Getting the Most Out of Your EMR

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Stephen McCallister, CPHIT, CPEHR

Disclosures

- Rathkopf
  - I use Allscripts Professional EHR and PM
    - Have been a STAR client
  - I use Meditab/IMS Immunotherapy Module
  - I use Patient Link
  - I use both Apple and Microsoft based systems
- McCallister
  - I have been a NextGen client
  - I use Microsoft (Windows), Apple (iOS) and Google (Android) systems
Overview

• Usage of EHRs
• Templates
• Interfaces
• Portals
• CDS
• Reporting

Usage of EHRs

• EHR adoption rates rose steadily and doubled from 2005 to 2011, reaching 67.8% for family physicians in 2011

Ann Fam Med January/February 2013 vol. 11 no. 1 14-19
Figure 1. The steady rise of EHR adoption by family physicians and other physician specialties, 2001-2011.

ABFM = American Board of Family Medicine; EHR = electronic health record; FP = family physician; NAMCS = National Ambulatory Medical Care Survey.

Data Source: National Ambulatory Medical Care Survey, American Board of Family Medicine Diplomate Database.

Figure 2b. State variations in EHR adoption among family physicians (NAMCS-FP), 2010-2011.

EHR = electronic health record; FP = family physician; NAMCS = National Ambulatory Medical Care Survey.

Note: Number in parentheses in the legend indicates the number of states in each category.

Data Source: NAMCS
Challenges with Meaningful Use
EHR Satisfaction & Usability Diminishing
Will Underwood, MPH | Alan Brookstone, MD

Top 10 Ambulatory EHR Products by Frequency of Attestation - 2012

Source: CMS Meaningful Use Attestation Data – Attestation Year 2011. Limited to ambulatory EHRs up to and including October 2012 (n=317,539)
Would you Recommend this Product to a Colleague?

- 2010 (n=1263)
- 2011 (n=1500)
- 2012 (n=1414)

39% would not recommend their EHR to a colleague

Would you Purchase this EHR Again?

- 2010 (n=1263)
- 2011 (n=1500)
- 2012 (n=1414)

38% would not purchase their EHR again
Satisfaction With Features and Functionality

- 2010 (n=1158)
- 2011 (n=1500)
- 2012 (n=1415)

12% increase in dissatisfaction from 2010-2012

Overall Satisfaction with Customer Support

- 2010 (n=1187)
- 2011 (n=1507)
- 2012 (n=1488)

11% increase in dissatisfaction from 2010-2012
Satisfaction increased 2012
Selected Observations

- Satisfaction and usability ratings are dropping
  - This holds true regardless of specialty type and across multiple vendors

- Patient portals are increasingly being implemented
  - Potential positive impact on patient engagement

- Providers struggling with workload and productivity
Dissatisfaction with EHRs Rising, Survey Finds
By David Pittman, Washington Correspondent, MedPage Today Published: March 07, 2013

- Physician satisfaction and usability ratings for certified EHRs have fallen since 2010
- The number of physicians who said they would not recommend their EHR to a colleague rose to 39% in 2012 from 24%
- 40% of those surveyed said they would not purchase their system again -- a number that rose from 25% in 2012
- 34% said they were "very dissatisfied" with their system, up from 19% in 2010

http://www.medpagetoday.com/PracticeManagement/InformationTechnology/37723

Other findings from the 155-question survey on EHR usage, satisfaction, and meaningful use criteria include:

- Clinicians who were "very satisfied" with the ability for their EHR to improve care dropped from 23% in 2010 to 17% in 2012
- Physicians who were "very dissatisfied" increased from 10% to 20% in that time period
- 32% of responders said they had not returned to pre-EHR implementation productivity compared with 20% in 2010
- Dissatisfaction with ease of use increased from 23% in 2010 to 37% in 2012
- Satisfaction with ease of use dropped from 61% in 2010 to 48% in 2012
If Practices Don't Change, EHRs Lose Money
By David Pittman, Washington Correspondent, MedPage Today
Published: March 04, 2013

- The average physician lost nearly $44,000 over 5 years implementing an electronic health record system
- Just 27% of practices achieved a positive 5-year return on investment -- a number that would rise to 41% with the addition of federal incentives to use EHRs

http://www.medpagetoday.com/PracticeManagement/InformationTechnology/37653

- “…the vast majority of practices lost money because they failed to make operational changes to realize the benefits of EHRs such as ditching paper medical records after adoption…”
- "Practices with a positive return on investment realized savings by eliminating paper medical records, as well as dictation and billing services and positions of, or hours worked by, staff members who were performing services no longer required after EHR adoption”
• "Practices may therefore need encouragement and assistance in changing the way they operate so they can benefit from EHR adoption."

• Practices that saw a positive return on EHR investment increased revenue by more than $114,000 per physician over 5 years, results showed.

• In comparison, practices with a negative return on EHR investment saw revenue increase by an average of only $9,200 per physician in 5 years.

• Primary care practices fared better than specialists.

• 38% of practices with six or more physicians achieved a positive return on investment, compared with 26% of practices with one or two physicians.
• 55% of practices reported a reduction in the cost of paper medical records after EHR adoption
• 22% of practices reported the most common ongoing cost was additional hours of practice time
• 10% of practices noted improved efficiency, allowing them to see more patients each day
• 18% increased revenue through improved billing
• Practices with a practice management system in place to help with billing functions before EHR adoption benefited less on average

When fully functional and exchangeable, the benefits of EHRs offer far more than a paper record can.

• EHRs:
  – Improve quality and convenience of patient care
  – Increase patient participation in their care
  – Improve accuracy of diagnoses and health outcomes
  – Improve care coordination
  – Increase practice efficiencies and cost savings

http://www.healthit.gov/providers-professionals/benefits-electronic-health-records-ehrs
5 Steps to Ensure Better EHR-Provider Outcomes
April 19, 2013
Marion K. Jenkins, PhD, FHIMSS

1. Invest in training
2. Redesign your work flow
3. Set proper expectations
4. Be committed to success
5. Take the long-term view

http://www.physicianspractice.com/5-steps-ensure-better-ehr-provider-outcomes

Invest in training…

- AmericanEHR News - Physicians Need More Training on How to Use EHRs - October 20, 2011
  - New Report Highlights Relationship Between EHR Training and Satisfaction, as well as the Usability of Features Important for Achieving Meaningful Use
Invest in training…

- At least three to five days of EHR training was necessary to achieve the highest level of overall satisfaction.
- Nearly half (49.3%) of respondents indicated that they received three or fewer days of training.
- Ratings on ease of use for basic EHR functions required for Meaningful Use continued to improve with more than two weeks of training.
- Ratings on ease of use for specific Meaningful Use measures varied significantly. More training – at least one week – was correlated with improvement in the reported usability of advanced EHR features (e.g. checking patient formulary, importing medication lists, and medication reconciliation).

Redesign your work flow…

- Should really have been part of your original implementation plan
  - Analyze and map out the practice’s current workflow and processes of how the practice currently gets work done (the current state).
  - Map out how EHRs will enable desired workflows and processes, creating new workflow patterns to improve inefficiency or duplicative processes (the future state)
- If not working for you, rethink it
Set proper expectations…

- Plan for more training than you think you will need
- Plan for more time to get back to prior efficiency
- Establish proficiency standards for office staff
- Expect longer to see return on investment

Be committed to success…

- All providers must fully commit and be in agreement
  - “A house divided against itself cannot stand.”
    - Abraham Lincoln
- Should be provider driven and provider led
- Ongoing process
Take the long term view…

- Change is difficult
- First few months will be much harder
- After 6 months, gets easier
- After 12 months, wouldn’t give up my EHR

31.04% of respondents who had been using their EHR for more than 5 years reported being very satisfied with the ability of their EHR to improve patient care and 29.2% were satisfied.

Similar, but less dramatic, data suggested that clinicians who have used EHRs for 3–5 years experience similar levels of satisfaction with the ability of their EHR to improve patient care.

Not surprisingly, clinicians who have used EHRs for 6 months or less report the lowest levels of satisfaction with their EHRs.

http://www.americanehr.com/blog/2013/03/ehr-ability-to-improve-patient-care-is-an-optimum-period-of-use-needed/
Templates, favorites lists, etc.

- Customize templates in your EHR to mirror your current paper forms
- Create short cuts, auto texts, macros for your common discussions
- If you find yourself typing or dictating the same phrase, create a shortcut for it
- If you are modifying an existing template consistently, can you create a different template
# Allergy, Asthma & Immunology Center of Alaska, LLC

Please fill out fully (circle, check and/or fill in the answer)

Name: ___________________ Age: _______ DOB: __________ M/F: _______ Date: __________

Referred by: ___________________ Additional Physicians: ___________________

Reason for visit: ________________________________________________________________

Local pharmacy of choice: ___________________ Mail order pharmacy: ____________

Circle or check symptoms that apply, or circle none:

**UPPER AIRWAY SYMPTOMS**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhinitis (nose)</td>
<td>Conjunctivitis (eyes)</td>
</tr>
<tr>
<td>No nose</td>
<td>Itchy nose</td>
</tr>
<tr>
<td>Non-disruptive sneezing</td>
<td>Sneezing</td>
</tr>
<tr>
<td>Itchy nose</td>
<td>Runny nose</td>
</tr>
<tr>
<td>Watery eyes</td>
<td>Post nasal drip</td>
</tr>
<tr>
<td>Red eyes</td>
<td>Sinusitis (sinuses)</td>
</tr>
<tr>
<td>Sinus pressure</td>
<td>Nasal congestion</td>
</tr>
<tr>
<td>Sinus pain</td>
<td>Constant &quot;cold&quot; like symptoms</td>
</tr>
<tr>
<td>Upper teeth hurting</td>
<td>Dry nasal membrane</td>
</tr>
<tr>
<td>Headache</td>
<td>Diagnosed nasal polyps</td>
</tr>
<tr>
<td>Bad breath</td>
<td>Loss of taste</td>
</tr>
<tr>
<td>Cheek pain</td>
<td>Loss of smell</td>
</tr>
<tr>
<td>Forehead pain</td>
<td>Itchy roof of mouth</td>
</tr>
<tr>
<td>Sensitivity to odors</td>
<td></td>
</tr>
</tbody>
</table>

**Symptoms occur:**

- Spring: All year
- Summer: With weather changes
- Fall: Randomly
- Winter:                                 

**Symptoms began (How many?):**

Days ago: _____  Months ago: _____
Interfaces

- Labs
- Radiology
- Immunization registry
- Intake forms
- Immunotherapy modules
Patient Portals

A patient portal is a secure online website that gives patients convenient 24-hour access to personal health information from anywhere with an Internet connection. Using a secure username and password, patients can view health information such as:

- Recent doctor visits
- Discharge summaries
- Medications
- Immunizations
- Allergies
- Lab results

Some patient portals also allow patients to:

- Exchange secure e-mail with their health care teams
- Request prescription refills
- Schedule non-urgent appointments
- Check benefits and coverage
- Update contact information
- Make payments
- Download and complete forms
- View educational materials
Meaningful Use Requirements

- Medical practices can meet a number of the meaningful use requirements by using a robust patient portal. The importance of the patient portal will increase with higher patient engagement thresholds for Stages 2 and 3.

- **Stage 1 Core Requirements**
  - Provide patients with an electronic copy of their health information.
  - Provide patients with a clinical summary of the office visit.
  - Enter or modify personal or demographic information.

- **Stage 1 Menu Options**
  - Send reminders to patients for preventive and follow-up care.
  - Provide patients with timely electronic access to their health information.
  - Identify and provide patient-specific educational resources.
Patient Portals: Common Concerns and the Facts

<table>
<thead>
<tr>
<th>Concern</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providers will be flooded with email messages from patients</td>
<td>Rather than being inundated with messages, providers report increased efficiency and appreciate being able to respond to patients at their convenience. Evaluation studies find that telephone volume decreases when secure messaging is introduced.</td>
</tr>
<tr>
<td>Patients may use messaging inappropriately.</td>
<td>Studies find that the communication content of patient messages tends to be appropriate, addressing non-urgent care issues. Best practice is to educate patients about when and how to use secure messaging.</td>
</tr>
<tr>
<td>Clinicians will be unable to bill time for communicating with patients on the portal and the practice will lose revenue.</td>
<td>Portal features have been found to provide cost savings by decreasing indirect and direct labor costs, such as mailing costs for lab results, online billing questions versus telephone, online appointment scheduling, and online appointment reminders.</td>
</tr>
<tr>
<td>Patients will be confused or upset by information contained within the EHR.</td>
<td>Best practices for displaying test results include providing a brief explanation and guidance for any follow-up along with the results.</td>
</tr>
<tr>
<td>Patients won’t adapt to using a patient portal.</td>
<td>A majority of consumers favor using online tools to communicate with providers, obtain lab results online, and make appointments. Medical practices have had success in getting a wide range of patients—including the elderly, lower income, and those with chronic illnesses—to use a patient portal.</td>
</tr>
</tbody>
</table>

Tips for Launching the Portal

- **Advertise the portal** by posting signs, using telephone on-hold messages, distributing flyers and letters to patients, and staff wearing “Ask me about the portal” buttons.
- **Make it everyone’s job to encourage using the portal**, from front-desk and telephone staff to physicians. Develop talking points for staff that encourage patients to sign up and use the portal.
- **Develop policies and procedures** for response times for messages and systems for routing and responding to messages.
Tips for Launching the Portal

- **Phase in the portal rollout** by pilot testing it with a few physicians or clinical sites first. Start by activating a few features and rollout new features over time.

- **Minimize potential loss of patient interest** by simplifying the registration process. Try bulk enrollment or having patients register at kiosks in the clinic. Designate staff to assist patients and troubleshoot.

- **Educate patients** about what kinds of communication are appropriate via the portal, how and when providers will use messaging, and when to check the portal for lab results.
The Top Ten Changes in Patient Expectations for 2013
April 25, 2013 - James Doulgeris, Nicholas Bonvicino, MD

• **Expectation #7: Communication.** Being proactive by using secure e-mail, Web applications, and texting to educate, inform, and respond to patients, and book and confirm appointments, is key to patient retention, patient referrals, and a more efficient operation. A relatively small investment in experienced professionals to prepare the system yields big gains in revenue and reduced costs.


• **Expectation #2: Customer service, technology, and outcomes.** Three fundamental systemic changes — access to information, expectation of quality service, and quality care, and the patient perception that technology has evened the playing field, making skill less of a factor — have taken permanent root. People rarely look for credentials. They look for a solution, and, their search is easier than ever. Change your website from an electronic brochure to an interactive, integrated component of your practice. Doing this is a key element in transitioning from volume to value.

• Here are a few functions that are tailor-made for a patient portal:
  – Patient appointment scheduling
  – Billing and online payments
  – Communication
  – Decision-making

• “Give patients the services they want and you'll reap the benefits in customer loyalty, increased practice efficiency, and reduced costs.”

  [Link to article](http://www.physicianspractice.com/pearls/your-practice-fully-engaged-its-patient-portal)

CDS

• “Clinical decision support (CDS) provides clinicians, staff, patients or other individuals with knowledge and person-specific information, intelligently filtered or presented at appropriate times, to enhance health and better health care. CDS encompasses a variety of tools to enhance decision-making in the clinical workflow.”

  [Link to FAQ](http://www.healthit.gov/providers-professionals/faqs/what-clinical-decision-support)
• Computerized alerts and reminders to care providers and patients based on patient specific data elements, including diagnosis, medication, and gender/age information as well as lab test results
• Clinical guidelines/established best practices for managing patients with specific disease states
• Condition-specific order sets
• Focused patient data reports and summaries
• Documentation templates
• Diagnostic support
• Contextually relevant reference information

Core Measure 11
Clinical Decision Support Rule

Objective:
Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance with that rule.

Measure:
Implement one clinical decision support rule.

Clinical Importance
Clinical decision support (CDS) is an adjunct to help practices deliver the highest quality of care based on a clear and convincing evidence based. It represents one of the most promising tools to mitigate the ever-increasing complexity of the day-to-day care practice of medicine. When implemented successfully, CDS can assure that all patients in a practice receive appropriate and timely preventive services. The effective use of a clinical decision support system means patients get the right tests, the right medications, and the right treatment, particularly for chronic conditions.
Reporting

• Reporting is underutilized in EHRs and can be applied to majority of EHRs. Since the majority EHRs use SQL databases there are a couple of options, such as Excel, Crystal Reports and IBM Cognos, that will work with all EHR SQL databases

Examples…

• Upcoming Well Child Check (WCC) reminder phone calls
  – A report automatically looks for patients that will be due for a WCC in the next month and uploads a file to calling system to remind patients to make an appointment. The phone call even gives them an option to be connected back to the office to make the appointment. This can be done for less than $0.25 per call, much cheaper than having someone call them manually.

• Overdue WCC or immunizations
  – Same procedure as above but looks to see if they need a WCC or Immunization. This way the patients receive a reminder before and after the WCC is due
• Past due balances
  – A call is made to patients regarding a balance on their account over a certain amount of days and is given an option to connect to a billing person.

• State and Federal required reporting
  – Reports are generated at different intervals depending on the reporting agencies requirements and emailed through a secure HIPAA compliant method to the agency:
    • STD – every other day
    • Birth Defects (run every 3 months)
    • Blood Lead– every other day
    • Certain Diseases (e.g. TB) – every other day

• Disease/Symptom Management
  – RSV
    • A report is run prior to RSV season that identifies patients that would be eligible for Synagis.
    • Reports are generated every week during Synagis season to identify those patients that will be due for their shot within the next two weeks. This helps us ensure that we have everything lined up and have the Synagis in the office for them.
    • Another report identifies patients that missed their Synagis so we can address why.

• Some housekeeping reports are auto generated to ensure procedures, labs etc… are followed up on or completed within a specific timeframe.
  • Immunizations
  • Labs
  • Referrals
Allergy and Asthma Examples

- Reminder to all patients < 18 y.o. with an asthma diagnosis to complete back to school paperwork
- Reminder to all patients or all asthmatics re: influenza and pneumococcal vaccines
- Reminder to all immunotherapy patients who have not had a provider appt in the last year
- Reminder to all asthmatics who have not spirometry in the last year
- Etc….

Some exciting changes our practice recently made and working on..

- Updated website
- Integrated online patient forms
- Integrated social media
- Implementing an electronic immunotherapy module with interface to our current PM system
- Implementing a patient portal
New Patients

How to Prepare for your Appointment

1. Complete Patient Registration Form
   - Print, complete and bring to appointment

2. Complete Online Health History

3. Complete New Patient Questionnaire
   - Print and bring to appointment.

Medications to hold for your appointment:
- Click here

What to Expect

Please allow 3 hours for your first appointment. Your visit includes a comprehensive history intake, exam, possible skin testing & diagnostic procedures and education. If you need to cancel or change an appointment, please call us as soon as possible. We do charge for missed appointments.

Welcome

We are very pleased that you have selected Allergy, Asthma & Immunology Center of Alaska for your allergy/immunology assessment. This introduction to our clinic is designed to inform you about our background and policies, and familiarize you with some of the tests and treatments we use for allergies and asthma.

We are ready to help you with a wide variety of allergy, asthma, and immunology problems, including: allergic rhinitis (hay fever), asthma, food allergies, immunodeficiencies (chronic infections), basic/atopy (allergic rhinitis, latex allergy, reactions to medications (e.g., penicillin or local anesthetics), reactions to immunizations, urticaria (hives) and angioedema, allergic fungal sinusitis, as well as other allergy related problems.
Medications to hold for your appointment

Skin testing may be necessary during your evaluation but the results may be blocked by certain substances; we require that ANTIHISTAMINE EFFECT BE TAKEN FOR 72 HOURS PRIOR TO YOUR APPOINTMENT.

This includes (but not limited to):

- Actifed
- **Allegra (fexofenadine) (7 days),**
- Antiver (meclizine),
- Astelin Nasal Spray,
- Alavox (hydroxyzine),
- Atrohist
- Axid (Nizatidine),
- Benadryl (diphenhydramine),
- Bromfed (brompheniramine),
- Chlor-Trimeron (CTM) (chlorpheniramine),
- Cimetidine (Tagamet),
- **Clarinex (loratadine) (7-14 days)**
- Comcost,
- Contact,
- Deconamine,
- Demazene Repetas,
- Dimetane,
- Dimetapp (diphenhydramine),
- Disopril,
- Dramamine,
- Dristan,
- Drixoral (desloratadine),
- **Hismanal (astemizole) (4-8 weeks)**
- Histalet Forte
Talking to specialists about dealing with allergies and asthma in social situations. Brought to you by the Allergy and Asthma Network Mothers of Asthmatics (AANMA).
Read More →

Chef 2 Go: Food Allergy Intervention
A Chef goes on the lookout for allergy sufferers to help them prepare a stress-free meal for their family. Brought to you by the Allergy and Asthma Network Mothers of Asthmatics (AANMA).
Read More →

FOOD ALLERGY GUIDELINES
On Monday, December 6th, the definitive Guidelines for the Diagnosis & Management of Food Allergy were released.
Read More →

Facebook Feed
Allergy Alaska

Allergy Alaska

Food guide issued for the season:
- Peanuts - 0 - 3 CM
- Tree nuts and legumes - 0 - 3 CM
- Fish & Shellfish - 0 - 3 CM

Allergy Alaska's John Andersen
- Eat Jog Walk
- Milk, eggs, nuts, fish, shellfish, fish, and shellfish - 0 - 3 CM

Twitter Feed @AllergyAlaska

Allergy Alaska's John Andersen
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YouTube Videos

Video 1

Video 2