Required Specialty Rotation: Developmental and Behavioral Pediatrics at KCHC/UHB and Designated Community Sites

Residents: Pediatric residents at the PL1, PL2 or PL3 level

Prerequisites: none.

Primary Goals for this Rotation

GOAL 1: Prevention. Understand the factors that shape child development and the role of the pediatrician in the prevention of developmental and behavioral problems in children.

- 1 : Describe key prenatal influences that influence child development.
- 2 : Describe key perinatal influences that influence child development.
- 3 : Describe key postnatal influences that influence child development
- 4 : Describe the environmental, social and family influences that promote or interfere with the optimal development and behavior of a child.
- 5 : Describe the primary care pediatrician's role in prevention: establishing a relationship based on mutual respect/trust with family; provision of anticipatory guidance at key developmental stages.
- 6 : Provide appropriate anticipatory guidance related to common developmental, behavioral and parenting issues:
 - 1) expected milestones and behaviors at child's next developmental level
 - 2) injury prevention related to developmental level
 - 3) behavior management and positive disciplinary techniques
 - 4) normal independence and limit-testing behaviors
 - 5) separation issues
 - 6) promoting healthy eating practices and dealing with common feeding problems
 - 7) promoting speech and language development
 - 8) literacy promotion
 - 9) typical sleep patterns, sleep hygiene, and dealing with common sleep problems
 - 10) toilet training
 - 11) sibling rivalry
 - 12) television, video games, computers and media

GOAL 2: Normal vs. Abnormal. Develop a working knowledge of typical development and behavior for children and families and apply this knowledge in the clinical setting to differentiate normal from abnormal states; assess and provide guidance on common behavioral problems.

- 1 : For each of the domains of child development and behavior:
 - 1) Describe the spectrum of age-appropriate development and behavior and variations from typical for children from birth through adolescence.
 - 2) Discuss how different developmental domains interact and influence one another at different stages of development.
 - 3) Counsel families on the variations within typical development and behavior.
 - 4) Identify "red flags" of abnormal development and behavior.
- 2 : Describe a child's typical progress in each of the following developmental domains, identify signs of abnormal development, and provide parents with counseling concerning:

- 1) Cognitive skills
- 2) Fine and gross motor skills
- 3) Receptive and expressive language
- 4) Social/emotional development
- 5) Self-help and adaptive behaviors
- 3 : Describe a child's typical progress in each of the following areas, identify signs of abnormal development, and provide parents with counseling concerning:
 - 1) Attachment (bonding)
 - 2) Autonomy
 - 3) Temperament
 - 4) Sexuality
- 4: Understand the difference between developmental surveillance, screening and evaluation. Know current AAP Policy Statement on use of formal developmental screening at 9, 18 and 30 months.
- 5: Use standardized, validated and accurate developmental and behavioral screening instruments, plus skills in interview, exam and medical knowledge to identify patterns of atypical development, such as:
 - Developmental screening tools based on parent report (Ages & Stages Questionnaire, M-CHAT)
 - 2. Developmental screening tools based on direct elicitation and measurement of children's behavior (C-NBAS, Denver)
 - 3. Knowledge of use and interpretation of hearing screening (audiometry, otoacoustic emissions)
 - 4. Standardized tools for assess ADD and ADHD
- 6: For common developmental-behavioral issues, describe natural history and diagnostic criteria (applying DSM-PC), implement assessment appropriate to primary care setting, provide counseling, treatment and behavior management recommendations to parents, and referrals to community resources as appropriate:
 - 1) breath-holding spells
 - 2) head banging
 - 3) crying and colic
 - 4) oppositional behavior
 - 5) attention deficit and hyperactivity disorders
 - 6) elimination problems (encopresis, enuresis)
 - 7) adjustment reactions
 - 8) difficulties with parenting and discipline
 - 9) habits (e.g. thumb sucking, nail biting)
 - 10) school avoidance / refusal
 - 11) simple motor tics

GOAL 3: Approach to presenting problems commonly encountered in developmental pediatrics: evaluate and manage common developmental-behavioral signs and symptoms in infants, children, and adolescents.

1 : For developmental-behavioral signs and symptoms:

- 1) perform an appropriate problem-oriented interview and physical examination
- 2) obtain additional information from other sources (e.g. day care, school)
- 3) formulate a differential diagnosis, including typical variants where appropriate
- 4) use structured instruments, assessments, and diagnostic algorithms as indicated
- 5) formulate and carry out a plan for evaluation
- 6) develop a management plan with the patient and family
- 7) provide appropriate counseling to parents or patients
- 8) identify appropriate referral resources
- 9) provide appropriate follow-up, including case management, when multiple disciplines are involved.
- 2 : Describe the approach, evaluation and management of the following developmental behavioral situations:
 - 1) Developmental delay, language delay and/or social deficit in a young child
 - 2) Learning problems and/or attention deficit / hyperactivity in a school age child
 - 3) Child with significant behavior problems
 - 4) Child with mood disturbances and/or somatic complaints
- 3 : Select, perform and/or interpret appropriate developmental tools to arrive at a neurodevelopmental classification, for example use of:
 - 1) NICHQ Vanderbilt questionnaires, Einstein Evaluation of School-related Skills (ESRS), CAT-CLAMS, Child Behavior Checklist (CBCL), CARS
 - 2) Parent-based risk assessment tools such as the Communication and Symbolic Behavior Scales (CSBS-DP)
 - 3) Diagnostic Classification: 0-3 approach
 - 4) Knowledge of common psychoeducational tests (e.g. Bayley-3, PLS-4, WISC-III) used by specialists to evaluate children with developmental and learning problems, including familiarity with use of quotients, percentiles, and the range of scores seen in specific conditions such as mental retardation, learning disabilities, etc.
- 4 : Select, perform and/or interpret appropriate clinical tests to establish a medical etiology of identified developmental / behavioral problems and/or global developmental delay, such as:
 - 1) Blood tests to rule out organic or genetic conditions (such as thyroid function tests, lead screen, genetic testing, metabolic screening)
 - 2) Neuroimaging and other studies (e.g. MRI)

GOAL 4: Common Conditions Generally Referred. Recognize, provide initial management, appropriately refer, and provide primary care case management for common developmental or behavioral conditions that often need additional diagnostic and/or management support from other specialties or disciplines.

- 1 : For the more complex developmental-behavioral problems that require referral for diagnostic or management support listed in #2 below:
 - 1) Describe diagnostic criteria
 - 2) Identify alternative or co-morbid conditions
 - 3) Describe natural history
 - 4) Organize initial assessment, consultation and ongoing coordination of care as the primary care pediatrician

- 5) Be familiar with referral and community resources available
- 2 : Recognize and provide initial management, appropriately refer and provide primary care case management for the following developmental-behavioral conditions:
 - 1) Developmental-behavioral disorders associated with chronic physical health conditions (e.g., spina bifida, cleft lip, cleft palate, sensory impairment, Tourette's disorder, extreme prematurity)
 - 2) Cognitive disabilities (e.g., mental retardation)
 - 3) Language and learning disabilities
 - 4) Motor disabilities (e.g., cerebral palsy)
 - 5) Autistic spectrum disorders
 - 6) Externalizing disorders (e.g., violence, conduct disorder, antisocial behavior, oppositional defiant disorder, school failure, school phobia, excessive school absences, firesetting)
 - 7) Internalizing disorders (e.g., adjustment disorder, anxiety disorder, mood disorders)
 - 8) Sensory integration disorders
 - 9) Attention deficit disorders
- 3 : Serve as case manager or active team participant for individuals with developmental and behavioral disorders through the primary care setting, demonstrating skills including:
 - 1) Communication and record-sharing with other disciplines
 - 2) Maintenance of a complete problem list
 - 3) Managing the "whole patient"
 - 4) Family empowerment and communication
 - 5) Maintain patient and family confidentiality (HIPAA)
- 4 : Be familiar with the role of interventions, community resources, and specialists that work with children with developmental-behavioral disorders:
 - 1) Audiology
 - 2) Child Life
 - 3) Child Psychiatry
 - 4) Child Psychology
 - 5) Developmental-Behavioral Pediatrics
 - 6) Pediatric Neurology
 - 7) Early Intervention
 - 8) Occupational Therapy
 - 9) Physical Therapy
 - 10) Speech and Language Therapy
 - 11) Educational System and Teachers (preschool and school age)
 - 12) Family counseling
 - 13) Feeding specialists
 - 14) Physical Medicine and Rehabilitation
 - 15) Pharmacotherapy
 - 16) Social Work
 - 17) Vision Specialist
 - 18) Other (support groups, parent training, etc.)

- GOAL: Pediatric Competencies in Brief. Demonstrate high standards of professional competence while working with children who present with developmental and behavioral concerns. [For details see Pediatric Competencies.]
- **Competency 1: Patient Care.** Provide family-centered patient care that is development- and age-appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.
- 1 :Use a logical and appropriate clinical approach to the care of children who present with developmental and behavioral concerns, applying principles of evidence-based decision-making and problem-solving.
- 2 :Provide sensitive support to children who present with developmental and behavioral concerns, and their families.
- **Competency 2: Medical Knowledge.** Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.
- 1 :Demonstrate a commitment to acquiring the knowledge needed in developmental and behavioral pediatrics.
- 2 :Know and/or access medical information efficiently, evaluate it critically, and apply it appropriately to care of children and families dealing with developmental and behavioral concerns.
- **Competency 3: Interpersonal Skills and Communication.** Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.
- 1 :Communicate skillfully with families and children, and provide appropriate patient education and reassurance for conditions common to developmental and behavioral pediatrics.
- 2 :Communicate effectively with physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.
- 3: Maintain accurate, legible, timely, confidential and legally appropriate medical records in this clinical setting.
- **Competency 4: Practice-based Learning and Improvement**. Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.
- 1 :Use scientific methods and evidence to investigate, evaluate, and improve patient care practice related to developmental and behavioral issues.
- 2 :Identify personal learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.

Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

- 1 :Demonstrate personal accountability to the well-being of patients (e.g., following-up on results, writing comprehensive notes, and seeking answers to patient care questions).
- 2 :Demonstrate a commitment to professional behavior in interactions with staff and colleagues.
- 3 :Adhere to ethical and legal principles, and be sensitive to diversity.

Competency 6: Systems-Based Practice. Understand how to practice high-quality health care and advocate for patients within the context of the health care system.

- 1 :Identify key aspects of health care systems as they apply to care of individuals and their families dealing with mental health, behavioral or developmental concerns, including cost control, billing, and reimbursement.
- 2 :Demonstrate sensitivity to the costs of clinical care for patients who present with developmental or behavioral concerns, and take steps to minimize costs without compromising quality.
- 3 :Recognize and advocate for families who need assistance to deal with system complexities and identify resources to meet their needs.
- 4 :Recognize the limits of one's knowledge and expertise and take steps to avoid medical errors.

Procedures

GOAL: Diagnostic and screening procedures. Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used

by the pediatrician in practice.
ADHD home and school questionnaires
Audiometry evaluation: interpretation
Behavioral screening questionnaire
Developmental screening test
Hearing screening
Language screening test
Vision screening

Source

Adapted from Kittredge, D., Baldwin, C. D., Bar-on, M. E., Beach, P. S., Trimm, R. F. (Eds.). (2004). APA Educational Guidelines for Pediatric Residency.