

EMR Implementation



At the Alexandria Clinic

Background

- The Alexandria Clinic is a 30+ provider multispecialty group with two locations
- Electronic record access in place since 1996.
- Opened current facility in 1997
- Needed to update and phase in new software in 2004.

The Search

- Due to the need for new medical record software, a search for appropriate vendors was started in 2003.
- Search criteria were established
 - Combined office management/EMR package was felt to be important to help with support issues.
 - Ease of use by both clinical and non-clinical users.

The Search

- Criteria continued
 - Functionality assessment as outlined in the existing AAFP Survey information.
 - Ability to visit practice sites with software in place.
 - Ability to allow chart entry at the time of pt. interaction.
 - Ability to work in multiple charts concurrently

The Search

- EMR goals
 - Improve coding and documentation
 - Reduce transcription costs
 - Improve Preventive Care
 - Allow for improved information Access
 - Eliminate need to hunt for charts (1FTE)
 - Allow for off site chart access and sharing between sites
 - Electronic Prescribing from Exam Room

The Search

- Vendors invited for Demo's
 - Top 5 candidates selected based on criteria
 - Top 3 candidates chosen by EMR committee
 - Each returned for demonstrations to both clinical and non-clinical staff, direct interaction was encouraged
 - Site visits performed to verify performance in a clinical setting.

The Decision

- Staff meeting held to review findings and measure support for new system
 - Leading candidates rated
 - Physician support to move forward was addressed.
 - Decision reviewed by an outside consultant to verify process and look for any potential problems with software vendor.

EMR Comparison – Post Site Visits

	A4	Vendor B	Vendor C
Ease of Data Entry *	5	3	3
Flexibility for Multiple Users *	5	4	4
System Output (Notes and Letters)	4	3	4
Multiple Problem Visits	5	3	4
Coding Support and Linking	4	5	4
User Interface and Workflow	4	4	4
Prescription Writing and Refills	5	5	5
Messaging and Telephone Support	5	5	5
Preventive Health Reminders *	3	5	4
Flow Sheets and Labs	5	5	5
TOTALS	45	42	42



Recommendations to Medical Staff

- Move forward with EMR and EPM process with A⁴ as the leading candidate
- Continuing commitment from the medical staff and agreement to optimize utilization of the EMR System
- Final recommendation expected at December 2003 medical staff meeting

Implementation

- Detailed plan was provided by Vendor
 - Practice management to change initially, to be followed by EMR implementation.
 - Allowed for concurrent use of new and old systems with planned merger of EMR data into the new system.
 - Allowances/changes made by practice for a gradual transition into the new system.

Implementation

- Hardware Changes

- Change from Unix and dumb terminals to a Windows based system.
- Addition of a wireless network
- Decision regarding specific hardware choices for the end users

Implementation

- Training
 - Provided by Vendor at a cost
 - Included training of an initial customization team.
 - Customization team members of great value as other users were being introduced.

Implementation

- Gradual Transition
 - Helped to avoid production decrease
 - Less stressful to users
 - Allows for some variability among users
 - Still requires a concerted effort to keep on track and move forward.

Implementation

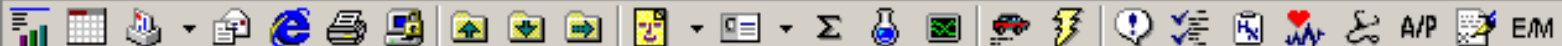
- Preloading Medical Information
 - Past Medical information entered based on the pending appointment schedule
 - Requires Decision in Advance as to which information to enter
 - Requires a nurse or other “clinically aware” individual to perform adequately
 - Very Beneficial in regard to patient flow

Implementation

- Initial and ongoing Customization
 - Specialty Specific for Specialists based on previous charges and superbill
 - Continuous Updates in regard to user needs
 - Requires time commitment and support for involved personnel
 - Ability to customize without extensive training important to allow sharing of the workload

 Mr. Fred Flintstone, Male, 46 years old, #000123, Insurance Carrier Unknown, 11/23/1960

Session Edit Charts Office Patient Options Tools Launch Help





Patient Problem List Patient Medications My Short Lists Short Lists Search Free Text

Include
Reset List
Collapse All
Add to My

- *BODY SYSTEM INDEX - AC
 - @COMMON DIAGNOSES - AC
 - @CARDIOVASCULAR - AC
 - @DERMATOLOGY - AC
 - @EENT - AC
 - @ENDOCRINE, NUTRITIONAL, METABOLIC, IMMUNITY - AC
 - @GI - AC
 - @GU - AC
 - @GYNECOLOGY - AC
 - @HEMATOLOGY - AC
 - @INFECTIOUS DISEASE - AC
 - @MUSCULOSKELETAL - AC
 - @NEUROLOGIC - AC
 - @PSYCHIATRIC - AC
 - @RESPIRATORY - AC
 - @OPHTHALMOLOGY - AC

Edit... Move Up Move Down Move... Delete Note...  Interactions Clear

 ABDOMINAL PAIN, GENERALIZED (789.07)
 Consultation Follow Up Letter AC short version (With A/P included)

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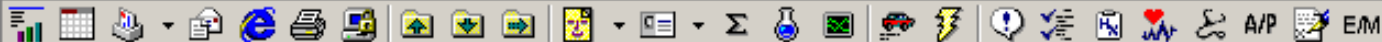
- Forms and Letters-AC
 - GI - AC
 - Back to *BODY SYSTEM INDEX - AC
 - Protocols
 - Abdominal Pain/Abdominal Mass
 - ABDOMINAL PAIN, EPIGASTRIC (789.06)
 - ABDOMINAL PAIN, EPIGASTRIC (789.06)
 - ABDOMINAL PAIN, RIGHT UPPER QUADRANT (789.01)
 - ABDOMINAL PAIN, RIGHT UPPER QUADRANT (789.01)
 - ABDOMINAL PAIN, LEFT UPPER QUADRANT (789.02)
 - ABDOMINAL PAIN, LEFT UPPER QUADRANT (789.02)
 - ABDOMINAL PAIN, RIGHT LOWER QUADRANT (789.03)
 - ABDOMINAL PAIN, RIGHT LOWER QUADRANT (789.03)
 - ABDOMINAL PAIN, LEFT LOWER QUADRANT (789.04)
 - ABDOMINAL PAIN, LEFT LOWER QUADRANT (789.04)
 - ABDOMINAL PAIN, GENERALIZED (789.07)

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Patient Problem List Patient Medications My Short Lists Short Lists Search Free Text

- Include
 - Reset List
 - Collapse All
 - Add to My
- ABDOMINAL PAIN, GENERALIZED (789.07)
 - AMYLASE (82150)
 - BLD CNT, COMPL CBC W/AUTO DIFF WBC (85025)
 - SED RATE AUTOMATED (85652)
 - BASIC METABOLIC PANEL-ACL (80048)
 - HEPATIC FUNCTION PANEL (80076)
 - VENIPUNCTURE (36415)
 - URINALYSIS, AUTOMATED W/ MICRO (81001) Test run @ Lab
 - URINE BAC CULTURE-QUAN COL COUNT (87086)
 - X-RAY EXAM OF ABDOMEN, SINGLE VIEW (74000)
 - X-RAY EXAM OF ABDOMEN, COMPLETE (74020)
 - US EXAM OF ABDOMEN, COMPLETE (76700)
 - US EXAM OF ABDOMEN, LIMITED Limited e.g single organ,quadrant or F/U (76705)
 - CONTRAST CT SCAN OF ABDOMEN (74160) Creatinine Per Protocol
 - CONTRAST CT SCAN OF PELVIS (72193) Creatinine Per Protocol

Edit... Move Up Move Down Move... Delete Note... Interactions Clear

- ABDOMINAL PAIN, GENERALIZED (789.07)
 - Consultation Follow Up Letter AC short version (With A/P included)
 - AMYLASE (82150) - Routine
 - SED RATE AUTOMATED (85652) - Routine
 - BASIC METABOLIC PANEL-ACL (80048) - Routine
 - HEPATIC FUNCTION PANEL (80076) - Routine

Lessons Learned

- Hardware and Network Stability First
 - Experienced IT support on site
 - Would have delayed implementation due to network issues if aware
 - Lab interface critical, requires backup method until stability demonstrated.
 - Connection issues with wireless network multifactorial and frustrating initially but eventually stable

Lessons Learned

- Success of Implementation directly related to user interest and commitment.
- Issues can persist even with adequate training and effort
- Workflow changes can be difficult to make in established practice patterns
- EMR can shift more responsibility to the physician

Lessons Learned

- Templates are good for a framework, details remain important
 - Most visits contain unique information that can be important in justifying decision making
 - Unique information adds clinical relevance, readability and aids in recall of visit
 - **Voice recognition** enhances ability to add the unique information while maintaining EMR format and still avoiding typing/transcription

Goals Attained

- Improved coding and reimbursement accomplished
- Transcription eliminated for most users and significantly decreased for all.
- Chart Access much improved
- Documentation improved in regard to coding, readability related to physician input.

Goals Attained

- Preventive Health, a work in progress, subjectively improved, objective measurements being implemented
- Outside Chart Access, available via a secure Citrix connection whenever connected to the Internet
- Electronic Prescribing from exam room in place

Wish List

- Continued improvements in speed of documentation
- Improved connectivity with other providers
- More automated functions, dose calculation with automated prescription completion, formulary and Medicare necessity checking (upgrade in Sept.)
- Web Portal (available)

