 15.98) Mean = 59.59 (SD = 14.89) Conners oppositional parent Mean = 60 (SD = 13.34) Mean = 53.96 (SD = 9.67) Conners ADHD index teacher No. patients with outcome = 60.78 (SD = 14.96); No. patients with outcome = 56.38 (SD = 13.28) Conners cognitive problems and/or inattention teacher mean = 60.89 (SD = 10.58) Mean = 57.5 (SD = 7.91) Conners hyperactivity teacher Mean = 59.59 (SD = 15.17) Mean = 56.31 (SD = 13.47) Conners oppositional teacher Mean = 56.52 (SD = 8.93) Mean = 52.35 (SD = 10.12) BRIEF metacognition index: parent Mean = 72.96 (SD = 8.06) Mean = 64.19 (SD = 9.24) BRIEF metacognition index: teacher Mean = 67.96 (SD = 18.67) Mean = 64.85 (SD = 16.35)	Conners hyperactivity parent Mean = 65.7 (SD = 16.5) Mean = 62.75 (SD = 13.73) Conners oppositional parent Mean = 59.79 (SD = 12.17) Mean = 57.5 (SD = 10.59) Conners ADHD index teacher No. patients with outcome = 58.4 (SD = 11.4); No. patients with outcome = 56.52 (SD = 10.25) Conners cognitive problems and/or inattention teacher mean = 56.24 (SD = 11.05) Mean = 55.56 (SD = 10.26) Conners hyperactivity teacher Mean = 55.36 (SD = 13.2) Mean = 55.64 (SD = 11.14) Conners oppositional teacher Mean = 52.92 (SD = 8.93) Mean = 50.58 (SD = 8.71) BRIEF metacognition index: parent Mean = 71.38 (SD = 7.73) Mean = 69.61 (SD = 7.19) BRIEF metacognition index: teacher Mean = 60.2 (SD = 13.04) Mean = 60.79 (SD = 12.76)	<i>P</i> = .04 <i>P</i> = .10 <i>P</i> = .43 <i>P</i> = .23 <i>P</i> = .25 <i>P</i> = .59 <i>P</i> = .01 <i>P</i> = .22

DBDRS, Disruptive Behavior Disorder Rating Scale; NA, not applicable; NR, not recorded; NS, not significant.  
<sup>a</sup> See “Quality Assessment and Applicability of Individual Studies” for definitions of quality assessment ratings.

Study (Companion); N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Nonpharmacologic versus nonpharmacologic						
Academic performance						
Chacko et al <sup>23</sup>	Cogmed working memory training with difficulty titrated to a user's ability	"Placebo" Cogmed working memory training with difficulty not titrated to a user's ability	3 wk post	WRAT-4 word reading	—	Treatment effect = -2.72 (SE = 5.5) P = .5
85				WRAT-4 sentence completion		Treatment effect = 5.6 (SE = 4.7) P = .23
Good				WRAT-4 math computation		Treatment effect = 5.22 (SE = 5.21) P = .31
RCT				WRAT-4 spelling		Treatment effect = 1.28 (SE = 6.17) P = .83
Children aged 7–17 y						
Behavior changes						
Dovis et al <sup>24</sup>	Braingame Brian (computerized home-based executive functioning training)	Braingame Brian in training mode and the working memory task in placebo mode	3 mo	Parent DBDRS: inattention Mean = 12.9 (SD = 4.1) Parent DBDRS: hyperactivity and/or impulsivity Mean = 12.6 (SD = 6.4) Teacher DBDRS: inattention Mean = 12.2 (SD = 5.8) Teacher DBDRS: hyperactivity and/or impulsivity Mean = 9.3 (SD = 4.9)	Parent DBDRS: inattention Mean = 14.6 (SD = 5.3) Parent DBDRS: hyperactivity and/or impulsivity Mean = 13 (SD = 5.1) Teacher DBDRS: inattention Mean = 13.3 (SD = 6.6) Teacher DBDRS: hyperactivity and/or impulsivity Mean = 11.5 (SD = 7)	NS NS NS NS NS
89						
Good						
RCT						
Children aged 7–17 y		All tasks in training mode (overall easier)				
Van der Donk et al <sup>71</sup>						
105	Cogmed working memory training	Paying attention in class (experimental, combined working memory and compensatory training)	6 wk	CBCL: externalizing problems scale	CBCL: attention problems scale	NR
Fair						
RCT						
Children aged 7–17 y						
Functional impairment						

TABLE 21 Continued

Study (Companion); N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
van Dongen- Boomsma et al <sup>22</sup> 51 Good RCT Children of all ages ≤ 17 y	Cogmed training program	Cogmed training program without adjustment for patient skill level (control group)	5 wk	CGI-I No. patients with outcome = 25	CGH No. patients with outcome = 21	<i>P</i> = .514
Nonpharmacologic versus pharmacologic (NA)						
Nonpharmacologic versus placebo, usual care, or waitlist (NA)						

CGI-I, Clinical Global Impression-Improvement; DBDRS, Disruptive Behavior Disorder Rating Scale; NA, not applicable; NR, not recorded; NS, not significant; —, not applicable.

<sup>a</sup> See Supplemental Table 17 for the definition of quality assessment ratings.

**SUPPLEMENTAL TABLE 22** Changes in Standardized Scores on CBT Interventions for ADHD

Study (Companion); N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic Boyer et al <sup>20</sup>	CBT with an aim to improve planning skills	Solution-focused CBT without an aim to improve planning skills	3 mo	ADHD symptom scale: combined inattentive and hyperactivity and/or impulsivity Mean = 18.66 (9.64) Disruptive behavior disorders: summarized ODD/CD subscales Mean = 5.84 (5.49)	ADHD symptom scale: combined inattentive and hyperactivity and/or impulsivity Mean = 19.99 (9.69) Disruptive behavior disorders: summarized ODD/CD subscales Mean = 5.99 (5.78)	<i>P</i> < .001
RCT Children aged 7–17 y			12 mo	ADHD symptom scale: combined inattentive and hyperactivity and/or impulsivity Mean = 18.41 (9.76) Disruptive behavior disorders: summarized ODD/CD subscales Mean = 4.74 (4.30)	ADHD symptom scale: combined inattentive and hyperactivity and/or impulsivity Mean = 20.02 (8.21) Disruptive behavior disorders: summarized ODD/CD subscales Mean = 4.55 (3.80)	<i>P</i> < .001
Nonpharmacologic versus pharmacologic (NA) Vidal et al <sup>73</sup>	CBT	Usual care	12 wk	ADHD RS: adolescent inattention Mean = 10.14 (0.51) ADHD RS: adolescent impulsivity Mean = 8.29 (0.7) ADHD RS: parents inattention Mean = 11.31 (0.58) ADHD RS: parents impulsivity Mean = 7.72 (0.77)	ADHD RS: adolescent inattention Mean = 14.47 (0.5) ADHD RS: adolescent impulsivity Mean = 11.72 (0.7) ADHD RS: parents inattention Mean = 16.99 (0.6) ADHD RS: parents impulsivity Mean = 11.56 (0.78)	ES = 8.57 ( <i>P</i> < .001) ES = 4.9 ( <i>P</i> < .001) ES = 9.62 ( <i>P</i> < .001) ES = 4.95 ( <i>P</i> < .001)

ES, effect size; NA, not applicable; ODD/CD, oppositional defiant disorder/conduct disorder.

<sup>a</sup> See "Quality Assessment and Applicability of Individual Studies" for definitions of quality assessment ratings.



**SUPPLEMENTAL TABLE 23** Findings on CBT Interventions for ADHD

Study (Companion); <i>N</i> ; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic Depression or anxiety Boyer et al <sup>20</sup> (Boyer et al <sup>21</sup> )	CBT with an aim to improve planning skills	Solution-focused CBT without an aim to improve planning skills	3 mo	Child depression inventory Mean = 8.92 (6.82)	Child depression inventory Mean = 9.21 (5.57)	<i>P</i> < .001
159 Fair RCT				Screen for child anxiety related emotional disorders Mean = 20.49 (16.17)	Screen for child anxiety related emotional disorders Mean = 19.54 (18.17)	<i>P</i> < .001
Children aged 7–17 y				Child depression inventory Mean = 7.68 (5.10)	Child depression inventory Mean = 8.48 (4.65)	<i>P</i> < .001
Nonpharmacologic versus pharmacologic (NA)			12 mo	Screen for child anxiety related emotional disorders Mean = 18.86 (14.39)	Screen for child anxiety related emotional disorders Mean = 18.53 (16.17)	<i>P</i> < .001
Nonpharmacologic versus placebo, usual care, waitlist						
Functional impairment Vidal et al <sup>23</sup>	CBT	Usual care	12 wk	CGI-S: self-report Mean = 2.9 (0.12)	CGI-S: self-report Mean = 3.35 (0.12)	ES = 3.75 ( <i>P</i> < .001)
119 Good RCT				CGI-S: clinician Mean = 2.86 (0.07)	CGI-S: clinician Mean = 3.4 (0.07)	ES = 7.71 ( <i>P</i> < .001)
Children aged 7–17 y						

ES, effect size.

<sup>a</sup> See Supplemental Table 17 for the definition of quality assessment ratings.

**SUPPLEMENTAL TABLE 24** Changes in Standardized Scores on Child or Parent Training for ADHD

Study (Companion); N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Nonpharmacologic versus nonpharmacologic						
Bai et al <sup>16</sup>	A psychoeducation program based on the theory of planned behavior	General clinical counseling	3 mo	ADHD RS IV Mean = 33.7 (SD = 5.4) (Baseline mean = 49.9, SD 11.5)	ADHD RS IV Mean = 45.1 (SD = 7.9) (Baseline mean = 48.1, SD = 8.1)	P = .008
89 Good RCT Children aged 7–17 y						
Chacko et al <sup>22</sup>	STEPP	BPT program	2.07 mo	Disruptive behavior disorder scale: inattentive Mean = 1.78 (SD = 0.63) Disruptive behavior disorder: hyperactive and/or impulsive Mean = 1.69 (SD = 0.57) Treatment attitude inventory: satisfaction with outcome Mean = 24.18 (SD = 3.02)	Disruptive behavior disorder scale: inattentive Mean = 1.67 (SD = 0.74) Disruptive behavior disorder: hyperactive and/ or impulsive Mean = 1.59 (SD = 0.70) Treatment attitude inventory: satisfaction with outcome Mean = 20.20 (SD = 2.35)	NR NR NR
120 Good RCT Children of all ages ≤17 y						

TABLE 24. Continued

Study (Companion); N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between-Group P
Pfiffner et al <sup>62</sup>	Child life and attention skills treatment	Parent group component only	10–13 wk	Parent child symptom inventory	Parent child symptom inventory	P = .001
199				Mean = 2.2 (SE = 0.3)	Mean = 3.2 (SE = 0.3)	
Good RCT				Child symptom inventory	Child symptom inventory	P < .001
				Mean = 2.99 (SE = 0.3)	Mean = 4.2 (SE = 0.3)	
Children aged 7–17 y		Evaluation and community care		Parent child symptom inventory	Parent child symptom inventory	NR
				Child symptom inventory	Child symptom inventory	NR
				Mean = 4.1 (SE = 0.4)	Mean = 5 (SE = 0.4)	NR
				Parent child symptom inventory	Parent child symptom inventory	NR
				Child symptom inventory	Child symptom inventory	NR
				Mean = 3.2 (SE = 0.3)	Mean = 4.2 (SE = 0.4)	NR
				Parent child symptom inventory	Parent child symptom inventory	NR
				Child symptom inventory	Child symptom inventory	NR
				Mean = 4.2 (SE = 0.4)	Mean = 4.1 (SE = 0.4)	P < .001
				Parent child symptom inventory	Parent child symptom inventory	P = .396
				Child symptom inventory	Child symptom inventory	NR
				Mean = 2.2 (SE = 0.3)	Mean = 4.2 (SE = 0.4)	NR
				Child symptom inventory	Child symptom inventory	NR
				Mean = 3.7 (SE = 0.4)	Mean = 4.1 (SE = 0.4)	NR
				Parent child symptom inventory	Parent child symptom inventory	NR
				Child symptom inventory	Child symptom inventory	NR
				Mean = 4.2 (SE = 0.4)	Mean = 4.2 (SE = 0.4)	NR

**TABLE 24** Continued

Study (Companion); N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Huang et al <sup>42</sup> 97 Fair RCT Children aged 7–17 y	Behavioral-based social skill training for patients and parallel parent group sessions	Group therapy for motivation and treatment per usual care, such as medication and counseling at the outpatient department	6 mo	Change in CBCL withdrawn subscale Mean = -0.84 (SD = 2.3) Change in CBCL somatic complaints subscale Mean within group change = -0.14 (SD = 2.7) CBCL change anxious/depressed subscale Mean within group change = -2.19 (SD = 4) CBCL change social problems subscale Mean within group change = -1.4 (SD = 2.3) CBCL change thought problems subscale Mean within group change = -1.02 (SD = 2.8) CBCL change attention problems subscale Mean within group change = -1.26 (SD = 2.8) CBCL change delinquent behavior subscale Mean within group change = -0.76 (SD = 2.2) CBCL change aggressive behavior subscale Mean within group change = -4 (SD = 7.1)	Change in CBCL withdrawn subscale Mean = -0.28 (SD = 1.6) Change in CBCL somatic complaints subscale Mean within group change = -1.42 (SD = 3.7) CBCL change anxious/depressed subscale Mean within group change = -0.89 (SD = 3.7) CBCL change social problems subscale Mean within group change = -0.92 (SD = 2.2) CBCL change thought problems subscale Mean within group change = -1.06 (SD = 2.1) CBCL change attention problems subscale Mean within group change = -1.772 (SD = 3.2) CBCL change delinquent behavior subscale Mean within group change = -0.6 (SD = 1.9) CBCL change aggressive behavior subscale Mean within group change = -2.37 (SD = 5.9)	P = .84 P = .14 P = .79 P = .57 P = .60 P = .04 P = .91 P = .94
Nonpharmacologic versus pharmacologic Moreno-García et al <sup>55</sup> 57 Fair RCT Children aged 7–17 y	Standard pharmacologic treatment	Behavioral treatment	20 wk	IVA/CPT: full-scale attention mean = 2.1 (SD = 16.88)	IVA/CPT: full-scale attention mean = -3.88 (SD = 16.24)	P = .013
Nonpharmacologic versus placebo, usual care, or waitlist Chacko et al <sup>22</sup> 120 Good RCT Children of all ages ≤17 y	STEPP	Waitlist	2.07 mo	Disruptive behavior disorder scale: inattentive Mean = 1.78 (SD = 0.63) Disruptive behavior disorder: hyperactive and/or impulsive Mean = 1.69 (SD = 0.57)	Disruptive behavior disorder scale: inattentive Mean = 1.72 (SD = 0.65) Disruptive behavior disorder: hyperactive and/or impulsive Mean = 1.72 (SD = 0.56)	NR NR



TABLE 24 Continued

Study (Companion); N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Ferrin et al <sup>32</sup> 81 Good RCT	Psychoeducational program	Control	12 wk	CPRS: inattention –12 wk Mean = 7.95 (SD = 3.84) P = .001 CPRS: hyperactivity and/or impulsivity –12 wk Mean = 6.74 (SD = 4.84) CPRS: index Mean = 18.6 (SD = 8.66) CPRS: opposition subscale Mean = 5.2 (SD = 4.06)	CPRS: inattention –12 wk Mean = 11 (SD = 3.28) CPRS: hyperactivity and/or impulsivity –12 wk Mean = 8.45 (SD = 4) CPRS: index Mean = 21.16 (SD = 7.08) CPRS: opposition subscale Mean = 5.63 (SD = 3.86)	P = .001 NS
Children of all ages ≤17 y			12 mo	CPRS: inattention and/or cognition Mean = 8.26 (SD = 4.3) P = .032 CPRS: hyperactivity and/or impulsivity Mean = 7.4 (SD = 4.84) CPRS index –12 wk Mean = 16.8 (SD = 7.18) P = .001 CPRS opposition –12 wk Mean = 4.95 (SD = 3.79)	CPRS: inattention and/or cognition Mean = 10.41 (SD = 3.62) CPRS: hyperactivity and/or impulsivity Mean = 8.47 (SD = 3.82) CPRS index –12 wk Mean = 22.44 (SD = 6.13) CPRS opposition –12 wk Mean = 6.18 (SD = 3.87)	P = .0032 NS P = .001 NS

BPT, Behavioral Parent Training; C, combined type; CPRS, Conners' Teaching Rating Scale; MPH, methylphenidate; NR, not reported; NS, not significant; STEPP, Strategies to Enhance Positive Parenting.

<sup>a</sup> See "Quality Assessment and Applicability of Individual Studies" for definitions of quality assessment ratings.

**SUPPLEMENTAL TABLE 25** Findings on Child or Parent Training or Behavioral Interventions for ADHD

Study (Companion); #; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic Academic performance Abikoff et al <sup>12</sup>	Organizational skills	Performance-based intervention precluding skill	12 wk	Academic performance RS  Mean = pre: 53.45; post: 62.16 (SD = pre: 10.34; post: 10.52) Academic proficiency scale Mean = pre: 16.39; post: 18.55 (SD = pre: 4.27; post: 4.26)	Academic performance RS  Mean = pre: 54.45; post: 63.96 (SD = pre: 11.12; post: 11.90) Academic proficiency scale Mean = pre: 17.08; post: 18.35 (SD = pre: 3.54; post: 3.89)	NS
Children aged 7–17 y Acceptability of treatment Chacko et al <sup>22</sup>	STEPP	BPT program	2.07 mo	Parent treatment attitude inventory: satisfaction with process Mean = 16.36 (SD = 2.03)	Parent treatment attitude inventory: satisfaction with process Mean = 14.12 (SD = 2.09)	<i>P</i> < .01
120 Good RCT Children of all ages ≤17 y Functional impairment Chacko et al <sup>22</sup>	STEPP	Waitlist	2.07 mo	Impairment RS: overall Mean = 3.31 (SD 1.41)	Impairment RS: overall Mean = 4.11 (SD 1.67)	<i>P</i> < .01
120 Good RCT Children of all ages ≤17 y Pfiffner et al <sup>62</sup>	Child life and attention skills treatment	Parent group component only	10–13 wk	Parent CGI	Parent CGI	<i>P</i> = .0
199 Good RCT Children aged 7–17 y	Evaluation and community care	Evaluation and community care		Mean = 6 (SE = 0.7) Teacher CGI severity Mean = 5.8 (SE = 0.8)	Mean = 5.8 (SE = 0.9) Teacher CGI severity Mean = 5.2 (SE = 1)	<i>P</i> = .0
	Parent group component only	Parent group component only	5–7 mo	Parent CGI Mean = 6 (SE = 1) Teacher CGI severity Mean = 5 (SE = 1.1)	Parent CGI Mean = 5 (SE = 1) Teacher CGI severity Mean = 5 (SE = 1.1)	NR NR
	Evaluation and community care	Evaluation and community care		Parent CGI Mean = 3.4 (SE = 0.2)	Parent CGI Mean = 5.8 (SE = 1) Teacher CGI severity Mean = 3.5 (SE = 0.2)	<i>P</i> = .001 <i>P</i> = .775





**TABLE 25** Continued

Study (Companion); N, Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Molina et al <sup>54</sup> (Vitello et al <sup>14</sup> )	Medication management	Behavioral training (parent group, parent individual, classroom [student], and teacher sessions) Combination: medication management and behavioral training	8 y	Depression (CDI)  Mean = 5.78 (SD = 7.84)	Depression (CDI)  Mean = 7.84 (SD = 7.24)	P = .1029
579						
Fair RCT Children aged 7–17 y		Usual care		Anxiety (MASC) Mean = 77.7 (SD = 14.9)	Anxiety (MASC) Mean = 82.8 (SD = 16.7) Depression (CDI) Mean = 8 (SD = 7.66) Anxiety (MASC) Mean = 84.1 (SD = 18.3) Depression (CDI) Mean = 7.19 (SD = 7.73) Anxiety (MASC) Mean = 85.8 (SD = 19.7)	P = .0217
Elevated blood pressure Molina et al <sup>54</sup> (Vitello et al <sup>14</sup> )	Medication management	Behavioral training (parent group, parent individual, classroom [student], and teacher sessions) Combination: medication management and behavioral training Usual care	8 y	SBP at 14 mo  Mean = 102.4 (SD = 9.7) DBP at 14 mo  Mean = 67.6 (SD = 9.6)	SBP at 14 mo  Mean = 103.2 (SD = 10.3) DBP at 14 mo  Mean = 68.9 (SD = 9.1) SBP at 14 mo Mean = 102.6 (SD = 10.2) DBP at 14 mo Mean = 66.5 (SD = 10.4) SBP at 14 mo Mean = 104.1 (SD = 10.6) DBP at 14 mo Mean = 67.8 (SD = 8.8)	NS  NS
579						
Fair RCT Children aged 7–17 y						
Incarceration Molina et al <sup>54</sup> (Vitello et al <sup>14</sup> )	Medication management	Behavioral training (parent group, parent individual, classroom [student], and teacher sessions)	8 y	Arrested once	Arrested once	P = .7350
579				% patients with outcome = 22.4	% patients with outcome = 17.4	

TABLE 25 Continued

Study (Companion); #; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Fair		Combination: medication management and behavioral training		$P = .735$	Arrested 2 or more times	
RCT				Arrested 2 or more times % patients with outcome = 10.3 $P = .735$	% patients with outcome = 7.8	
Children aged 7–17 y		Usual care			Arrested once % patients with outcome = 18.9 Arrested 2 or more times % patients with outcome = 5.7 Arrested once % patients with outcome = 22.9 Arrested 2 or more times % patients with outcome = 7.8	
Increased heart rate Molina et al <sup>54</sup> (Vitiello et al <sup>74</sup> )	Medication management	Behavioral training (parent group, parent individual, classroom [student], and teacher sessions)	8 y	Heart rate at 14 mo	Heart rate at 14 mo	NS
579		Combination: medication management and behavioral training		Mean = 84.2 (SD = 12.4) Incidence of tachycardia at 14 mo	Mean = 79.1 (SD = 12) Incidence of tachycardia at 14 mo	NS
Fair RCT		Usual care		% patients with outcome = 0.8	% patients with outcome = 0.8	
Children aged 7–17 y				Heart rate at 14 mo Mean = 84.6 (SD = 12.2) Incidence of tachycardia at 14 mo % patients with outcome = 2.2 Heart rate at 14 mo Mean = 78.9 (SD = 12.9) Incidence of tachycardia at 14 mo % patients with outcome = 2.5		
Motor vehicle collisions Molina et al <sup>54</sup> (Vitiello et al <sup>74</sup> )	Medication management	Behavioral training (parent group, parent individual, classroom [student], and teacher sessions)	8 y	Accidents, citations, ticket	Accidents, citations, ticket	$P = .6691$
579		Combination: medication management and behavioral training		% patients with outcome = 28.6 Accidents, citations, ticket	% patients with outcome = 19.7 Accidents, citations, ticket	
Fair					% patients with outcome = 19	

TABLE 25 Continued

Study (Companion); N, Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
RCT Children aged 7–17 y Nonpharmacologic versus placebo, usual care, or waitlist Academic performance Abikoff et al <sup>12</sup> 180	Organizational skills	Usual care Waitlist	12 wk	Academic performance RS Mean = pre: 53.45; post: 62.16 (SD = pre: 10.34; post: 10.52) Academic proficiency scale Mean = pre: 16.39; post: 18.55 (SD = pre: 4.27; post: 4.26)	Accidents, citations, ticket % patients with outcome = 21.5 Academic performance RS Mean = pre: 54.06; post: 54.53 (SD = pre: 8.58; post: 9.74) Academic proficiency scale Mean = pre: 16.05; post: 16.63 (SD = pre: 3.22; post: 3.30)	NS
Children aged 7–17 y Storebø et al <sup>70</sup>	Social skills group and medication management	Medication management (usual care)	3 mo	Connors CBRS academic score mean = 20.13 (SD = 15.15)	Connors CBRS academic score mean = 17.88 (SD = 10.11)	NS
56			6 mo	Connors CBRS academic score mean = 21.04 (SD = 11.98); between group MD: -0.48 (95% CI = -7.254 to 6.293)	Connors CBRS academic score mean = 21.52 (SD 12.56)	
Good RCT Children aged 7–17 y Depression or anxiety Hiscock et al <sup>39</sup> (Papadopoulos et al <sup>60</sup> )	Sleep hygiene practices and standardized behavioral strategies	Children in the control group received usual clinical care	6 mo	Depression or anxiety: depression anxiety stress scale Mean = 31.3 (SD = 23.6) Depression or anxiety: parent mental health with the depression anxiety stress scale, total score	Depression or anxiety: depression anxiety stress scale Mean = 33.9 (SD = 28.5)	P = .55
244						
Good RCT Children of all ages ≤17 y Functional impairment Chacko et al <sup>22</sup> 120 Good RCT Children of all ages ≤17 y Sleep disturbance	STEPP	Waitlist	2.07 mo	Impairment RS: overall Mean = 3.31 (SD 1.41)	Impairment RS: overall Mean = 4.65 (SD 1.30)	NR

TABLE 25 Continued

Study (Companion); #; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Hiscock et al <sup>39</sup>	Sleep hygiene practices and standardized behavioral strategies	Children in the control group received usual clinical care	6 mo	Sleep disturbance: Child Sleep Habits Questionnaire total score, mean = 53.2 (7.5)	Sleep disturbance: Child Sleep Habits Questionnaire total score, mean = 55.9 (8.8)	<i>P</i> < .001
(Papadopoulos et al <sup>60</sup> ) 244 Good RCT Children of all ages ≤17 y Workforce participation						
Hiscock et al <sup>39</sup> (Papadopoulos et al <sup>60</sup> )	Sleep hygiene practices and standardized behavioral strategies	Children in the control group received usual clinical care	3 mo	Workforce participation: d late for work	—	<i>P</i> = .02
244 Good RCT Children of all ages ≤17 y				Workforce participation: missed d of work		<i>P</i> = .03 (both nonparametric tests)

BPT, Behavioral Parent Training; CBRS, Comprehensive Behavior Rating Scale; CDI, Children's Depression Inventory; CI, confidence interval; DBP, diastolic blood pressure; GPA, grade point average; MASC, Multidimensional Anxiety Scale for Children;

NR, not reported; NS, not significant; SBP, systolic blood pressure; STEPP, Strategies to Enhance Positive Parenting; WIAT, Wechsler Individual Achievement Test. —, not applicable.

<sup>a</sup> See Supplemental Table 17 for the definition of quality assessment ratings.

**SUPPLEMENTAL TABLE 26** Findings on Omega-3 Fatty Acid Supplementation for ADHD

Study (Companion); #; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Nonpharmacologic versus nonpharmacologic (NA)						
Nonpharmacologic versus placebo, usual care, or waitlist						
Behavior changes Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Euphoric	Euphoric	NR
200				% patients with outcome = 38.9 Anxiety	% patients with outcome = 34.6 Anxiety	NR
Good RCT				% patients with outcome = 45 Irritable	% patients with outcome = 63.5 Irritable	NR
Children aged 7–17 y				% patients with outcome = 79.1 Prone cry	% patients with outcome = 84.6 Prone cry	NR
				% patients with outcome = 62.7 Talk less	% patients with outcome = 57.7 Talk less	NR
				% patients with outcome = 31.8 Sad and/or unhappy	% patients with outcome = 32.7 Sad and/or unhappy	NR
				% patients with outcome = 40 Irritability	% patients with outcome = 34 Irritability	NR
				% patients with outcome = 15.31	% patients with outcome = 11.63	NR
Elevated blood pressure						
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Systolic	Systolic	P = .955
200				Mean = 103.6 (SD = 14.82)	Mean = 100.25 (SD = 12.95)	
Good RCT				Diastolic	Diastolic	P = .342
Children aged 7–17 y				Mean = 64.66 (SD = 11.39)	Mean = 63.89 (SD = 10.28)	
Functional impairment Johnson et al <sup>43</sup> (Johnson et al <sup>44</sup> )	Omega-3/6 fatty acid supplementation (792 mg daily)	Placebo	3 mo (double-blind phase)	CGI score	CGI score	NS
75				Mean change = -0.58 (0.87)	Mean change = -0.13 (0.50)	NS
				CGI score	CGI score	
				Mean change = -1.24 (1.07)	Mean change = -0.93 (0.92)	
Good RCT						
Children aged 7–17 y						
Sleep disturbance						

TABLE 26 Continued

Study (Companion); #; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Insomnia	Insomnia	NR
200 Good RCT				% patients with outcome = 38.2 Severe insomnia	% patients with outcome = 53.9 Severe insomnia	NR
Children aged 7–17 y				Nightmares	Nightmares	NR
Tics or other movement disorders				% patients with outcome = 29.1	% patients with outcome = 34.6	
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Tics	Tics	NR
200 Good RCT				% patients with outcome = 22.7	% patients with outcome = 32.7	
Children aged 7–17 y						
Gastrointestinal symptoms						
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Stomachaches	Stomachaches	NR
200 Good RCT				% patients with outcome = 39.5 Decreased appetite	% patients with outcome = 46.2 Decreased appetite	NR
Children aged 7–17 y				% patients with outcome = 32.7 Severely decreased appetite	% patients with outcome = 32.7 Severely decreased appetite	NR
Growth suppression				% patients with outcome = 4.08	% patients with outcome = 4.65	NR
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Height in cm	Height in cm	P = .196
200 Good RCT				Mean = 135.25 (SD = 13.35)	Mean = 136.77 (SD = 12.26)	
Children aged 7–17 y						
Increased heart rate				Increased heart rate	Increased heart rate	P = .825
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Mean = 79.72 (SD = 12.03)	Mean = 81.18 (SD = 13.24)	
200 Good RCT						
Children aged 7–17 y						
Personality change						

TABLE 26 Continued

Study (Companion); N, Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Uninterested	Uninterested	NR
200 Good RCT Children aged 7–17 y Wt decrease				% patients with outcome = 32.7	% patients with outcome = 38	
Manor et al <sup>47</sup> (Manor et al <sup>48</sup> )	Phosphatidylserine enriched with omega-3 fatty acids	Placebo	15 wk	Wt (kg)	Wt (kg)	P = .980
200 Good RCT Children aged 7–17 y Nonpharmacologic versus pharmacologic Behavior changes				Mean = 33.39 (SD = 10.61)	Mean = 33.06 (SD = 8.42)	
Barragan et al <sup>17</sup>	MPH (maximum 1 mg/kg per d)	Omega-3/6 fatty acid supplementation (6 capsules/d)	1 y	Irritability by the end of the study period (clinical assessment)	Irritability by the end of the study period (clinical assessment)	NR
90 Poor		MPH (maximum 1 mg/kg per d and omega-3/6 fatty acid supplementation [6 capsules/d])		% patients with outcome = 23.33	% patients with outcome = 0	
RCT					Irritability by the end of the study period % patients with outcome = 0	
Children aged 7–17 y Changes in appetite	MPH (maximum 1 mg/kg per d)	Omega-3/6 fatty acid supplementation (6 capsules/d)	1 y	Appetite suppression by the end of the study period	Appetite suppression by the end of the study period	NR
Barragan et al <sup>17</sup>				% patients with outcome = 70	% patients with outcome = 33.3	
90 Poor		MPH (maximum 1 mg/kg per d and omega-3/6 fatty acid supplementation [6 capsules/d])			Appetite suppression by the end of the study period	
RCT						





TABLE 26 Continued

Study (Companion); <sup>a</sup> M, Quality; <sup>b</sup> Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Barragan et al <sup>17</sup>	MPH (maximum 1 mg/kg per d)	Omega-3/6 fatty acid supplementation (6 capsules/d)	1 y	Insomnia by the end of the study period	Insomnia by the end of the study period	NR
90	MPH (maximum 1 mg/kg per d and omega-3/6 fatty acid supplementation [6 capsules/d])	MPH (maximum 1 mg/kg per d and omega-3/6 fatty acid supplementation [6 capsules/d])		% patients with outcome = 20	% patients with outcome = 0	
Poor RCT					Insomnia by the end of the study period % patients with outcome = 0	
Children aged 7–17 y						

MPH, methylphenidate; NA, not applicable; NR, not reported; NS, not significant.

<sup>a</sup> See Supplemental Table 17 for the definition of quality assessment ratings.

**SUPPLEMENTAL TABLE 27** Changes in Standardized Scores on Herbal Interventions or Dietary Approaches for ADHD

Study (Companion); <i>N</i> ; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic Peisser et al <sup>61</sup>	Restricted elimination diet	No elimination diet	5 wk after intervention started	ADHD RS: parental total score Mean 24.2; 95% CI = 19.5 to 29.0	ADHD RS: parental total score Mean 1.3; 95% CI = 0.2 to 2.5 Mean between group change = 23.7 95% CI = 18.6 to 28.8	<i>P</i> < .0001
100 Good RCT				ADHD RS: teacher total score Mean 14.3; 95% CI = 11.6 to 17.1	ADHD RS: teacher total score Mean -0.4; 95% CI = -1.7 to 1.0	
Children of all ages ≤17 y				ADHD RS: parent inattention score Mean 11.3; 95% CI = 8.9 to 13.8	ADHD RS: parent inattention score Mean 0.2; 95% CI = -0.4 to 0.8 Mean between group change = 11.8 95% CI = 12.0 to 18.6	<i>P</i> < .0001
				ADHD RS: parent hyperactivity and impulsivity score Mean 12.9; 95% CI 10.5 to 15.3	ADHD RS: parent hyperactivity and impulsivity score Mean 0.3; 95% CI = -0.6 to 1.1 Mean between group change = 11.9 95% CI = 9.1 to 14.4	<i>P</i> < .0001
				ADHD RS: teacher hyperactivity and impulsivity score Mean 7.8; 95% CI = 6.2 to 9.5	ADHD RS: teacher hyperactivity and impulsivity score Mean -0.6; 95% CI = -1.4 to 0.2 Mean between group change = 8.5 95% CI = 6.8 to 10.3	<i>P</i> < .0001
				Abbreviated Conners scale: parent Mean 12.0; 95% CI = 9.4 to 14.6	Abbreviated Conners scale: parent Mean 0.1; 95% CI = -0.7 to 0.8 Mean between group change = 11.8 95% CI = 9.2 to 14.5	<i>P</i> < .0001
				Abbreviated Conners scale: teacher Mean 6.6; 95% CI = 4.9 to 8.4	Abbreviated Conners scale: teacher Mean -0.8; 95% CI = -1.4 to -0.3 Mean between group change = 7.5 95% CI = 5.9 to 6.2	<i>P</i> < .0001
				ADHD RS: "behavior scores" Total score Mean = 9.6 (SD = 6.9)	ADHD RS "behavior scores" Total score Mean = 46.9 (SD = 5.5)	
				ADHD RS: "behavior scores"	ADHD RS "behavior scores" inattention	



Study (Companion); #; Quality <sup>a</sup> , Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
RCT				Mean within group change = 12.3 (SD = 3.1)	Mean within group change = 13.9 (SD = 2.3)	NR
Children aged 7–17 y Salehi et al <sup>65</sup>	MPH (up to 30 mg/d)	Ginkgo biloba	6 wk	Parent ADHD RS IV Mean = 26; 95% CI = 13 to 38 Teacher ADHD RS IV Mean = 25; 95% CI = 15 to 35	Parent ADHD RS IV Mean = 16; 95% CI = 5 to 27 Teacher ADHD RS IV Mean = 11; 95% CI = 4 to 20	P < .01 P < .001
Good RCT						
Children aged 7–17 y Nonpharmacologic versus placebo, usual care, or waitlist Dutta et al <sup>27</sup>	Memomet synup (Bacopa monniera 125 mg, Convulvulus pleuricaulis 100 mg, Centella asiatica 100 mg)	Placebo	4 mo	Conners' 10-point RS (hyperactivity)	Conners' 10-point RS (hyperactivity)	Reported as significant in text
86 Good RCT				Mean percent change 48%	Mean percent change 29%	
Children aged 7–17 y Mohammadpour et al <sup>62</sup>	2000 IU vitamin D plus MPH	Placebo vitamin D plus MPH	2 d	CPRS oppositional	CPRS oppositional	NR
54 Fair RCT				Mean = 55.28 (SD 11.6) CPRS cognitive Mean = 56 (SD 11.8) CPRS hyperactive	Mean = 59.76 (SD 12.1) CPRS cognitive Mean = 57.21 (SD 10.5) CPRS hyperactive	NR NR NR
Children of all ages ≤17 y				Mean = 56.92 (SD 11.8) CPRS ADHD index Mean = 55.84 (SD 10.2) ADHD RS: inattentive Mean = 49.80 (SD 31.7) ADHD RS: hyperactive and/or impulsive	Mean = 59.79 (SD 12.4) CPRS ADHD index Mean = 56.79 (SD 9.6) ADHD RS: inattentive Mean = 61.37 (SD 29.5) ADHD RS: hyperactive and/or impulsive	NR NR NR NR
				Mean = 69.40 (SD 22.4) ADHD RS: total score Mean = 60.44 (SD 22.1) SNAP parent DSM IV ADHD symptoms	Mean = 77.44 (SD 19.5) ADHD RS: total score Mean = 71.75 (SD 23.6) SNAP parent DSM IV ADHD symptoms	NR NR NR
Arnold et al <sup>15</sup>	Zinc 15 mg once daily (>8 wk with amphetamine in all groups)	Placebo	8 wk	SNAP parent DSM IV ADHD symptoms	SNAP parent DSM IV ADHD symptoms	NR
52 Fair RCT				Mean = 1.92 (SD = 0.54) GRS: parent Mean = 1.95 (SD = 0.49) GRS: teacher; zinc versus placebo Mean = 1.90 (0.67) SNAP parent DSM IV ADHD symptoms	Mean = 1.9 (SD = 0.63) GRS: parent Mean = 1.84 (0.56) GRS: teacher; zinc versus placebo Mean = 1.71 (SD = 0.79) SNAP parent DSM IV ADHD symptoms	NR NR NR NR
Children aged 7–17 y			10 wk			NR

TABLE 27 Continued

Study (Companion); <i>N</i> Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
				Mean = 1.61 (SD = 0.52) CRS: parent	Mean = 1.47 (0.51) CRS: parent	
				Mean = 1.52 (SD = 0.52) CRS: teacher; zinc versus placebo	Mean = 1.24 (0.5) CRS: teacher; zinc versus placebo	NR
				Mean = 1.23 (SD = 0.58) SNAP parent DSM IV ADHD symptoms	Mean = 1.40 (0.81) SNAP parent DSM IV ADHD symptoms	NR
13 wk				Mean = 1.19 (0.56) CRS: parent	Mean = 1.01 (SD = 0.38) CRS: parent	NR
				Mean = 1.08 (SD = 0.45) CRS: teacher; zinc versus placebo	Mean = 0.91 (0.43) CRS: teacher; zinc versus placebo	NR
				Mean = 0.9 (SD = 0.65) SNAP parent DSM IV ADHD symptoms	Mean = 0.63 (0.58) SNAP parent DSM IV ADHD symptoms	
21 wk				Mean = 0.99 (SD = 0.52) CRS: parent	Mean = 0.82 (0.44) CRS: parent	NR
				Mean = 0.83 (SD = 0.47) CRS: teacher; zinc versus placebo	Mean = 0.72 (0.52) CRS: teacher; zinc versus placebo	NR
				Mean = 1.17 (SD = 0.53)	Mean = 0.94 (0.69)	NR

CI, confidence interval; CRS, Conners Rating Scale; DSM IV, Diagnostic and Statistical Manual of Mental Disorders IV; IU, international unit; MPH, methylphenidate; NR, not reported; SNAP, Swanson, Nolan and Pelham Revision.

<sup>a</sup> See "Quality Assessment and Applicability of Individual Studies" for definitions of quality assessment ratings.



TABLE 28 Continued

Study; N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Changes in appetite Arnold et al <sup>15</sup>	Zinc 15 mg once daily (>8 wk with amphetamine in all groups)	Zinc 15 mg twice daily	8 wk	Changes in appetite	Changes in appetite	NR
52 Fair RCT			>8 wk	No. patients with outcome = 3 Changes in appetite	No. patients with outcome = 4 Changes in appetite	NR
Children aged 7–17 y	Placebo		8 wk	No. patients with outcome = 15 Changes in appetite	No. patients with outcome = 8 Changes in appetite	NR
			>8 wk		No. patients with outcome = 4 Changes in appetite	NR
					No. patients with outcome = 17 Changes in appetite	NR
Gastrointestinal symptoms Arnold et al <sup>15</sup>	Zinc 15 mg once daily	Zinc 15 mg twice daily	8 wk	Stomachaches and other GI problems	Stomachaches and other GI problems	NR
52 Fair RCT			>8 wk	No. patients with outcome = 11 Stomachaches and other GI problems	No. patients with outcome = 4 Stomachaches and other GI problems	NR
Children aged 7–17 y Tics or other movement disorders Arnold et al <sup>15</sup>	Zinc 15 mg once daily	Zinc 15 mg twice daily	8 wk	Stereotypical behaviors	Stereotypical behaviors	NR
52 Fair RCT			>8 wk	No. patients with outcome = 3	No. patients with outcome = 1	NR
Children aged 7–17 y Sleep disturbance Arnold et al <sup>15</sup>	Zinc 15 mg once daily	Zinc 15 mg twice daily	8 wk	Stereotypical behaviors	Stereotypical behaviors	NR
52 Fair RCT			>8 wk	No. patients with outcome = 7	No. patients with outcome = 2	NR
Children aged 7–17 y Sleep disturbance Arnold et al <sup>15</sup>	Zinc 15 mg once daily	Zinc 15 mg twice daily	8 wk	Sleep	Sleep	NR
52 Fair RCT			>8 wk	No. patients with outcome = 0	No. patients with outcome = 1	NR
Children aged 7–17 y Nonpharmacologic versus pharmacologic Behavior changes Li et al <sup>46</sup>	MPH 1 mg/kg per d	Ningdong granule (a traditional Chinese medicine preparation)	8 wk	Anxiety	Anxiety	NR
72 Good RCT				No. patients with outcome = 5	No. patients with outcome = 1	NR

TABLE 28 Continued

Study; #; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Children aged 7–17 y Changes in appetite Li et al <sup>46</sup>	MPH 1 mg/kg per d	Ningdong granule (a traditional Chinese medicine preparation)	8 wk	Decreased appetite	Decreased appetite	NR
72 Good RCT				No. patients with outcome = 13 Increased appetite No. patients with outcome = 4	No. patients with outcome = 1 Increased appetite No. patients with outcome = 5	NR
Children aged 7–17 y Salehi et al <sup>65</sup>	MPH (up to 30 mg/d)	Ginkgo biloba	6 wk	Decreased appetite	Decreased appetite	P = .0002
50 Good RCT				No. patients with outcome = 5	No. patients with outcome = 19	
Children aged 7–17 y Chemical leukoderma Li et al <sup>46</sup>	MPH 1 mg/kg per d	Ningdong granule (a traditional Chinese medicine preparation)	8 wk	ADHD RS teacher	ADHD RS teacher	NS
72 Good RCT				Mean within group change = 12.3 (SD = 3.1)	Mean within group change = 13.9 (SD = 2.3)	
Children aged 7–17 y Depression or anxiety Salehi et al <sup>65</sup>	MPH (up to 30 mg/d)	Ginkgo biloba		Sadness	Sadness	NS
50 Good RCT				No. patients with outcome = 2 Anxiety No. patients with outcome = 7	No. patients with outcome = 7 Anxiety No. patients with outcome = 9	NS
Children aged 7–17 y Gastrointestinal symptoms Li et al <sup>46</sup>	MPH 1 mg/kg per d	Ningdong granule (a traditional Chinese medicine preparation)	8 wk	Nausea	Nausea	NR
72 Good RCT				No. patients with outcome = 16 Stomach pain No. patients with outcome = 12	No. patients with outcome = 2 Stomach pain No. patients with outcome = 2	NR
Children aged 7–17 y Sleep disturbance						







TABLE 28 Continued

Study; N; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group P
Katz et al <sup>45</sup>	Patented herbal preparation	Placebo	0.5 mo	Sleep disturbance	Sleep disturbance	NR
120 Fair RCT				No. patients with outcome = 1	No. patients with outcome = 4	
Children aged 7–17 y Suicide ideation Arnold et al <sup>15</sup>	Zinc 15 mg once daily	Placebo	8 wk	Harm to self or others	Harm to self or others	NR
52 Fair RCT				No. patients with outcome = 1	No. patients with outcome = 0	
Children aged 7–17 y Tics or other movement disorders Arnold et al <sup>15</sup>	Zinc 15 mg once daily	Placebo	>8 wk	Harm to self or others No. patients with outcome = 1	Harm to self or others No. patients with outcome = 0	NR
52 Fair RCT				Stereotypical behaviors	Stereotypical behaviors	NR
Children aged 7–17 y				No. patients with outcome = 3	No. patients with outcome = 5	
				Stereotypical behaviors No. patients with outcome = 7	Stereotypical behaviors No. patients with outcome = 9	NR

GI, gastrointestinal; IU, international unit; MPH, methylphenidate; NR, not recorded; NS, not significant; WPREMB, Weekly Parent Ratings of Evening and Morning Behavior.

<sup>a</sup> See Supplemental Table 17 for the definition of quality assessment ratings.

**SUPPLEMENTAL TABLE 29** Changes in Standardized Scores on Other Treatment Approaches for ADHD

Study (Companion); <i>M</i> ; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic (NA) Nonpharmacologic versus pharmacologic (NA) Nonpharmacologic versus placebo, usual care, or waitlist Hong and Cho <sup>40</sup>	Acupuncture	Waitlist control	1.5 mo	ADHD RS (Korean version) total score Mean = -4.91 (SD 10.50)	ADHD RS (Korean version) total score Mean = -4.00 (SD 11.00)	<i>P</i> = .561
Fair RCT				ADHD RS inattention Mean within group change = -2.67 (SD 4.90)	ADHD RS inattention Mean within group change = -1.68 (SD 4.61)	<i>P</i> = .250
Children aged 7–17 y				ADHD RS hyperactivity and/or impulsivity Mean within group change = -2.26 (SD 5.50)	ADHD RS hyperactivity and/or impulsivity Mean w/in group change = -2.84 (SD 4.00)	<i>P</i> = .956
				Conners' RS Mean within group change = -2.51 (SD 4.95)	Conners' RS Mean within group change = -1.78 (SD 4.14)	<i>P</i> = .385
				CBCL total score Mean within group change = -7.79 (SD 16.69)	CBCL total score Mean within group change = -3.00 (SD 25.00)	<i>P</i> = .393
				CBCL ADHD subscale Mean within group change = -1.38 (SD 3.54)	CBCL ADHD subscale Mean within group change = -0.64 (SD 4.36)	<i>P</i> = .247
				CBCL external subscale Mean within group change = -1.85 (SD 7.19)	CBCL external subscale Mean within group change = -1.00 (SD 10.00)	<i>P</i> = .632
Mohammadi et al <sup>53</sup> (Mostafavi et al <sup>56</sup> )	MPH and melatonin	MPH and placebo	8 wk	ADHD RS attention score Mean = 11.11	ADHD RS attention score Mean = 11.29	<i>P</i> = .974
Fair RCT				ADHD RS hyperactivity score Mean = 11.62	ADHD RS hyperactivity score Mean = 10.96	<i>P</i> = .720
Children aged 7–17 y Webster-Stratton et al <sup>16</sup>	Incredible y program	Waitlist	5 mo	CBCL: mother attention problems Mean = 65.8 (SD = 7)	CBCL: mother attention problems Mean = 68.8 (SD = 9.6)	NS
Fair RCT				CBCL: father attention problems Mean = 64.8 (SD = 8.6)	CBCL: father attention problems Mean = 65.8 (SD = 10)	NS
Children of all ages ≤ 17 y						

MPH, methylphenidate; NA, not applicable; NS, not significant.

<sup>a</sup> See "Quality Assessment and Applicability of Individual Studies" for definitions of quality assessment ratings.

**SUPPLEMENTAL TABLE 30** Findings on Other Approaches for ADHD

Study (Companion); <i>N</i> ; Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Nonpharmacologic versus nonpharmacologic Academic performance Evans et al <sup>50</sup>	Challenging horizons program: after school version	Challenging horizons program: mentoring version	12 mo	GPA	GPA	<i>P</i> = .146
326 Fair RCT Children aged 7–17 y		Community care		Mean = 2.3	Mean = 2.1	
Mautone et al <sup>49</sup>	Family-school success: early elementary	Coping with ADHD through relationships and education	12 wk	ACES score	ACES score	NR
61 Fair RCT Children of all ages ≤17 y				Mean = 3.38 (SD = 0.57)	Mean = 3.11 (SD = 0.5)	
Power et al <sup>63</sup>	Family school success therapy	Coping with ADHD through relationships and education	2 mo post-12 wk	ACES score	ACES score	NR
199 Fair RCT Children aged 7–17 y				Mean = 3.39 (SD = 0.48)	Mean = 3.25 (SD = 0.66)	
Behavior changes Abikoff et al <sup>13</sup>	New forest parenting package	Helping the noncompliant child	3 mo	Academic performance RS	Academic performance RS	NS
164 Good RCT Children aged ≤6 y				Mean = 3.32 (SD = 0.65)	Mean = 3.2 (SD = 0.68)	
			6 mo	Mean = 3.51 (SD = 0.64)	Mean = 3.36 (SD = 0.76)	NS
			6.8 mo	Behavior changes: CPRS, revised: total Mean = 68.01 (SD = 11.69)	Behavior changes: CPRS, revised: total Mean = 63.44 (SD = 10.13)	NS
				Behavior changes: CPRS, revised: inattention Mean = 65.60 (SD 13.53)	Behavior changes: CPRS, revised: inattention Mean = 61.74 (SD 10.04)	NS
				Behavior changes: CPRS, revised: hyperactivity Mean = 68.08 (SD 10.69)	Behavior changes: CPRS, revised: hyperactivity Mean = 63.39 (SD 10.24)	NS
				Behavior changes: Conners' teacher RS, revised: total Mean = 64.27 (SD = 12.27)	Behavior changes: Conners' teachers RS, revised: total Mean = 62.06 (SD = 11.39)	NS
				Behavior changes: Conners' teacher RS, revised: inattention Mean = 61.39 (SD = 13.58)	Behavior changes: Conners' teacher RS, revised: inattention Mean = 60.48 (SD = 11.79)	NS

TABLE 30 Continued

Study (Companion); <i>N</i> ; Quality <sup>a</sup> , Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Myers et al <sup>57</sup>	Telemedicine	Usual care and consult	25 wk	Behavior changes: Conners' teacher RS, revised: hyperactivity Mean = 64.25 (SD = 11.64) Behavior changes: Vanderbilt caregiver, meeting criteria for inattention	Behavior changes: Conners' teacher RS, revised: hyperactivity Mean = 62.01 (SD = 12.06)	NS <i>P</i> < .001
223 Fair				Behavior changes: Vanderbilt caregiver, meeting criteria for hyperactivity		<i>P</i> = .02
RCT Children of all ages ≤17 y				Behavior changes: Vanderbilt caregiver, meeting criteria for combined		<i>P</i> = .005
				Behavior changes: Vanderbilt teacher, meeting criteria for inattention		NS
				Behavior changes: Vanderbilt teacher, meeting criteria for hyperactivity		NS
				Behavior changes: Vanderbilt teacher, meeting criteria for combined		<i>P</i> = .02 <i>P</i> = .045
Oberai et al <sup>58</sup> 61 Fair RCT	Homeopathy	Placebo	6 wk	CPRS, revised: oppositional Mean = 56.4 (SD = 7)	CPRS, revised: oppositional Mean = 63.2 (SD = 8.3)	NR
				CPRS, revised: cognition problems	CPRS, revised: cognition problems	NR
				Mean = 56.6 (SD = 7.4)	Mean = 67.4 (SD = 5.4)	NR
				CPRS, revised: hyperactivity Mean = 63.7 (SD = 9.8)	CPRS, revised: hyperactivity Mean = 78.3 (SD = 7.9)	NR
				CPRS, revised: ADHD index Mean = 58.2 (SD = 7.3)	CPRS, revised: ADHD index Mean = 68.3 (SD = 4.6)	NR
			12 wk	CPRS, revised: oppositional Mean = 49.5 (9.5)	CPRS, revised: oppositional Mean = 66.2 (7.6)	<i>P</i> = .0001
				CPRS, revised: cognition problems Mean = 50.7 (7.7)	CPRS, revised: cognition problems Mean = 66.6 (6.2)	<i>P</i> = .0001
				CPRS, revised: hyperactivity Mean = 55.6 (11.9)	CPRS, revised: hyperactivity Mean = 78.2 (6.9)	<i>P</i> = .0001
				CPRS, revised: ADHD index Mean = 51.8 (9.1)	CPRS, revised: ADHD index Mean = 68.4 (5)	<i>P</i> = .0001

**TABLE 30** Continued

Study (Companion); <i>N</i> Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Functional impairment Evans et al <sup>50</sup>	Challenging horizons program: after school version	Challenging horizons program: mentoring version	6 mo posttreatment	CPRS, revised Effect size = 0.22 Impairment RS: parent report; relation to children Mean = 1.76 (SD = 1.89)	Impairment RS: parent report; relation to children Mean = 1.67 (SD = 1.78)	<i>P</i> = .005 NR
326 Fair RCT Children aged 7–17 y	Community care			Impairment RS: teacher report; relation with peers Mean = 1.93 (SD = 1.91)	Impairment RS: teacher report; relation with peers Mean = 1.97 (SD = 1.83) Impairment RS: parent report; relation to children Mean = 1.8 (SD = 1.69) Impairment RS: teacher report; relation with peers Mean = 1.72 (SD = 1.94)	NS NS
Nonpharmacologic versus pharmacologic Behavior changes Mohammadi et al <sup>55</sup> (Mostafavi et al <sup>56</sup> )	MPH and melatonin	MPH and placebo	8 wk	Irritability No. patients with outcome = 16	Irritability No. patients with outcome = 10	NR
60 Fair RCT Children aged 7–17 y				Sadness No. patients with outcome = 10	Sadness No. patients with outcome = 2	NR
Changes in appetite Mohammadi et al <sup>55</sup> (Mostafavi et al <sup>56</sup> )	MPH and melatonin	MPH and placebo	8 wk	Appetite score Mean = 13.26	Appetite score Mean = 12.33	<i>P</i> = .755
60 Fair RCT Children aged 7–17 y				Loss of appetite No. patients with outcome = 14	Loss of appetite No. patients with outcome = 11	
Gastrointestinal symptoms Mohammadi et al <sup>55</sup> (Mostafavi et al <sup>56</sup> )	MPH and melatonin	MPH and placebo	8 wk	Stomachache No. patients with outcome = 9	Stomachache No. patients with outcome = 5	NR
60						

TABLE 30 Continued

Study (Companion); <i>N</i> ; Quality <sup>a</sup> , Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
Fair RCT				Nausea and vomiting No. patients with outcome = 3	Nausea and vomiting No. patients with outcome = 3	NR
Children aged 7–17 y Sleep disturbance Mohammadi et al <sup>55</sup> (Mostafavi et al <sup>56</sup> )	MPH and melatonin	MPH and placebo	8 wk	Mean sleep latency (min) Mean = 17.96	Mean sleep latency (min) Mean = 26.37	<i>P</i> = .267
60 Fair RCT				Total sleep (h) Mean = 8.51	Total sleep (h) Mean = 8.27	<i>P</i> = .197
Children aged 7–17 y				SDSC sleep score Mean = 41.3 Insomnia No. patients with outcome = 8	SDSC sleep score Mean = 45.5 Insomnia No. patients with outcome = 8	<i>P</i> = .528
				Sleepiness No. patients with outcome = 4	Sleepiness No. patients with outcome = 4	NR
Tics or other movement disorders Mohammadi et al <sup>55</sup> (Mostafavi et al <sup>56</sup> )	MPH and melatonin	MPH and placebo	8 wk	Dyskinesias No. patients with outcome = 0	Dyskinesias No. patients with outcome = 2	NR
60 Fair RCT				Tics No. patients with outcome = 1	Tics No. patients with outcome = 1	NR
Children aged 7–17 y Wt decrease Mohammadi et al <sup>55</sup> (Mostafavi et al <sup>56</sup> )	MPH and melatonin	MPH and placebo	8 wk	Wt loss No. patients with outcome = 9	Wt loss No. patients with outcome = 9	NR
60 Fair RCT						
Children aged 7–17 y Nonpharmacologic versus placebo, usual care, or waitlist Behavior changes Abikoff et al <sup>13</sup>	New forest parenting package	Control	6.8 mo	Behavior changes: CPRS, revised: total	Behavior changes: CPRS, revised: total	<i>P</i> = .001



**TABLE 30** Continued

Study (Companion); <i>N</i> Quality <sup>a</sup> ; Design; Age Category	Intervention	Comparison	Follow-up Times	Findings—Intervention	Findings—Comparison	Between Group <i>P</i>
164 Good RCT Children aged ≤6 y				Mean = 68.01 (SD = 11.69) Behavior changes: CPRS, revised: inattention Mean = 65.60 (SD 13.53) Behavior changes: CPRS, revised: hyperactivity Mean = 68.08 (SD 10.69)	Mean = 76.44 (SD = 9.84) Behavior changes: CPRS, revised: inattention Mean = 75.31 (SD 10.38) Behavior changes: CPRS, revised: hyperactivity Mean = 74.45 (SD 10.67)	<i>P</i> = .001   <i>P</i> = .001
				Behavior changes: Conners' teachers RS, revised: total Mean = 64.27 (SD = 12.27) Behavior changes: Conners' teacher RS, revised: inattention Mean = 61.39 (SD = 13.58)	Behavior changes: Conners' teacher RS, revised: total Mean = 70.65 (SD = 11.22) Behavior changes: CPRS, revised: inattention Mean = 68.22 (SD = 11.81)	NS  NS
				Behavior changes: Conners' teacher RS, revised: hyperactivity Mean = 64.25 (SD = 11.64)	Behavior changes: CPRS, revised: hyperactivity Mean = 70.26 (SD = 11.98)	NS
Functional impairment Hong and Cho <sup>40</sup> 48 Fair RCT Children aged 7–17 y Oberai et al <sup>58</sup> 61 Fair RCT Children aged 7–17 y	Acupuncture	Waitlist control	1.5 mo	CGI-S Mean within group change = -0.83 (SD 1.00)	CGI-S Mean within group change = 0.00 (SD 1.00)	.012
	Homeopathy	Placebo	6 wk	CGI-SS Mean = 2.9 (SD = 0.7)	CGI-SS Mean = 3.8 (SD = 0.6)	NR
			12 wk	CGI-S scale Mean = 2.5 (0.7)	CGI-S scale Mean = 4 (0.6)	<i>P</i> = .0001

ACES: Academic Competence Evaluation Scale; CGI-SS: Clinical Global Impression of Severity of Suicidality; GPA, grade point average; MPH, methylphenidate; NR, not recorded; NS, not significant; SDSC, Sleep Disturbance Scale for Children.  
<sup>a</sup> See Supplemental Table 17 for the definition of quality assessment ratings.

**SUPPLEMENTAL TABLE 31 Adverse Effects**

Adverse Effect	Findings
<b>Physical</b>	
Wt loss <sup>65</sup>	12.0% ( <i>n</i> = 3) receiving ginkgo biloba and 32.0% ( <i>n</i> = 8) receiving MPH
Biting fingernails <sup>47</sup>	39.8% ( <i>n</i> = 4.6) receiving PS omega-3
Crying <sup>47</sup>	57.1% ( <i>n</i> = 3.3) receiving PS omega-3
Talk less <sup>47</sup>	45.4% ( <i>n</i> = 2.6) receiving PS omega-3
Tics <sup>47</sup>	36.6% ( <i>n</i> = 2.4) receiving PS omega-3
Sedation <sup>45</sup>	<i>n</i> = 1 receiving compound herbal supplement
Accidental injury <sup>45</sup>	<i>n</i> = 1 receiving compound herbal supplement
Central nervous symptom unspecified <sup>15</sup>	<i>N</i> = 1 zinc groups and <i>n</i> = 0 placebo
Fever <sup>15</sup>	<i>N</i> = 3 zinc groups and <i>n</i> = 0 placebo group
Head, eyes, ears, and throat unspecified <sup>15</sup>	<i>N</i> = 4 zinc groups and <i>n</i> = 3 placebo group
Musculoskeletal, unspecified <sup>15</sup>	<i>N</i> = 1 zinc groups and <i>n</i> = 4 placebo group
Respiratory, unspecified <sup>15</sup>	<i>N</i> = 8 zinc groups and <i>n</i> = 5 placebo group
Slapped in face <sup>15</sup>	<i>N</i> = 0 zinc groups and <i>n</i> = 1 placebo
School performance <sup>15</sup>	<i>N</i> = 1 zinc groups and <i>n</i> = 0 placebo
Skin, unspecified <sup>15</sup>	<i>N</i> = 2 zinc groups and <i>n</i> = 3 placebo
Upper respiratory infection <sup>15</sup>	<i>N</i> = 2 zinc groups and <i>n</i> = 4 placebo
<b>Gastrointestinal</b>	
Nausea <sup>17,45,46</sup>	5.6% ( <i>n</i> = 2) receiving NDG and 44.4% ( <i>n</i> = 16) receiving MPH 20% ( <i>n</i> = 6) receiving MPH alone <i>n</i> = 2 receiving compound herbal supplement
Dyspepsia <sup>17</sup>	40% ( <i>n</i> = 9) receiving omega-3/6 alone after 1 mo of treatment
Stomach pain <sup>15,46,47,65</sup>	5.6% ( <i>n</i> = 2) receiving NDG and 33.3% ( <i>n</i> = 12) receiving MPH 12.0% ( <i>n</i> = 3) receiving ginkgo biloba and 20.0% ( <i>n</i> = 5) receiving MPH 15.3% ( <i>n</i> = 1.8) receiving PS omega-3 <i>N</i> = 9 zinc groups and <i>n</i> = 13 placebo <i>n</i> = 3 receiving PS omega-3 <i>n</i> = 2 receiving compound herbal supplement
Discomfort <sup>45,48</sup>	
<b>Sleep</b>	
Insomnia <sup>17,47,65</sup>	20% ( <i>n</i> = 6) receiving MPH alone 12.0% ( <i>n</i> = 3) receiving ginkgo biloba and 48.0% ( <i>n</i> = 12) receiving MPH
Hypersomnia <sup>46</sup>	46.9% ( <i>n</i> = 2.9) receiving PS omega-3 16.7% ( <i>n</i> = 5) receiving NDG and 0 receiving MPH
Trouble falling asleep <sup>46</sup>	2.8% ( <i>n</i> = 1) receiving NDG and 13.9% ( <i>n</i> = 5) receiving MPH
Nightmares <sup>47</sup>	28.6% ( <i>n</i> = 2.9) receiving PS omega-3
Disturbance <sup>15,45</sup>	<i>n</i> = 1 receiving compound herbal supplement <i>N</i> = 1 zinc groups and <i>n</i> = 4 placebo group
<b>Appetite</b>	
Suppression <sup>17</sup>	70% ( <i>n</i> = 21) receiving MPH alone, 6.7% ( <i>n</i> = 2) receiving omega-3/6 alone, and 33.3% ( <i>n</i> = 10) receiving combined
Decreased <sup>45-47,65</sup>	2.8% ( <i>n</i> = 1) receiving NDG and 36.1% ( <i>n</i> = 13) receiving MPH 20.0% ( <i>n</i> = 5) receiving ginkgo biloba and 76.0% ( <i>n</i> = 19) receiving MPH 39.8% ( <i>n</i> = 3.1) receiving PS omega-3 <i>n</i> = 1 receiving compound herbal supplement
Increased <sup>46</sup>	13.9% ( <i>n</i> = 5) receiving NDG and 11.1% ( <i>n</i> = 4) receiving MPH
Appetite change unspecified <sup>15</sup>	<i>N</i> = 7 zinc groups and <i>n</i> = 4 placebo
<b>Symptom</b>	
Headache <sup>15,47,48</sup>	<i>n</i> = 1 receiving PS omega-3 33.7% ( <i>n</i> = 2.6) receiving PS omega-3 <i>N</i> = 7 zinc group and <i>n</i> = 13 placebo
Daydream <sup>47</sup>	57.1% ( <i>n</i> = 2.4) receiving PS omega-3
Dizziness <sup>47</sup>	16.3% ( <i>n</i> = 2.6) receiving PS omega-3
Drowsiness <sup>47</sup>	30.6% ( <i>n</i> = 1.9) receiving PS omega-3
Euphoric <sup>47</sup>	38.8% ( <i>n</i> = 3.0) receiving PS omega-3
Anxious <sup>15,47</sup>	49.0% ( <i>n</i> = 2.7) receiving PS omega-3 <i>N</i> = 8 zinc groups and <i>n</i> = 6 placebo group

**TABLE 31** Continued

Adverse Effect	Findings
Irritable <sup>15,47</sup>	72.5% ( <i>n</i> = 3.8) receiving PS omega-3 <i>N</i> = 14 zinc groups and <i>n</i> = 10 placebo group
Sad, unhappy <sup>47</sup>	39.8% ( <i>n</i> = 2.4) receiving PS omega-3
Uninterested <sup>47</sup>	27.8% ( <i>n</i> = 3.0) receiving PS omega-3
Emotional lability <sup>45</sup>	<i>n</i> = 2 receiving compound herbal supplement
Affective blunting <sup>15</sup>	<i>n</i> = 1 zinc groups and <i>n</i> = 1 placebo
Depression <sup>15</sup>	<i>N</i> = 9 zinc groups and <i>n</i> = 5 placebo group
Fatigue <sup>15</sup>	<i>N</i> = 4 zinc groups and <i>n</i> = 6 placebo group
Harm to self and others <sup>15</sup>	<i>N</i> = 1 zinc groups and <i>n</i> = 0 placebo group
Hypersensitivity reaction <sup>15</sup>	<i>N</i> = 3 zinc groups and <i>n</i> = 1 placebo group
Stereotypical behavior <sup>15</sup>	<i>N</i> = 4 zinc groups and <i>n</i> = 5 placebo

MPH, methylphenidate; NDG, Ningdong granule; PS, phosphatidylserine.

Outcome SOE Grade	No. Studies and Design (N Patients)	Study Limitations	Directness	Consistency	Precision	Reporting Bias	Findings
Pharmacologic versus nonpharmacologic Changes in standardized symptom scores Insufficient	5 RCTs (356)	Medium	Direct	Inconsistent	Imprecise	Unclear	Five RCTs contained reports of changes in symptom scores. <sup>17,25,26,46,55,65</sup> One study contains a report of a significant change in standardized symptom scores favoring MPH medication compared with supplementation of ginkgo biloba. In 2 studies, no significant differences between groups supplemented by omega-3/6 alone or in combination with MPH medication or Ningdong granule and MPH medication was identified by standardized symptom scores. In 2 studies, no significant differences were found between MPH medication and either neurofeedback or behavioral therapy groups on changes in standardized symptom scores.
Neurofeedback Changes in standardized symptom scores Insufficient	4 RCTs (353)	Low	Direct	Inconsistent	Imprecise	Unclear	Four RCTs contained reports of changes in symptom scores. <sup>19,34,55,68,69</sup> In 3 of the 4 studies, researchers demonstrated improvement in standardized symptom scores compared with an inactive control, a behavioral intervention, and standard pharmacologic treatment. One study revealed no difference relative to cognitive training, and 1 study revealed no difference compared with usual care.
Cognitive training Changes in standardized symptom scores Low	9 RCTs (768)	Medium	Direct	Inconsistent	Imprecise	None	Nine RCTs contained reports of changes in symptom scores. <sup>18,23,24,28,34,35,41,68,69,71,72,75</sup> Two fair-quality RCTs (out of a total of 5) in which the Cogmed cognitive training program was evaluated contained demonstrations of a significant improvement in standardized scale scores at some, but not all, of the follow-up assessment times. A good-quality RCT revealed no treatment effect associated with the Braingame program compared with no intervention, and 2 good-quality RCTs in which computer-based cognitive training programs were compared to neurofeedback revealed either no treatment effect or superiority of neurofeedback relative to cognitive training. In 1 fair-quality RCT, researchers demonstrated a reduction in ADHD symptoms associated with cognitive training relative to no intervention.
CBT Changes in standardized symptom scores Low	2 RCTs (278)	Low	Direct	Consistent	Imprecise	Suspect	A good-quality and a fair-quality RCT revealed statistically significant improvement in ADHD symptom associated with CBT relative to usual care or a limited CBT intervention. <sup>20,21,73</sup>
Child or parent training or behavior Changes in standardized symptom scores Moderate	8 RCTs (1042)	Low	Direct	Consistent	Imprecise	None	Of 6 good-quality and 2 fair-quality RCTs, <sup>16,22,29,32,39,42,59,60,62</sup> only 1 fair-quality study did not demonstrate a significant improvement in ADHD symptoms associated with child or parent training or sleep hygiene.
Omega-3/6 fatty acid supplementation							

TABLE 32 Continued

Outcome SOE Grade	No. Studies and Design (N Patients)	Study Limitations	Directness	Consistency	Precision	Reporting Bias	Findings
Changes in standardized symptom scores Moderate	8 RCTs (880)	Low	Direct	Consistent	Precise	None	Two meta-analyses of 4 and 3 good-quality studies, respectively, revealed no significant differences between omega-3/6 and placebo for parent ratings ( $n = 411$ , SMD $-0.32$ , 95% CI $-0.80$ to $0.15$ , $I^2 = 52.4\%$ , $Q = 6.3$ , $P = .098$ ) or teacher ratings of total ADHD symptoms ( $n = 287$ ; SMD $-0.08$ ; 95% CI $-0.47$ to $0.32$ ; $I^2 = 0.0\%$ ; $Q = 1.2$ ; $P = .56$ ). <sup>36,38,43,44,47,48,50,51,64,77</sup>
Herbal interventions or dietary approaches	3 RCTs (238)	Low	Direct	Inconsistent	Imprecise	None	Three studies contained reports of changes in symptom scores. <sup>15,27,61</sup> In 1 good-quality RCT, researchers demonstrated improvement in ADHD RS scores associated with an elimination diet relative to a nonrestricted diet. One good-quality and 1 fair-quality study did not reveal a reduction in ADHD symptoms relative to placebo for either Mernommet syrup or zinc supplementation.
Other approaches	3 RCTs (252)	Medium	Direct	Consistent	Imprecise	None	Two fair-quality studies did not reveal a reduction in ADHD symptoms relative to placebo or no intervention for melatonin or the Incredible Years program. <sup>53,56,76</sup> Another fair-quality study did not reveal a reduction in ADHD symptoms associated with acupuncture relative to a waitlist control. <sup>40</sup>

CI, confidence interval; MPH, methylphenidate; SMD, standardized mean difference.