



# Entrustable Professional Activities

## EPA 5 for Developmental-Behavioral Pediatrics

### EPA 5: Recommend Appropriate Medical Workup and Evidence-Based Medical, Therapeutic, Educational, and Behavioral Interventions for Children with Developmental-Behavioral Disorders

#### Supervision Scale for This EPA

1. Trusted to observe only
2. Trusted to execute with direct supervision and coaching
3. Trusted to execute with indirect supervision and discussion of information conveyed for most simple and some complex cases
4. Trusted to execute with indirect supervision but may require discussion of information conveyed for a few complex cases
5. Trusted to execute without supervision

#### Description of the Activity

Developmental-behavioral pediatricians (DBPs) have traditionally provided care for children with developmental-behavioral disorders within multispecialty teams, including psychologists, speech/language pathologists, special educators, occupational therapists, and physical therapists. However, even within such interprofessional teams, it is the DBP's role to determine the most appropriate medical workup in an attempt to: 1) establish an etiologic diagnosis to account for the developmental-behavioral disorder, 2) provide targeted surveillance for potential associated medical complications, and 3) provide genetic counseling for families. In the current era of health care reform, in many states, it is now difficult to access insurance coverage for the other members of the multispecialty team, given that all of these allied health services are available through local school districts and are considered by most insurance carriers to be educational rather than medical services. Thus, in addition to their responsibility for medical workup and providing evidence-based medical interventions, DBPs also must have expertise in recommending evidence-based educational, therapeutic, and behavioral interventions for children with developmental-behavioral disorders, working closely with each child's family, school district, and local community providers.

The specific functions which define this EPA include:

1. Pursuing medical workups in an attempt to identify an underlying etiologic diagnosis to account for each child's descriptive developmental-behavioral diagnosis
2. Recommending evidence-based medical interventions for children with developmental-behavioral disorders
3. Recommending evidence-based educational, therapeutic, and behavioral interventions for children with developmental-behavioral disorders in the community

#### Judicious Mapping to Domains of Competence

- Patient Care  
 Medical Knowledge  
 Practice-Based Learning and Improvement



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- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice
- Personal and Professional Development

### Competencies Within Each Domain Critical to Entrustment Decisions

PC 6:	Using optimal clinical judgment
PC 7:	Developing management plans
MK 1:	Demonstrating knowledge
ICS 2:	Demonstrating insight into emotion
ICS 4:	Working as a member of a health care team
SBP 3:	Incorporating cost awareness into care

### Context for the EPA

**Rationale:** Unlike most other pediatric subspecialties, a specific etiologic diagnosis is not made in a majority of children with developmental-behavioral disorders, particularly those with high prevalence, low morbidity problems (such as learning disabilities and ADHD). Thus, DBPs require expertise in tailoring medical laboratory workups based on each child's presenting medical, social, family, and developmental histories and physical and neurodevelopmental examinations. Also, unlike most other pediatric subspecialties, there are only a limited number of evidence-based medical interventions for developmental-behavioral disorders, which are chronic special health care problems. Thus, given the lack of traditional biomedical treatments and the chronicity of the conditions, families often pursue, and educators and allied health professionals often recommend, nonevidence-based alternative therapies. Such nonevidence-based therapies may be potentially harmful and can be financial and time-consuming burdens to families that prevent them from taking advantage of evidence-based educational, therapeutic, and behavioral interventions. Thus, given their training in evidence-based medicine, DBPs also must assume the critical role of recommending and advocating for evidence-based educational, therapeutic, and behavioral interventions for children with developmental-behavioral disorders in their communities.

**Scope of Practice:** DBPs receive referrals from primary pediatric health care providers, schools, and community agencies to offer medically based diagnostic and management services for patients with a broad spectrum of developmental-behavioral concerns from infancy through young adulthood. Whether working within an interprofessional team or independently, it is the DBP's role to pursue a medical workup to attempt to establish an etiologic diagnosis for each child's developmental-behavioral disorder. Within this role, DBPs often collaborate with other subspecialists, such as medical geneticists and child neurologists, particularly if the DBP's initial workup uncovers a genetic etiology or structural brain anomaly. As there are relatively few evidence-based biomedical treatments for children with developmental-behavioral disorders (e.g., stimulant medication for attention deficit hyperactivity disorder [ADHD]), most of the interventions recommended need to be accessed in the community (e.g., early intervention services, special education services, behavior therapy, speech/language therapy, occupational therapy, physical therapy). Thus, given their training in evidence-based medicine, it is also the DBP's role to guide families to pursue evidence-based interventions in the community.



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### Curricular Components That Support the Functions of the EPA

1. Pursuing medical workups in an attempt to identify an underlying etiologic diagnosis to account for each child's descriptive developmental-behavioral diagnosis
  - Describes the importance of identifying an etiologic diagnosis in children with developmental-behavioral diagnoses in terms of providing targeted surveillance for associated medical conditions
  - Describes the importance of identifying an etiologic diagnosis in children with developmental-behavioral diagnoses in terms of providing genetic counseling and support for families
  - Demonstrates a highly cost-effective yet comprehensive approach to medical workup (e.g., genetic/metabolic testing, brain imaging, electroencephalogram (EEG), hearing/vision testing) tailored to each child based on their presenting medical, social, and family histories, developmental history (e.g., static, acute, or progressive patterns of developmental delay), physical examination (e.g., dysmorphic features, neurocutaneous signs), and neurodevelopmental examination
  - Identifies those children who require referral to other medical subspecialists (e.g., medical genetics, child neurology) based on results of the initial medical workup
2. Recommending evidence-based medical interventions for children with developmental-behavioral disorders
  - Identifies evidence-based medical treatments for children with developmental-behavioral disorders, such as:
    - Stimulant medication for ADHD
    - Atypical antipsychotic medication for irritability in children with autism spectrum disorder
    - Selective serotonin reuptake inhibitors for obsessive-compulsive disorder, anxiety, depression
    - Melatonin for reducing sleep onset latency
  - Describes the placebo effect and cognitive dissonance, and why parents are often attracted to alternative therapies that lack evidence for children with developmental-behavioral disorders
  - Identifies non-evidence-based biomedical treatments that are often harmful to children, such as:
    - Nutritional supplements (which are unregulated and can include impurities)
    - Mega doses of vitamins or minerals (which can have toxic side effects)
    - Restricted diets (which can lead to potential nutritional deficiencies)
    - Inappropriate use of and side effects from chelating agents, immunotherapies, hyperbaric oxygen treatment, or antifungal, antiviral, or antibiotic medications
    - Withholding immunizations
3. Recommending evidence-based educational, therapeutic, and behavioral interventions for children with developmental-behavioral disorders
  - Describes which children qualify for early intervention programs
  - Contributes to the development of early intervention Individual Family Service Plans
  - Recommends evidence-based educational interventions for children who do not qualify for early intervention or early childhood special education (e.g., Early Head Start; Head Start)
  - Identifies the categorical diagnoses that qualify children for early childhood special education and special education services under federal law:



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- Autism
  - Blindness/visual Impairment
  - Deafness/hearing Impairment
  - Emotional disturbance
  - Intellectual disability
  - Multiple disabilities
  - Orthopedic impairment
  - Other health impairment
  - Specific learning disability
  - Speech or language impairment
  - Traumatic brain injury
- Contributes to the development of special education Individualized Education Program plans and recommend evidence-based educational interventions (e.g., Orton-Gillingham based programs for reading)
  - Describes Section 504 of the Rehabilitation Act and how to access Section 504 services for children
  - Recommends evidence-based psychological/behavioral interventions (and recognizes the specific indications for each), such as:
    - Parenting interventions for disruptive behavior in preschoolers (e.g., Parent-Child Interaction Therapy; Positive Parenting Program (Triple P; The Wonder Years)
    - Applied behavior analysis for autism spectrum disorder and/or intellectual disability
    - Cognitive behavioral therapy for anxiety/mood disorders
    - Enuresis alarms for enuresis
  - Identifies nonevidence-based therapeutic interventions that result in financial or family time-consuming burdens for families and prevent them from taking advantage of evidence-based educational, therapeutic, and behavioral interventions, such as:
    - Facilitated communication
    - Patterning
    - Vision therapy
    - Sensory integration therapy
    - Auditory integration therapy
    - Craniosacral therapy

Problems that can be referred back to primary care physicians:

- Given the prevalence of developmental-behavioral problems and disorders in the general pediatric population, the limited number of board-certified DBPs, and the long waiting lists for developmental-behavioral consultation, DBPs must be competent in providing comprehensive consultative services (including pursuing or recommending medical studies aimed at making an etiologic diagnosis and sharing evidence-based recommendations for treatment/intervention) for primary pediatric health care providers and must be confident in referring patients back to their primary care providers or co-managing patients as necessary.



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Problems that **generally** require referral/consultation/interprofessional co-management:

- Unlike in most other pediatric subspecialties, a specific etiologic diagnosis is not made in a majority of children with developmental-behavioral disorders, particularly those with high prevalence, low morbidity problems (such as learning disabilities and ADHD). However, when the medical workup uncovers an underlying genetic or metabolic diagnosis, consultation with medical genetics is indicated, both to provide genetic counseling to families and, as some metabolic disorders are treatable, to provide direct treatment. Medical genetics should also be consulted if the initial workup performed by the DBP is negative, but the child appears at higher risk for an underlying genetic diagnosis based on family history, physical examination (e.g., dysmorphic or neurocutaneous features), or based on the severity of the developmental disorder (e.g., severe intellectual disability), given medical genetics specialists' increased expertise and techniques in making genetic diagnoses, such as whole exome sequencing, specific gene mutational analyses, etc. DBPs also often require consultation with child neurology, especially for children found to have abnormal EEGs or brain imaging studies on the initial workup completed by the DBP.

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### Curricular Components Authors

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