

## What Makes a Great Pediatric EHR?

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A great pediatrician is *caring, attentive, available* and *knowledgeable*; a great pediatric office is full of people with these qualities; and a great pediatric EHR allows the doctor and staff to demonstrate what makes them great. Being able to express a caring persona by adding an alert to a child's record (reminding to ask about Tigger, the family cat) may seem like fluff to the doctor, but the family sees this as a good quality. Let's consider the remaining qualities of a great pediatrician: *attentive, available, and knowledgeable*.

The screenshot displays a patient record for Pam Richardson, 9 years old. The interface includes a header with patient details, a central area for lab results and treatments, and a bottom navigation bar with large, colorful buttons. The lab results section shows a 4/3/2007 Throat Culture, Strep - Post RST (87081) (Closed) with a result of NEGATIVE. The treatments section lists several medications and their dosages, including Zyrtec, Amoxil, and Ciprodex.

Office	Smithton Pediatrics
PT Phone	(555) 555-5555
Wgt/Hgt	27.2727KG,
BMI	15.7

**4/3/2007 Lab Results** 51 of 51 Closed 51

**Items Added/Modified Since Last Encounter (208)**

**Treatments With No Assessment**

- 4/2/2007 : 4/3/2007 Throat Culture, Strep - Post RST (87081) (Closed)  
Throat Culture, Strep - Post RST (87081) (Collected): NEGATIVE

**Assessments and Treatments**

- 4/2/2007 Allergic Rhinitis < 477.9 >
- 4/2/2007 Zyrtec, Syrup 5 mg/5 ml: 1 Teaspoon po QD - Rx: 180 CC, No refills
- 4/11/2005 Otitis Media W/Rupture < 382.01 > (2x)
- 4/11/2005 Amoxil, Liquid 250 mg/5 ml: 3 1/4 Teaspoons po BID x 10 Days - Rx: 325 ml, No refills
- 4/11/2005 Ciprodex, Ear Drops: 4 Drops affected\_ear BID x 10 Days - Rx: 1 Bottle, No refills

Standard Chart Menu SOAP Screen Peds (1270)

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Large Colorful Buttons Facilitate Navigation and Data Entry

A great pediatrician is *attentive*. One Georgia pediatrician, a winner of the HIMSS Davies Ambulatory Care Award of Excellence for his use of the EncounterPRO EHR, shows his attentiveness using one hand to steady an energetic child and the other hand to enter data and orders out of the corner of his eye, facilitated by large colorful buttons. A workflow engine pushes screens in preprogrammed sequences so he is not distracted by screen-to-screen navigation. His focus remains uninterrupted and attentive to the concerned parent. Families like to see the doctor focus on them.

How can an EHR make a pediatrician more *available* to his patients? Taking a call from a patient and being able to access an EHR from home is powerful availability. Spending more time with each patient is another form of availability. A Chicago pediatrician, who also won the HIMSS Davies Ambulatory Care Award using the EncounterPRO EHR, notes that its customizable workflow has made his office so much more efficient that he can see more patients *and* spend more time with each patient. Efficiency allows more time to be available to parents and patients.

A great pediatrician is *knowledgeable*. Obviously, a pediatrician should be perceptive and know his pediatrics. Reminders of needed immunizations, a graph of growth relative to a norm, and a calculated drug dose are nice conveniences (and the EncounterPRO EHR has them), but pediatricians do not really need this decision support. A pediatric EHR should show the physician, at a glance, patient assessments, problems, current medications and treatments. The EncounterPRO EHR filters the SOAP note to display relevant information, while allowing access to all information with the touch of a button. When the physician can quickly “know” the child’s current information, the parent, patient and other physicians will feel that the pediatrician is knowledgeable about the patient.

The EncounterPRO EHR was the first Windows-based pediatric ambulatory EHR (that we know of), debuting in 1995. Its pediatric-specific functionality includes: premature, infant and child growth charts; vaccination tracking; functional development; Barton Schmitt pediatric protocols for telephone triage; and direct integration of vitals and spirometry instruments from Midmark Diagnostics Group and Welch Allyn. Areas of the record can be configured to be inaccessible by patients or guardians. Pediatric-specific reporting includes School Immunization, School Absence and Camp forms; Parent Take Home, Overdue Health Maintenance and a variety of signed immunization reports. The documentation for a HEDIS audit is as simple as the touch of a button.

The vaccine tracking and management module of the EncounterPRO EHR allow interfaces to state immunization registries (in those states that offer an automated upload option) as well as

parent signature capture directly in exam rooms. The module relies on CDC guidelines for notification of when a patient is due for a specific vaccine and recommends a schedule of the remaining doses. It works for patients who are on schedule as well as those who have fallen behind. Access to the CDC guidelines is quickly available.

The EncounterPRO EHR is not just an EHR (CCHIT Certified, meeting ambulatory EHR criteria for 2006), it is the only EHR *workflow management system* for ambulatory care that meets criteria published by the Workflow Management Coalition, a very important distinction; a workflow management system has a *workflow engine* which executes modifiable *workflow definitions* to save users time and effort.

Many pediatricians operate with narrow profit margins. Reducing costs, capturing charges correctly, and increasing the number of encounters can increase profit. If a pediatrician cannot chart a routine otitis media encounter from start to finish in 30 seconds, the EHR will slow him or her down and reduce profit. The EncounterPRO EHR's workflow engine essentially pushes tasks to users as fast as they can accomplish them. However, pediatric offices accomplish tasks in many different orders, so the workflow definitions can be changed to accommodate a specific pediatric group preference.

Other workflow features include to-do lists and task tracking. Communication and follow up tools assist the pediatrician and the entire office team to offer better patient management. Visitors to office sites often comment on the quiet efficiency with which an EncounterPRO EHR-equipped office is run—the workflow management system reduces the need for constant staff interaction about what needs to be done. A simple message and task assignment to the appropriate staff person gets the job done.

SMITHTON Pediatrics Logged On: Support Physician

<b>Room 1</b> SMITHSON, JOHN - 10y (23) Examination <IH> (19)	<b>Trauma Room</b> Empty	<b>Hall 1 8</b>
<b>Room 2</b> DIRTY	<b>IV Room</b> Empty	Hall 2 5
<b>Room 3</b> JOHNSON, TIM - 20y (42) Examination <IH> (2) Administer Hexadrol (Dexamethasone), Inj (IM) 10 mg/1 ml: 0.6 ml IM (2) CC / HPI <IH> (1) Observation Comment* <IH> (1)	<b>Nurse 1</b> MILLER, RICHARD - 11y (18) Examination <IH> (12) Perform or Refer Out Femur X-Ray, 2v (73550) (Right) (8) Perform or Refer Out Hip X-Ray, 2v, unilateral (73500) (Right) (8)	Hall 3 4
<b>Room 4</b> ANDERSON, LIN - 10y (8) Examination <CG> (4) BROWN, CHARLES - 12y (8) Examination <CG> (4) Review Labs <CG> (3)	<b>EXT. Exam Room</b> Empty	Telephone 34/1
<b>Room 5</b> Empty	<b>Nurse 2</b> MOORE, DANIEL - 2w (15) Collect or Refer Out Newborn Screen (3) MARTINEZ, JOSE 1w (12) Collect or Refer Out Newborn Screen (7) THOMPSON-JONES MICHELE - 12y (1) Collect Specimen: Urinalysis (In-house) (81000) (7)	Holding 36/1
<b>Room 6</b> Empty		Remote 14
		Waiting 5
		Checkout 109
		Charts
		Messages (18)
		Todo Items (3/126)
		Utilities
		Configuration
		Logoff

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Office View Tracks Patient, Task, and Provider Workflow in Real Time

Pediatricians and staff often struggle with office flow. Where are the patients? Where are the doctors? Where are the nurses? The EncounterPRO EHR's *office view* lets users see where patients are located, which provider the patient is scheduled to see, what tasks have been ordered for the patient, who is responsible for performing the tasks, and how long each task has been outstanding in minutes (updated continually in real time) – all in one multi-color coded screen. Nurses can easily identify unaccomplished patient care tasks. The office view helps the pediatrician and staff in managing higher patient volume more efficiently. Nurses can see patients in a real time waiting room and monitor phone calls posted in a telephone message room. In the first author's office, the office view, waiting room, and telephone message room each has its own dedicated flat screen, easily observed by any nurse or physician, to continually monitor progress and facilitate help with daily workflow where necessary.

Implementing a pediatric EHR workflow management system has a big payoff. Average per pediatrician income can increase substantially after implementation. Flexible and coordinated workflow, streamlined navigation and communication, and easy-to-create accurate documentation lead to a combination of seeing more patients, spending more time with each

patient, or going home early (the particular emphasis depending on the pediatrician's own business or personal objectives). One solo pediatrician HIMSS Davies Award winner, and EncounterPRO EHR user, doubled his income to over \$300,000 (in 2003) by seeing more patients *and* overseeing more clinical staff who see more patients.

A good pediatric EHR has the necessary pediatric-specific screens, functions, and reports. A great pediatric EHR must be more than the sum of its parts. A great pediatric EHR maximizes the opportunity for pediatricians and staff to demonstrate care, attentiveness, availability and knowledge—while making excellent business sense.