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The Role of Primary Care Physicians in Attention Deficit Hyperactivity Disorder (ADHD)

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Attention Deficit Hyperactivity Disorder (ADHD) has drawn substantial public attention over the last 30 years. Research regarding the prevalence, etiology, diagnosis and treatment of ADHD has burgeoned over the last decade and been summarized at the National Institutes of Health (NIH) Consensus Conference in 1998 and in several evidence-based reviews.^{1, 2, 3, 4} Clinically, the core symptoms of ADHD-inattention, hyperactivity, and impulsivity- have been defined as well as the scope of functional problems children with ADHD experience. However, public sentiment with respect to ADHD is variable, with some describing ADHD as a common neurobehavioral disorder and others seeing the diagnosis as more controversial.

Over the last two years, the American Academy of Pediatrics (AAP) has published evidence-based guidelines for the diagnosis and treatment of ADHD in primary care,^{5, 6} asserting that primary care clinicians should develop competence in its diagnosis and treatment for several reasons. First, ADHD is quite common in young children. Current prevalence estimates for school-aged children range from 4-12%.^{1, 5} In fact, ADHD is one of the three most common chronic disorders seen in primary care settings, the other two being asthma and chronic otitis media with effusion.⁷ Second, ADHD causes significant impairment in children's lives. The symptoms associated with ADHD interfere with attainment of many of the normal developmental milestones of childhood and adolescence that primary care clinicians monitor, such as academic, fine motor, and social and adaptive skills. As a result, children with ADHD often experience school failure, poor family and peer relations, low self-esteem, as well as other emotional, behavioral and learning problems.⁸ Third, primary care clinicians are frequently asked by parents and teachers to evaluate children with school problems for ADHD. Lastly, families and children with ADHD often encounter stigma in the community regarding ADHD and its treatment. The primary care clinician has an important role to play in presenting evidence-based information regarding ADHD to families and helping families develop a long-term plan for success.

With all of the reasons for primary care doctors to be concerned about the identification and treatment of ADHD, thankfully, research has demonstrated that both psychotropic medication and behavioral modification therapy can redirect the developmental trajectory of most children with ADHD. Thus, it is critical for primary care clinicians to develop competency in the early recognition, identification, and treatment of this condition. However, many clinicians have stressed the challenges inherent in taking any published guidelines and operationalizing them into their daily clinical care routine, practice environment, and health care system. In addition, clinicians have commented on barriers unique to ADHD management.

With the publication of the AAP's guidelines for ADHD in primary care, several critical challenges to implementation have become increasingly evident. First, the ADHD guidelines suggest a collaborative care model for both the diagnostic and treatment process. Clinicians are charged to work with families and children, in collaboration with school personnel, to determine whether or not a child has ADHD and any possible coexisting conditions, to identify target treatment outcomes, and to assure that the child with ADHD functionally improves over time. While clinicians have partnered with parents around anticipatory guidance, this collaborative care model may represent a shift for some clinicians with respect to managing a medical problem. Second, caring for children with ADHD requires a shift in focus from an acute care model (otitis media, viral syndromes, pharyngitis) to a chronic care model (asthma, diabetes) for each aspect of the primary care office system (scheduling, registration, triage, history and physical, treatment plan, and follow-up). The flexibility to shift to a chronic care model may be challenging for each member of the health care team, including families. In addition, because care of the child with a chronic disorder impacts on each aspect of the office system, this shift can not occur without primary care clinicians and office staff partnering together to develop a seamless system of care for families and children with ADHD. Finally, each office setting has a unique set of community resources from which to draw upon. These resources might include different staff support and skill levels, organizational and financial mechanisms, family and child sociodemographic and clinical characteristics, and access to mental health and educational services. Thus, solutions for implementation in one setting may not be transferable to another without significant modification.

The recommendations stated in the AAP ADHD guidelines provide important parameters for implementing evidence-based ADHD diagnosis and treatment and are reviewed below. The evidence-base for the recommendations has been well articulated previously and is not addressed in this paper.^{1,4,5,6} Instead, this paper focuses on critical questions offices will need to consider in order to implement the recommendations contained in the two AAP guidelines.

Diagnosing ADHD in the primary care setting

The AAP guidelines for the identification/diagnosis of ADHD are listed in Table I. The first recommendation confirms the AAP's perspective that primary care offices should serve as an initial entry point for the diagnosis of ADHD for young children. Briefly, for all children 6 to 12 years who present with symptoms of ADHD and/or school underachievement, this recommendation states that primary care offices should initiate an evaluation for ADHD. Inherent in this recommendation is a two-step process in primary care settings with the first step, articulated in this first recommendation, addressing an office-based system for identifying children with these broad types of problems.

The remaining five recommendations focus on the second step, specifically the evaluation of a child for ADHD. The second recommendation requires that DSM-IV criteria be utilized to diagnose ADHD.⁹ The DSM-IV identifies eighteen specific symptoms children with ADHD are found to have more frequently than their peers (see article by Martin T. Stein in this same issue for review of the DSM-IV criteria for ADHD chapter). Many school-age children have some of these symptoms, either transiently or in a mild form, and it is important to establish the high frequency of symptoms, in order to make the diagnosis of ADHD. The combination of symptoms displayed allows for the identification of three different subtypes of ADHD: a hyperactive/impulsive subtype (ADHD-HI), in which a child has at least 6 of 9 hyperactive/impulsive symptoms; an inattentive subtype (ADHD-IA), in which a child has at least 6 of 9 inattentive symptoms; and a combined subtype (ADHD-CT), where a child shows at least 6 symptoms in both categories. The DSM-IV also states that children and adolescents with this disorder must be distinguished from children with other disorders by determining that symptoms: 1) began prior to the age of seven years, 2) occur across multiple settings (e.g. in

school, home, other activities, and with peers), and 3) are associated with clinically significant functional impairment.⁹

The third and fourth recommendations focus more on the specifics for acquiring evidence regarding the *DSM-IV* criteria. These recommendations stress the importance of obtaining independent evidence from two sources, usually the parent(s) or caregiver(s) and the teacher (s). These criteria can be obtained either through a narrative format during the clinician's history and physical, or through the use of an ADHD-specific rating scale such as the Vanderbilt ADHD Diagnostic Parent and Teacher Rating Scales (VADPRS and VADTRS), Conners' Parent and Teacher Rating Scales (CPRS-R and CTRS-R), and the Swanson, Nolan and Pelham Questionnaire IV Rating Scale (SNAP-IV). Use of broadband scales like Achenbach's Child Behavior Checklist (CBCL) or Conners' Global Problem Index (CGI-P and CGI-T) is not recommended in making the diagnosis of ADHD, although these tools can be helpful in identifying other types of behavior problems.

The last two recommendations address other diagnostic tests that should or should not be included in the ADHD evaluation. The fifth recommendation stresses the importance of identifying other medical, psychosocial, behavioral or neurological conditions that may either mimic the symptoms of ADHD or co-occur in the same child and compound a child's level of impairment. Common co-existing conditions and their prevalence rates are Oppositional Defiant Disorder (35%), Conduct Disorder (26%), Anxiety (26%), and Depression (18%).¹ Some estimate that as many as 11-22% of children with ADHD may have Bipolar Disorder.¹⁰ Learning disabilities have also been noted in 12-60% of children with ADHD.^{1, 5} Interestingly, the sixth recommendation identifies several tests that are not routinely indicated in establishing the diagnosis of ADHD. These are specifically complete blood counts, lead tests, thyroid function tests, continuous performance tests, and brain imaging studies. Unless the history and/or physical suggest an alternative diagnosis than ADHD warranting a further work-up, these tests are not relevant in an ADHD evaluation.

The challenge inherent in implementing these guidelines is finding a delivery system that works for a specific office setting. Each office team will need to address for itself the who, what, where, when and how of each of these recommendations. Table II presents a worksheet for offices to utilize along with sample examples of choices offices have made. For example, for step one of the process delineated in the first recommendation, children could be identified as having school or behavioral problems by a variety of mechanisms. A poster with several open-ended questions regarding behavior and school functioning could be displayed in the waiting room to trigger families to address any concerns with their clinicians at either a well or sick visit. Pre-visit screening questionnaires could be administered upon registration or during triage by nursing or medical assistant staff who score the instruments and share the information with the clinician. Alternatively, clinicians could naturally work open-ended questions into well-child visits and sports physicals with a visual trigger provided on the history and physical form. Similarly, a variety of options could be utilized to initiate an evaluation. Positive responses to posters, questionnaires or clinician probes could result in initiation of an evaluation at that visit or prompt a follow-up visit. Front desk staff could be trained to request a purpose for each scheduled visit and provide any necessary pre-visit work to families prior to an initial visit with the primary care clinician.

Regarding recommendations two through six, the diagnostic process rests on collecting information from multiple settings to determine if a child meets the *DSM-IV* criteria for ADHD. Obtaining the *DSM-IV* criteria thus requires collaboration between families, schools, and primary care clinicians. These recommendations raise a number of important decision points for office teams. Who will guarantee this information is obtained: the front office staff, a nurse and/or medical assistant, a social worker or mental health worker (if available in the

office setting), the clinician, the family or a combination of the above? What will be utilized: a narrative approach, specific rating scales, or both? If specific rating scales are utilized, a number of follow-up questions must be addressed including: 1) which rating scale(s) will be used, 2) when will parents fill them out (prior to the first visit, at the first visit), 3) where will they be filled out (in the office waiting room, directly onto a computer, at home, or with an identified office staff person), and 4) who will be responsible for scoring them (office staff, clinician)? Are there characteristics of the office that may impact on how the evaluation process works that will need to be taken into consideration? These characteristics could include family characteristics (limited reading skills, language barriers, cross-cultural issues) and/or health care organization characteristics (integrated delivery system versus mental health carve out, capitated reimbursement versus fee-for-service, accessibility of clinical social worker or care manager, residency training ongoing at the site). Lastly, how will a seamless system be set up that is fiscally sound?

Offices will also need to grapple with those aspects of using the DSM-IV that are not specified in the guidelines. First, the DSM-IV criteria lack a developmental perspective in terms of symptom presentation across the lifespan. The 18 criteria in the DSM-IV are very specific for school-aged children and activities they often engage in. While the AAP guidelines recognize this limitation and only address children ages 6 to 12, the clinician will still be left with responsibility for the preschool child and/or adolescent presenting with ADHD symptoms. Second, the DSM-IV criteria display a dichotomous approach to a diagnostic decision: either a child has ADHD or does not. While the DSM-IV provides for a diagnosis for children who demonstrate several of the symptoms associated with ADHD with an insufficient number of symptoms to meet the DSM-IV diagnostic criteria, specifically ADHD-Not otherwise specified (ADHD-NOS), there is no clarity on how to determine if a child meets criteria for this diagnosis. Similarly, children who receive discrepant ratings from parents and teachers pose a diagnostic and treatment dilemma for the primary care clinical team. For some clinicians, referral to a mental health professional provides an opportunity to clarify the diagnosis. Other primary care clinicians find themselves without professional back-up and must develop parameters for the evaluation of children with an unclear diagnostic presentation.

In implementing the recommendations, it is helpful to approach the answers to these questions as a primary care team. Drawing a flowchart that walks a child and family through the process from initial concern regarding ADHD to an agreed upon diagnosis offers the opportunity to clarify roles and determine potential stumbling blocks for implementing the guidelines. Modifying tools and/or systems that others have tried in their office settings also decreases some very real barriers to implementing the diagnostic guidelines in the primary care office setting.

Treatment of the child with ADHD in the primary care setting

Once a diagnosis of ADHD has been made with confidence, the primary care clinician approaches the issue of treatment of the child with ADHD. The AAP recognized the variation in severity and complexity of children presenting with ADHD and specifically limited the target population cared for in primary care settings to children with ADHD but without major coexisting conditions. They also specified that the guidelines were not intended for use in the treatment of children with mental retardation, autistic spectrum disorders, hearing and visual impairment, medication side effects, or histories of child abuse and/or sexual abuse.⁶ However, there will be primary care clinicians who have limited neurological and mental health referral options in their communities who will need to determine protocols for managing the treatment of children with ADHD who do not meet the guideline criteria.

The AAP treatment guidelines (see Table III) have three major foci. First, the guidelines call for an ongoing partnership regarding treatment between the primary care clinician, child and family, with collaboration from school personnel (recommendations 1 & 2). Second, the guidelines promote the use of evidence-based treatments (recommendation 3). Lastly, the guidelines suggest a process for periodically monitoring the impact of treatment on a child's symptoms and functioning with alterations in targeted outcomes and treatment modalities made as necessary (recommendations 4 & 5). Similar to the diagnostic guidelines, offices need to consider the who, what, where, how, and when of the treatment process. A sample worksheet is provided in Table IV.

The first two recommendations importantly reframe the treatment decision-making process within the context of an ongoing, collaborative care model for ADHD. The first recommendation simply but potently states that clinicians should establish management programs that recognize ADHD as a chronic condition. The second recommendation underscores the important role of children and families in co-management. It also operationalizes for the clinician how to include children and families as equal partners in the design of the ADHD management program by stating that all three parties, in collaboration with school personnel, specify appropriate target outcomes for the ADHD symptoms as well as any co-existing conditions that will guide management decisions. These two recommendations have important implications for primary care clinicians as they determine how the ADHD treatment guidelines will be implemented in their office settings. Primary care teams need to examine the interactions with families at each level, from registration through the office visit, and reconsider whether the current system promotes a longitudinal collaborative care approach. Offices will also need to determine how target outcomes will be identified, recorded and reviewed with children and families and school personnel.

The third recommendation focuses on the role of the clinician in recommending evidence-based treatment, specifically stimulant medication and/or behavioral therapy. The treatment guidelines state that the strength of evidence regarding the effect of stimulant medication use is strong; children appropriately diagnosed with ADHD deserve discussion of possible stimulant medication use. Results of rigorous treatment studies such as the Multimodal Treatment Study of ADHD (MTA) suggest that carefully monitored titrated stimulant medication use is the single most efficacious treatment for ADHD and thus a critical component of treatment for ADHD.^{11,12} Medication is an effective strategy for several treatment objectives including the core ADHD symptoms, classroom performance, relationships with others, and improved self-esteem and self-efficacy. An initial trial of stimulants has been shown to be effective for about 70% of children diagnosed with ADHD.^{13,14} The percentage increases to over 90% if an alternative stimulant is tried following failure of an initial stimulant.¹⁵

Similarly, the evidence base for behavior therapy as an appropriate treatment in reducing ADHD symptoms is also strong.¹⁶ Behavior modification has several theoretical advantages to its use: 1) some families may not choose to use stimulant medications, 2) use in combination with medication may allow for a reduced dose, 3) the therapeutic benefits of stimulant medication usually occur during the day, whereas behavioral interventions may be used in the late afternoon or evening in place of an additional dose of medication, 4) disturbing behaviors not responding to medication respond to behavioral modification methodologies, and 5) behavioral treatment may help to enhance a parent's positive perception of his/her child and of his/her own parenting abilities. It should be noted that the recommendations do not state that behavioral strategies must be tried prior to a trial of medication; both stimulant medication and behavioral modification are equal alternatives for initial treatment.

The implementation of this third recommendation, however, in primary care settings deserves further discussion. It is quite clear from rigorous research studies that stimulant medication choice, dosage and time interval must be carefully titrated to meet the needs of each individual child in order for stimulants to be effective in improving a child's functioning.¹⁷ In fact, several titration trials may be necessary before the most effective medication type, dosing interval, and dosage are identified. Titration also requires collaboration between child, family, school personnel and clinician. School personnel are particularly critical for determining if a dose is impacting on a child's behavior and attention and if the dosing interval is sufficient for smooth functioning during the day. Families are important for determining symptom reduction in the afternoon and early evening as well as for tracking any potential side effects of the medications. Thus, offices will need to address the who, what, when, how and where of developing an effective system for monitoring titrated stimulant medication use.

Similar challenges exist with behavioral modification in that those psychosocial interventions with demonstrated effectiveness in the research literature are usually quite intensive. Second, it should be noted that individual psychotherapy, play therapy and cognitive therapy have not been shown to be effective in decreasing the core symptoms of ADHD. However, many of the strategies utilized by mental health professionals include individual psychotherapy, play therapy and cognitive therapy and not all professionals are experienced in the provision of intensive behavioral modification interventions. Thus, effective behavioral modification interventions may be difficult to access for children, either because they are not available through schools or health insurance plans or because available mental health professionals do not provide these types of services. Clinicians may need to partner with families, school personnel and local advocacy groups such as Children and Adults with Attention Deficit Disorder (CHADD) and the Learning Disabilities Association (LDA) to: 1) improve communication between families, schools and clinicians, 2) ensure that utilization review mechanisms do not limit access to evidence-based behavioral treatments, and 3) advocate for the passage of mental health parity legislation, that permits more open access to behavioral health for children and families, no matter what their insurance type.

Several other treatment strategies not discussed in the guidelines deserve further mention. Families, teachers, and clinicians need to make sure that the behavioral problems associated with ADHD are not masking co-existing learning disabilities. These learning disabilities will usually fall into the category of language-based disorders of learning, impaired mathematics performance, dysgraphia, and pragmatic language disorders related to language use in social contexts. For those children whose developmental and school history suggest possible learning disabilities, identification of learning disabilities will require formal psycho-educational testing for learning problems, identification of areas of disability, and specific learning interventions under an Individualized Education Program (IEP) as stipulated under the Individuals with Disabilities Education Act (Public Law 94-142, amended in 1997 under Public Law 105-17). Children with ADHD also show other learning difficulties, referred to as executive function, including inconsistent performance, delayed automatization of skills, and poor meta-cognitive abilities (organization, time management, and breaking tasks down into smaller components) that are not considered learning disabilities. These problems may be inappropriately attributed to laziness or lack of motivation by both parents and teachers. Direct remediation of learning problems, bypass strategies and meta-cognitive skills training through an IEP mechanism or a 504 Plan are all-important academic tools to utilize in planning curricula for children with ADHD and should be encouraged by primary care clinicians functioning as coaches to families and children.⁸

Similarly, referral to a mental health professional may be indicated for pharmacological or clinical treatment of a co-existing mental health disorder. Mental health professionals may also play an important role if there is significant familial stress related to a child's ADHD or

psychopathology in the family, including domestic violence, substance abuse and other conditions. Children with severe emotional impairment secondary to any mental health disorder, including ADHD, are also eligible for development of an intensive behavioral management plan under the IEP mechanism described above. Clinicians will need to identify how children under their care can access mental health services and how to ensure communication between different members of the care team.

The last two recommendations underscore the importance of systematic monitoring of treatment strategies to determine the impact and adverse side effects through the acquisition of information from parents, teachers, and children. If the selected management for a child has not met targeted outcomes, clinicians, parents, and school personnel should collaboratively evaluate the original diagnosis, use of all appropriate treatments, adherence to the treatment plan, and the presence of previously unidentified co-existing conditions. Mechanisms for communication may include phone, facsimiles, e-mail, or face-to-face conferences. Tools may include narratives notes, behavioral checklists, daily report cards regarding behavior, and routine school reports. In addition, offices need to examine how the office system is set up to address chronic health needs, how office visits are staged over time, and the clinician's role in working with children and families to aide them in becoming managers of their own care.

The importance of treating the child and parent as co-managers in the management of ADHD is critical for several reasons. First, adherence to any treatment regimen is improved when families and children participate in the development of that plan. Second, the child in the office today will be an adult struggling with residual ADHD symptoms as an adult tomorrow. The more that a child sees an approach that problem-solves regarding functioning, the better able that child will be to develop strategies for success as an adolescent and adult. Lastly, many clinicians recognize that poor child and parental self-esteem and self-efficacy are common in families with a child with ADHD. Primary care office systems must be sympathetic to parental and child self-concepts and work to instill self-confidence in both the parent and child. This may be particularly important if a child's parent also demonstrates symptoms of ADHD and/or learning disabilities, a possibility that is not uncommon given the genetic nature of ADHD. Considering the chronic nature of ADHD, parents and children must be encouraged to take ownership of the condition, working as equal partners with clinicians and school personnel, to manage the difficulties of ADHD and build on their individual strengths.

Summary

The AAP diagnostic and treatment guidelines provide important evidence-based recommendations for the care of children with ADHD in primary care settings. Implementing the guidelines in primary care requires a pro-active approach on the part of clinicians and office staff to develop a system of care for children with ADHD in the office setting. Changes in office systems are most sustainable when they are well-defined (delineating the who, what, where, when and how), small in scope initially, and tested to determine how successful the proposed change has been. This will require that key office team members commit to defining the who, what, where, when and how of each recommendation and to testing the solution proposed.

The task can seem daunting to even the most committed clinician and office team. However, several organizations, including the AAP ADHD Toolkit project, the National Institute for Children's Healthcare Quality (NICHQ), and several research studies funded by the National Institute of Mental Health (Improving Pediatricians' Use of AD/HD Guidelines and the San Diego ADHD Project (SANDAP)), have been working with primary care clinicians since the guidelines were published to identify necessary steps to be taken for clinicians to implement the guidelines. These efforts have led to a better understanding of the steps that physicians and

offices need to consider as they seek to implement these guidelines. These projects are working to develop diagnostic and treatment tools as well as sample flowcharts to aide offices as they develop a delivery system design. These tools and flow charts can be easily modified to work in different settings, and can substantially decrease the start-up time for implementing the guidelines in the office setting. In addition, the AAP is working with health plans and legislatures to address some of the reimbursement issues that challenge offices intent on providing high-quality, evidence-based care in primary care. The ultimate goal is that the 4-12% of children with ADHD in the population experience a reversal of a predictably negative developmental trajectory, and that they, their families, their peers, and their teachers, see these children as functioning, productive, and important members of society. The efforts involved are entirely worth it, especially to hear a parent say "I enjoy being with my child now!" and to see the confident, shy smile of a child who is experiencing success for the first time.

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Table I**AAP Guidelines for Diagnosis and Evaluation for the Child with ADHD**

Recommendation #1: In a child 6 to 12 years old who presents with inattention, hyperactivity, impulsivity, academic underachievement, or behavior problems, primary care clinicians should initiate an evaluation for ADHD.
Recommendation #2: The diagnosis of ADHD requires that a child meet DSM-IV criteria.
Recommendation #3: The assessment of ADHD requires evidence directly obtained from parents or caregivers regarding the core symptoms of ADHD in various settings, the age of onset, duration of symptoms, and degree of functional impairment.
Recommendation #3A: Use of these scales is a clinical option when evaluating children with ADHD.
Recommendation #3B: Use of broadband scales is not recommended in the diagnosis of children for ADHD, although they may be useful for other purposes.
Recommendation #4: The assessment of ADHD requires evidence directly obtained from the classroom teacher (or other school professional) regarding the core symptoms of ADHD, the duration of symptoms, the degree of functional impairment, and coexisting conditions. A physician should review any reports from a school-based multidisciplinary evaluation where they exist, which will include assessments from the teacher or other school-based professional.
Recommendation #4A: Use of these scales is a clinical option when diagnosing children with ADHD.
Recommendation #4B: Use of teacher global questionnaires and rating scales is not recommended in the diagnosing of children for ADHD, although they may be useful for other purposes.
Recommendation #5: Evaluation of the child with ADHD should include assessment for coexisting conditions.
Recommendation #6: Other diagnostic tests are not routinely indicated to establish the diagnosis of ADHD.

Table II

ADHD Diagnostic Guidelines Worksheet

DIRECTIONS: Utilize this table to delineate the who, what, where, when and how of each step in the diagnostic process.
STEP 1. Child identified as possible ADHD.
Example #1: Parent request during well child or acute visit for all children ages 6-12 years, triggers clinician inquiry; if concerns, evaluation packet given
Example #2: Screening questionnaire given to parent by receptionist when registers for well visits only; questionnaire scored by nurse/MA and clinician reviews with family; if concerns, referral to on-site psychologist for evaluation for ADHD
Proposed plan for office:
STEP 2. Child evaluated for ADHD and common co-existing conditions; requires information on ADHD symptoms, co-existing condition symptoms, and functioning from two sources.
Example #1: Evaluation packet includes Vanderbilt rating scale (ADHD and co-existing Conditions) that parent must complete and get teacher to complete; appointment is not Scheduled until packet returned. Clinician scores packet with family and child.
Example #2: Extended appointment is made with clinician who reviews DSM-IV criteria for ADHD and co-existing conditions with family. Clinician also contacts school and obtains similar information from teacher as well as recent grades and academic performance. Follow-up appointment is then scheduled to review information with family and child.
Proposed plan for office:
STEP 3a. Material reviewed with family and diagnosis made; uncomplicated presentation.
Example #1: At follow-up appointment, clinician reviews materials with family and child. Reading materials regarding ADHD and its treatment are given to the family to review with a follow-up appointment scheduled to discuss treatment options.
Example #2: Clinician meets with family to state probably ADHD diagnosis made; refers to classes and counseling offered by on-site psychologist regarding what is ADHD and how it is treated.
Step 3 b. Material reviewed with family and child; complicated presentation such as possible ADHD-NOS, discrepant results or multiple environmental issues.
Example #1: Clinician reviews results with family and school in order to clarify diagnosis.
Example #2: Clinician refers family to mental health provider for consultation regarding diagnosis.
Proposed plan for office:

Table III**AAP Guidelines for the Treatment of the School-Aged Child with ADHD**

Recommendation #1: Primary care clinicians should establish a treatment program that recognizes ADHD as a chronic condition.
Recommendation #2: The treating clinician, parents, and child, in collaboration with school personnel, should specify appropriate target outcomes to guide management.
Recommendation #3: The clinician should recommend stimulant medication and/or behavioral therapy as appropriate to improve target outcomes in children with ADHD.
Recommendation #3A: For children on stimulants, if one stimulant does not work at the highest feasible dose, the clinician should recommend another.
Recommendation #4: When the selected management for a child with ADHD has not met target outcomes, clinicians should evaluate the original diagnosis, use of all appropriate treatments, adherence to the treatment plan, and presence of coexisting conditions.
Recommendation #5: The clinician should periodically provide a systematic follow-up for the child with ADHD. Monitoring should be directed to target outcomes and adverse effects, with information gathered from parents, teachers, and the child.

Table IV

ADHD Treatment Guidelines Worksheet

STEP 1. Office develops collaborative, longitudinal chronic care model for the management of ADHD in the office setting.
Example #1: Office develops database system that can track office visits, functioning, and treatments received.
Example #2: Clinicians in office choose to restructure visits to provide optimal time for the treatment decisions.
Proposed plan for office:
STEP 2. Office sets up system to work with families and children to determine target outcomes and treatment options in collaboration with school personnel.
Example #1: Office utilizes management plan form with family and places in chart.
Example #2: Office designates on site allied health professional to meet with family.
Proposed plan for office:
STEP 3 a. Office titrates stimulant medication to achieve optimal functioning with minimal side effects; if one stimulant does not work, other stimulants are tried.
Example #1: Family and child return on a weekly basis. At each visit as changes are made, follow-up forms are given to the family to complete and to give to the teacher. These are reviewed on a weekly basis.
Example #2: Email contact is utilized between provider, parent, and school personnel to determine appropriate dose.
STEP 3 b. Office helps child and family to access behavioral modification therapy.
Example #1: Office refers to available behavioral modification therapy through managed care plan.
Example #2: Office provides training for allied personnel in behavioral modification.
Proposed plan for office:
STEP 4. Office establishes system for monitoring target outcomes, ADHD symptoms, child functioning and adverse effects using information acquired from the family, child and school personnel. If the targeted outcomes are not improving, a mechanism is in place to re-evaluate both the diagnosis and treatment.
Example #1: Computerized database triggers letter to family with follow-up forms to be completed by parent and teacher. The clinician reviews these forms with the family and child at the following visit.
Example #2: Families are encouraged to attend monthly group visits at 5pm. At these visits, the child's status is monitored, group support and education is offered, and medication is adjusted (if applicable).
Proposed plan for office: