Clinical Information System (CIS) Baselets Help Standardize Evaluation of ADHD in the KP Colorado Region

By Mark Groshek, MD

Introduction

For more than three years, nearly all patient charting in the Kaiser Permanente (KP) Colorado Region (KP Colorado) has been done in an electronic medical record called the Clinical Information System (CIS), a national version of which is currently being introduced to several KP Regions. One powerful tool in CIS is the baselet, a module containing a set of prewritten items that can be inserted into a clinical progress note. The purpose of this article is to describe a baselet instituted in KP Colorado to help streamline telephone intake of pediatric health plan members whose parents call to schedule an evaluation for attention deficit and hyperactivity disorder (ADHD), often because the child is having problems at school.

Organizational Context for Creating an ADHD Baselet

In KP Colorado during the past two years, the departments of pediatrics, family practice, mental health, health education, and pharmacy have formed the ADHD Task Force (Table 1) to develop tools for standardizing the telephone intake, clinical evaluation, and treatment of health plan members with ADHD. In developing its approach, the ADHD Task Force has drawn from recent guidelines published by the American Academy of Pediatrics (AAP),[1,2] the Agency for Health Care Policy and Research (AHCPR),[3] the National Institutes of Mental Health (NIMH),[4] and national experts[5] as well as from Best Practices guidelines developed in the KP Northern California Region.[6]

To improve the quality of care to our members, the task force has developed seven major goals:

- Assure that patients are properly screened for signs of ADHD as well as for other mental health disorders so that they are seen in the department best equipped to do the initial evaluation.
- Assure that information needed to assist in this evaluation is obtained by clinical staff and practitioners before the initial visit.
- Assure that adequate time is allotted to complete the evaluation.
- Provide tools that allow health care practitioners to adequately assess patients both for signs of ADHD and for signs of other disorders that may coexist with or masquerade as ADHD.
- Provide suggestions for appropriate treatment of ADHD when the condition is diagnosed.
- Provide tools to support close follow-up of patients diagnosed with ADHD.
- Ensure a cooperative relationship between participating departments so that patients can make a smooth transition between them when interdepartmental referral is needed to provide proper care.

Description of the ADHD Baselet: Structure and Processes

Baselets are among the most powerful tools in CIS and are conceptually similar to the macro feature of word processing programs. Both tools are designed to allow users to insert prewritten items into a document by using only a few keystrokes instead of typing the item completely, letter by letter. In CIS baselets, prewritten items may include medical history, results of physical examination, other types of assessment, physician orders, and other plans. Items can be inserted as full text or as coded terms. Any of these items may be selected ("turned on") or deselected ("turned off") by the person who is charting. Selecting an item causes the item to become part of the patient's permanent medical record; deselected items do not be-

Table 1. Attention Deficit and Hyperactivity Disorder (ADHD) Task Force members—KP Colorado	
Co-Chairs:	
Mark Groshek, MD	Pediatrics
Bruce Doenecke, MD	Pediatrics
Carol Annibella, MSN, FNP	Mental Health
Thomas E Boschen, MD	Pediatrics
Elizabeth A Chester, PharmD	Clinical Pharmacy Services
R Edward Gibson, MD	Mental Health
Jeanne Habib, MD	Behavioral Health/Diagnostics; Clinical Management Consulting
Richard E Koken, MD	Pediatrics
Katherine T Morrison, MD	Family Practice
Kathy Noll, MSN, CPNP	Health Education
Nancy Rogers, LCSW	Mental Health
Annette Rothman, RN, CPNP CS	Perinatal Home Care
Michael S Seller, MD	Pediatrics
Wendy S Zerin, MD	Pediatrics

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Quotes From Nurses Using the ADHD Baselet

Caroline Koehler, RN, from the KP Colorado Region's East Medical Facility, says, "The ADHD baselet is clear, concise, and easy to use. It's an effective tool to accurately telephone triage these children. It gives the RNs a clear baselet to direct the patient to the appropriate department for continued care. Overall, it's a very helpful telephone triage tool."

"This has really streamlined the triage process for complicated behavioral concerns," said one nurse of the KP Colorado Region's Westminster Medical Facility. Another said, "It is a great prompting tool for guiding our phone interview for behavioral and emotional issues." A third added "It really has helped me make appropriate triage decisions about whether to send the member to mental health or to pediatrics" for initial evaluation. "It's very thorough and quite user-friendly," said a fourth nurse.

come part of the permanent record.

These features enable clinicians to edit items so that charting is done accurately for each patient. Because the clinician need not type everything by hand, a baselet can increase the speed and completeness of charting. In addition, blocks of text can be added to a baselet to provide instruction and guidance to users of the baselet. In the baselet for ADHD, such blocks include information about diagnostic criteria and treatment approaches for ADHD and for other related disorders. As long as these blocks remain deselected, they do not become part of the patient's permanent chart.

After the clinician has edited the information to accurately reflect the patient's medical history and results of physical examination, this information is committed to the chart. At this point, the information becomes a permanent part of the medical record, and blocks that were not selected are deleted from the chart.

Every clinician and other staff member who provides patient care using CIS has an in-basket.
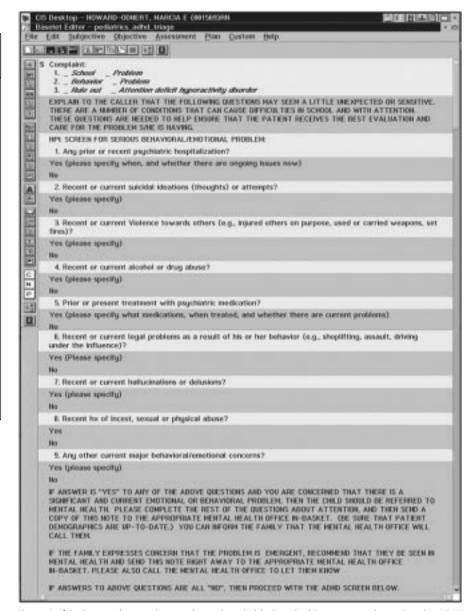

Figure 1 of 2. Captured screen image, shown here in black and white, as seen when using the ADHD Triage Baselet, currently used in the KP Colorado Region. Sections shown with a light gray background, which appear as yellow onscreen, have been selected to become part of the permanent note in CIS. Sections shown with a dark gray background, gray onscreen, have been deselected—either because they are instructional or optional—and do not become part of the permanent note in CIS. They can be selected with a single keystroke, in which case they do become part of the permanent note. Once a section has been committed, it has a white background.

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In addition, each department has one or more departmental in-baskets. When a clinician or other staff member electronically signs a note in CIS, a copy of the note can be sent electronically to another person's in-basket. All clinical staff may look at any in-basket, thus helping to assure that needed actions remain-

ing to be taken will be taken. Each department specifically assigns persons to manage the departmental in-baskets.

Most appointments in the primary care departments in KP Colorado are made by appointment clerks in the KP Colorado call center. Because these clerks do not provide direct

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Figure 2 of 2. Captured screen image.

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patient care, they might not understand the time issues involved. Consequently, in the past, appointments for ADHD evaluation were frequently made in slots reserved for short appointments; this practice left inadequate time for complete evaluation. In addition, although packets containing forms used to assist evaluation were provided to the call center, these forms often were not sent to members—an omission that further hampered initial evaluation. Now, all calls regarding evaluation for ADHD or for behavioral problems (at home or at school) are sent directly to the primary care clinic for triage and appointment scheduling.

The nurse who responds to the phone call opens the ADHD Triage Baselet (Figures 1 and 2). This baselet includes some explanatory text for the nurse in addition to a series of questions designed to assist in screening patients for clinically significant mental health problems. These questions are followed by a series of questions designed to assist in screening patients for signs of ADHD. The baselet includes instructions for the nurse in how to proceed on the basis of information provided by the health plan member. If the screen suggests presence of a clinically significant mental health problem, the nurse informs the caller that his or her needs are most likely to be served by scheduling an appointment with the mental health department. The completed note is routinely sent to the appropriate mental health facility, which then contacts the patient to schedule an evaluation. If the screen suggests that ADHD is the primary issue of concern, the nurse mails a packet of evaluation questionnaires to the patient's family. An appointment is scheduled only after the completed forms are received; this procedure ensures that full information will be available to the clinician at the time of evaluation. If the problem seems to be neither ADHD nor a clinically significant mental health problem, the nurse schedules a general appointment for the patient.

The baselet is designed so that the nurse making the telephone call can complete the baselet either while making the call or immediately afterward. Each yes/no screening ques-

tion is followed by two text blocks, one saying "no" and one saying "yes." This design allows the nurse to select the patient's answer to the question quickly and easily—often using as few as two keystrokes—before proceeding to the next question. The baselet design also allows the nurse the flexibility of adding explanatory text if necessary to explain the member's answer to the question, thus ensuring that important information is not lost.

Conclusion

Feedback from nursing staff that use the ADHD baselet has been positive. These staff members have found that the baselet helps to explain the process of the evaluation thoroughly to health plan members, helps ensure completeness of intake screening, and simplifies charting of the intake encounter.

The ADHD Task Force developed three additional baselet groups in CIS to help streamline and standardize the approach to ADHD at KP Colorado. We plan to introduce those baselets in future *Permanente Journal* articles. ❖

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The Reality of Tomorrow

It is difficult to say what is impossible,
for the dream of yesterday is the hope of today and the reality of tomorrow.

Robert H Goddard, 1882-1945, physicist and rocket scientist