

Teaching Residents Clinical Efficiency while using the Electronic Medical Record and ATTEND Mnemonic

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What challenges do *you* have with clinic
efficiency?

Background

- All residents must learn comprehensive patient care delivery
- Electronic Medical Record is part of care
- Previous surveys -90% residents and faculty recognize need for efficiency training
- No studies look at training in EHR combined with efficiency and communication training

Objectives for today

- Understand the need for teaching efficiency in the EMR while focusing on communications skills needed for best patient encounters
- Utilize one scripted approach to the EMR with the ATTEND method and proven efficiency/communication strategies
- Provide a process to improve provider satisfaction after participating in these workshops with data shared from our experience.

Methods

- 5 part workshop utilizing the EMR (EPIC) visit requirements while addressing
 - simplified Essential Elements in Clinical Practice (Makoul)
 - ATTEND approach to EMR (Rosenbaum)
 - Team STEPPS key elements

Simplified Essential Elements in Clinical Practice (Makoul)

- Pre-clinical preparation
- Rapport Building
- Encounter initiation
- Agenda setting
- Visit closure

ATTEND mnemonic for better patient-physician communication using the EMR

A	Acquaint yourself with the medical record	Acquaint yourself with patient's chart before entering the room, allowing for less chart review "screen time" while in the patient's presence.
T	Take a minute	Start the visit technology-free, giving the patient and his/her concerns your full attention.
T	Triangular placement of computer, patient, clinician	Triangular placement of computer, patient and clinician is most effective for allowing you to look at both the screen and the patient, and the patient to look at the screen and you.
E	Engage, Explain, Educate	Engage the patient in your use of the computer as a tool during the visit by using additional E's: <ul style="list-style-type: none"> • Explain to the patient what you are doing in both entering data and also looking for information on the computer (sign-posting). • Educate the patient by letting them see on the screen what you are seeing, especially graphs, images, etc.
N	No more screen	When discussing sensitive information, completely disengage from the computer (look at the patient, turn away from screen, take hands off keys, etc).
D	Describe the discharge Don't forget to log-out	Be explicit about what orders, etc, you are entering in the computer at the end of the visit and what the patient should expect (scheduling, tests, AVS, etc).

Epic(EMR), ATTEND, Team STEPPS

- Epic will be yellow, ATTEND Purple, Team STEPPS green
- EPIC Setup
- 1. **Widescreen** (can select under more activities, can order under menu personalization)
 - a. Encounter summary-choose buttons- include immunization certificate, oh, upcoming appointments
 - b. Review
 - c. Review flow sheet
 - d. Result review
 - e. Immunizations
 - f. Growth chart
 - g. Rooming
 - h. Clinic note- review how to float note
 - i. Note
 - j. Plan
 - k. Health maintenance
 - l. Wrapup
 - m. Charges
 - n. Procedure
 - o. Initial prenatal visit
 - p. Return prenatal visit
 - q. Letter
- 2. Create templates/edit templates
 - a. **AVS template** must include @DIAGNOSISWITHCOMMENTS@. how followup results will be communicated
 - b. **Clinic visit template** must include @DIAGNOSISWITHCOMMENTS@
- 3. **Diagnoses** expand buttons
- 4. **Med/orders** needs split view and correct buttons checked to allow refills correct.
- Pre-clinic Preparation A
- 1. **Open note/start template** (use new template or in create notes, use blue arrow button and copy
- 2. **HPI** – review **how to float note**
- 3. **Dashboard (TEAMSTEPPS)** - update needs like PHQ or Pap or undress pt
- -----end of first workshop
- Rapport Building
 - Take a minute
 - Triangular Placement (use rest of visit- especially closure)
 - Engage
 - **Rooming** - update past/social/surgical histories (Can look at patient entered material here)
- Encounter Initiation
- 1. Reopen **Note**, click edit- float or side bar- sentence or list- Patient lists concerns
- 2. Anything else, anything else...
- 3. Screen not drive

- Agenda setting N
- 1. Clean **problem list**
- 2. **Problem list** bring over to **diagnoses**
- 3. **Diagnoses**- Add new items addressing with star primary diagnosis
- 4. **Meds and orders**:
 - a. Renewals (check pharmacy- if wrong, **feedback/educate** your team MA)
 - b. New meds
 - c. Other orders
 - d. Followup order- tell time of visit, date if known, overbook? **Use Schedule**
- Staff here or after closure
- -----end of workshop
- **Closure ND**
- 1. **Comments (under diagnosis)** - write the plan for each diagnosis (this could be anytime in visit)
- 2. Write when f/u is planned.
- 3. Share link for mychart via email if indicated.
- 4. Print **AVS** and educate the patient. Consider highlighting
- 5. Update **Dashboard, Team STEPPS**
- Staff here if didn't after agenda set. Change diagnosis if needed.
- Note completion/charge-
 - Only need to finish HPI, add differential diagnosis, put in **charge**.
- -----end of workshop
- Consider another workshop on how to do followup results

- Epic will be yellow, ATTEND Purple, Team STEPPS green
-
- EPIC Setup
- 1. **Widescreen** (can select under more activities, can order under menu personalization)
 - a. Encounter summary-choose buttons- include immunization certificate, cb, spacing appointments
 - b. Review
 - c. Review flow sheet
 - d. Result review
 - e. Immunizations
 - f. Growth chart
 - g. Rooming
 - h. Clinic note- review how to float note
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- 3. **Diagnosis**- expand buttons
- 4. **Med orders** needs split view and correct buttons checked to allow refills correct.
-
- Pre-clinic Prescription A
 - 1. **Open note start template** (use new template or in create notes, use blue arrow button and copy HPI)—**review how to float note**
 - 2. Enter known preventative data into note if relevant.
 - 3. **Dashboard** (TEAMSTEPPS)- update needs like PHQ or Pap or undress pt
- -----end of first workshop

Write down your EMR name

- Take a moment and write the actual steps you use in your EMR each time you see a patient.
 - Eg. What you do previsit
 - What you do in the patient room in history taking with the computer, what you do in PE, what you do for your note, for assessment and plan, for your patient instructions...

Five Workshops Dec-March

- Invitation email
- Workshop
- Summary email immediately
- Followup email with key points reminder one week prior to next workshop

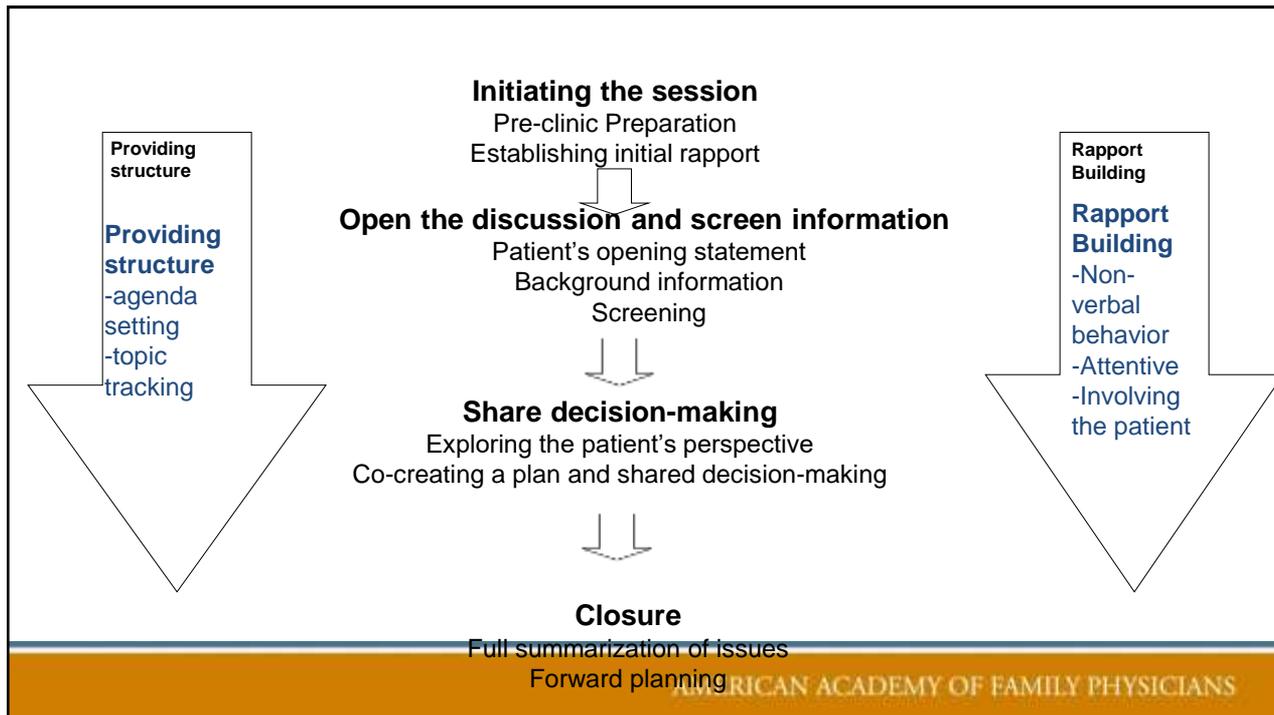


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Workshop 1

- Discuss challenges
 - Basic background research (very brief)- Makoul,
 - Bring up EMR patient
 - Optimize EMR navigators
 - Demonstrate what/where to do pre-clinic preparation
-
- First one was least immediately effective, but each built on the last and all were very interactive

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Utilizing Snapshot and Epic Playground...



Workshop 1 Summary

- Let's see how it works---
 - Epic (Your EMR) patient overview
 - Pre-clinic Preparation open note/start template
 - Enter known preventive data
 - Dashboard (eg. Pap, PHQ, undress)

Poll Question: During clinic which slows your residents most

- Poor agenda setting
- No attention to after visit planning
- Resident can't spend enough time with patient because of clerical computer order requirements
- Preclinic preparation
- By the way patients

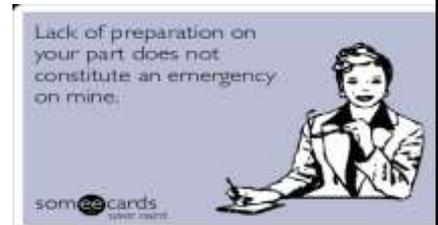
Next Four Workshops

- Review the previous workshop
- Discuss interim challenges and successes
- Work on the next agenda real time- with “real patients” in EPIC
- Give assignment
 - eg. **Use dashboard, Open note before starting visit, Try agenda setting, Try ATTEND-triangulate, Use the new note template**

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Workshop 2- Preclinic Prep and communication

- How do you prepare for clinic
 - Chart review
 - Interval history
 - Your last note
 - Prob list review and update
 - Labs first, whenever practical
 - Prescriptions needed?
 - MA's helping to identify refill needs.
 - Patient-provided data (questionnaires, emails, MyChart, Welcome)
 - Preparation starts at the end of the previous visit
 - Huddle with MA early in the session



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Use the dashboard to communicate anticipated needs.



The screenshot displays an Epic dashboard for a patient named WELBUR, JASON. The dashboard is divided into several sections:

- Visit Log:** A table with columns for Flag, Time, Patient, and Date. It shows several visits, with the most recent one highlighted in blue.
- Notes:** A list of notes with columns for Status w/ Time (UHC), Comments, and Plan. The notes include "4 month FU", "3 month FU", "Assessment of multiple issues", "3 month FU", "mg to 30mg", "medication issues per stage 6 needs", and "varicose injection per ortho/ptg".
- Comments:** A section for comments, including "Patient Lab Test ordered", "Health JVE MOCA PHCA", "HSA - Needs of Chail", and "Injection med orders placed".
- Plan:** A section for the plan, including "Injection med orders placed".

Overlaid on the dashboard is a "somecards" card with a cartoon illustration of a man looking stressed. The card contains the text: "I have 5 pages of Documentation for her visit. But I can't remember why she came to see me."

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Let's take a field trip to Epic and look at:

- using widescreen mode
- opening a note
- floating the note
- filling in and updating basic info (Prob List and prevention)

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let's talk about the “patient-physician-computer” relationship!

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*Why?

- Patient satisfaction
- Adherence to recommendations
- Trust/information sharing
- Patient recall of information
- Influence health outcomes
- Efficiency?



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*How do we establish rapport?

- ALWAYS start by addressing the patient directly – old, young, blind, deaf, non-English-speaking - it doesn't matter
- Introduce yourself (first name, last name), smile, (shake hand)
- Talk about the weather, “where are you from?”
- Informal conversation
- Take social hx first
- Eye contact
- Open posture, sit forward
- Tie in nurses' comments about reason for visit

Role play Introducing EMR

- Introduction,
- 30-60 seconds rapport
- Turn the computer and say, “Let me bring your record up on the computer, I'll be using it as we talk, you can see what I'm doing.”

Summary Workshop 2

Pre-clinic and Communication issues

- using widescreen mode
- opening a note
- filling in and updating basic info (Prob List and prevention
- ATTEND
- Rapport

POLL Question:How does agenda setting work in your clinic and where does it involve the EMR?

- The nurse does it on paper
- The nurse types a list in EMR
- The physician sometimes does it on paper
- The physician types a list into every note
- No-one does it
- It is done but not in EMR

Workshop 3- Agenda Setting

- Background information
- How to do it
- How to do it in EMR
- Role play

*How will gathering information at the beginning help?

- Avoid “By the Way...” phenomena: complete problem lists elicited from patients decrease the likelihood the patient will introduce new concerns at the close. (White, Levinson,etal, 1994)
- Increases patient motivation: full lists allow shared decision making and tailor the treatment plan to the full patient needs.(Eisenthal, '79; Kaplan '89; Williams 2000)
- Patient involvement from the beginning with determination of problem focus is essential to quality healthcare (henbest'90; Kroenke'98; Simpson '91; Stewart '99)

*What Are We Actually Doing?

- Many physicians interrupt in 18-23 seconds to redirect the interview (though if they gave only 6 seconds more, the patients usually complete the list), and 75% of patients never get to complete the list (Beckman '84; Marvel' 99)
- 50% interrupt after 1 concern and 25% interrupt before any concerns are expressed (Braddock '99)
- Between 30-80% of patient expectations are not addressed or identified (Kravitz '96; Marple '98' Schor '95)

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*Why?

- Fear loss of control of time (Dugdale '99)
- MDs feel compelled to address all of the patient needs the same day (Berg '96; Hornberger '97)
- MDs are drawn to the problems they can diagnose or treat (keeps comfort and control). (Byrne '76)
- Health maintenance lists get imposed on patient concerns (Bass '86; Stewart '79)

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*Action Plan: Establish Focus

- This method increases the patient satisfaction and physician satisfaction.
- This method doesn't increase overall time spent
- Could increase compliance, overall patient feeling of control
- It should decrease time spent in future visits
- Allow you to maintain non- anxious relationship centered presence in face of complex or lengthy problem lists
- Agree on priority listing

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How to do it?

1. Skill- make a list- IN HPI. Never accept first answer, ask "something (anything) else?" until patient indicates completion
tip: remind yourself you don't need to address all these problems in one visit

2. Skill: place relationship over need to focus- some patients need to tell the whole story before organizing. So listen and track concerns.

3. Skill: avoid premature diving- postpone diagnostic interview sequence and redirect the patient form in depth stories until all problems are listed.

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How to do it (continued)

4. Skill- ask the patient to prioritize the list
tip: ask yourself if you can address all the list, if not, suggest followup even now.
5. Skill- express concerns about issues when rank order is different from patients. Negotiate without undermining patient autonomy
6. Skill: seek confirmation and commitment.

Helpful Phrases- hand out

- “Before we address any of your problems today, I would like to hear a list of all your concerns.” (returnees, “what’s on your list today?”)
- “Excuse me, but before we talk further about your headache, I’d like to know if you have other concerns so we make sure to use our time in the best possible way.”
- “The first problem on your list is complex and to do a good job may mean not giving the same attention to other issues today and make another appointment soon to address them.”

Role play/Lets try it...

- Remember
 - Make list – “anything else? Something else?”
 - Keep rapport
 - Don’t prematurely dive/ don’t allow long stories
 - Ask pt to prioritize
 - Decide if you can address all
 - Negotiate order
 - Confirm/commit to list

Interim Plan and Next Encounter

- Try (during one whole clinic) opening clinic note template for every patient prior to a visit. (WS1/2)
- Update dashboard once prior to visit with MA instructions. (WS1)
- Try doing the “anything else” during one whole clinic. (WS3)
- Try typing a list in the HPI real-time for at least 4 patients. (WS3)
 - With this and whenever working on Epic in the room with the patient, try engaging the patient in what you’re doing. (ATTEND)

Workshop 4- Visit Closure

- Press-Ganey- Patient knows what to do next???
- Time spent planning

*How are things going?

- Widescreen view
- Update problem list
- Add diagnosis
- Start the note
- Set the agenda- list concerns, anything else?

Take a moment- on your paper

- What is your current closure in clinic? When you do your assessment and plan how does pt leave?
- Make a list for patient
- Print prescriptions
- Get nurse to do labs and schedule
- How could you put it in EMR?

- Closure ND
- 1. **Comments (under diagnosis)-** write the plan for each diagnosis (this could be anytime in visit)
- 2. Write when f/u is planned.
- 3. Share link for mychart via email if indicated.
- 4. Print **AVS** and educate the patient. Consider highlighting
- 5. Update **Dashboard**. **Team STEPPS**
 - Staff here if didn't after agenda set. Change diagnosis if needed.
 -
 - Note completion/charge-
 - Only need to finish HPI, add differential diagnosis, put in **charge**.
 -
 - ---end of workshop
 -
 -
 -

A/P- Diagnosis plus comments

- Our EMR

Visit Diagnoses					
Search for new item <input type="text"/> + Add Common Previous Problems					
P		ICD-9-CM	ICD-10-CM		PL
1.	OSA on CPAP Comment: go to medical supply with your setting in hand and ask what you need. I'll provide scrip	327.23	G47.33		
2.	Essential hypertension Comment: keep amlodipine the same.	401.9	I10		
3.	Primary osteoarthritis of right knee Comment: see steindler ortho to see if they could do surgery if they won't here.	715.16	M17.11		
4.	Allergic rhinitis	477.0	J30.1		
5.	Radiculopathy with lower extremity symptoms Comment: keep gabapentin, but go to 300 mg in morning and 300 mg at night. will adjust it next visit. see pain clinic.	724.4	M54.10		
6.	Hypothyroidism, postop Comment: see Dr. Dillon as scheduled and if reschedule let me know so we can do labs.	244.0	E89.0		
7.	Overactive bladder	596.51	N32.81		
8.	Major depressive disorder, recurrent, in full remission Comment: increase paxil to 80 mg and will set up specialist consult in 3 months for if mood not great.	296.36	F33.42		

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AVS- another game changer

Instructions					
You saw Kelly S Steffy, MD in clinic today. Thanks for coming!					
	ICD-9-CM	ICD-10-CM			
1.	Gastroesophageal reflux disease without esophagitis	530.81	K21.0		
2.	OSA on CPAP	327.23	G47.33	albuterol 80 mcg/Actuon inhaler	
3.	Essential hypertension	401.9	I10	amlODipine 10 mg tablet enalapril 20 mg tablet	
4.	Primary osteoarthritis of right knee	715.16	M17.11	diclofenac 50 mg EC tablet	
5.	Allergic rhinitis	477.0	J30.1	fluticasone 180 mg tablet fluticasone 50 mcg/Actuon nasal spray SPINACPHine (EPINEPH 3-PAN) 0.3 mg/0.3 mL injection syringe gabapentin 300 mg capsule	
6.	Radiculopathy with lower extremity symptoms	724.4	M54.10		
7.	Hypothyroidism, postop	244.0	E89.0	levothyroxine 250 mcg tablet levothyroxine 50 mcg tablet	
8.	Overactive bladder	596.51	N32.81	oxybutynin 5 mg tablet	
9.	Major depressive disorder, recurrent, in full remission	296.36	F33.42	PARoxetine 40 mg tablet	
10.	Seizure disorder	345.90	G40.900	PHENobarbital 32.4 mg tablet phenytoin 100 mg ER capsule	

Let me know if by christmas the left leg isn't improved with gabapentin or if you need me to do thyroid tests.

- As always, if you need you may call the University of Iowa Hospitals and Clinics Family Medicine Clinic at any time at 319-384-7222 --you can leave a better, you can send a note to me via myChart and I'll get it right away!
- For a prescription refill, you may call 319-384-7222. Please allow 3 days to process prescriptions.
- If we didn't get to all your concerns today, we will again start with that list at your next visit and continue to make sure we continue to work on address

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Follow up orders

The screenshot displays two windows from a medical software interface. The left window, titled 'Medications & Orders', shows a sidebar with 'New Order' and a list of medication orders with columns for 'CHECK REQUIRED?' and 'ORDERED BY: NAME'. The right window, titled 'Follow-up Procedures (1 Order)', shows a form for 'FOLLOW-UP: 1 Year'. It includes fields for 'Returner', 'Interval' (with options like 1 Week, 2 Weeks, 3-4 Weeks, 4 Weeks, 5-6 Weeks, 8 Weeks, 8 Weeks, 3 Months, 4 Months, 3-4 Months, 5 Months, 1 Year, As Needed, High Priority, Time Sensitive), 'Appt Duration' (15 mins, 45 mins, 60 mins), 'Appointment Day' (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday), 'Location' (Town/River/Landing, Outreach, LI Care), 'Outreach or LI CMS, specify', 'Schedule with' (visit), 'Return Reason' (Annual PC), 'Check-out note' (Change PCP to White), 'Interpreter Needed (specify language)?', 'Fasting?', and 'Single response'. A 'Comments (0/1)' field at the bottom contains the text 'Follow up orders'.

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Summary WS4: Interim Plan and Next Encounter

EVERY TIME- clean problem list and meds

EVERY TIME- keep rapport- Take a minute, triangulate computer and involve the patient with signpost

Most times- try to agenda set- anything else?

Before next visit- try the new template clinic visit and avs to have diagnosis plus comments- finish your clinic with every impression and plan almost completely done!

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POLL QUESTION: On which of the following do you spend most time?

- Cooking
- Social media
- Sleeping
- Electronic medical records
- CME
- exercise

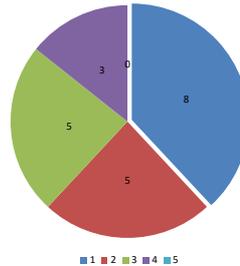
Final Workshop-tying it all together

- Review how it's going- share tips
- Share survey results

Resident Survey Results 19/28

- 18 completed the survey who attended at least one workshop (21 different actually attended)
- 84% felt they were helpful

How many residents attended all the workshops???



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Residents listed things they felt helpful

- Agenda setting- 50%
- Problem list updating 43%
- Using wide screen 25%
- Early note starting
- Others: appreciated mychart signup, dashboard use, typing in avs, typing in room

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Incidental findings- faculty survey

- 13 faculty attended and 100% felt it was helpful
- Tips- Mostly EPIC specific
- 14/16 felt they would be interested in attending further workshops

Pre vs. Post training Results

Time to note completion

- October (5.15 days), November (3.67-68 visits), December (4.15), **Average- 4.42 days**
- January (4.46), February (3.7), March (3.8) **Average- 3.97 days**
- *Remember workshops started December but went through early March. Best will be results for a year from now? Maybe numbers more based on time doing chores in EPIC?*

Challenges

- Optimal objective data
- Lack of workshop attendance
- Level of learner could definitely impact time to note completion
- Duration of data collection (over next year)

Suggestions for Further Study

- Compare note completion time between providers attended workshop vs those did not.
- Evaluate data based on time of the academic year- a full year
- Utilize Epic flash functionality for time spent on parts of EMR and time in room
- Overall Provider and Patient satisfaction
- Quality of note/After Visit communication
- Look at ATTEND and whether providers actually use it

Satisfaction

- Comments: Both Residents and Faculty made many comments suggesting they felt these workshops were helpful for many intangible reasons. Mutual support? Teamwork? All of this isn't measured successfully in our study
- Communication studies suggest Shared Decision Making benefits patients with full and appropriate negotiation of plan helpful. If the Efficient Epic training works, it would likely lead to increased patient satisfaction as well
- 84% residents and 84% faculty would be interested in attending

Poll Question:

Enter your email address to be included in any follow-up communication from the presenter(s).



Social Q & A

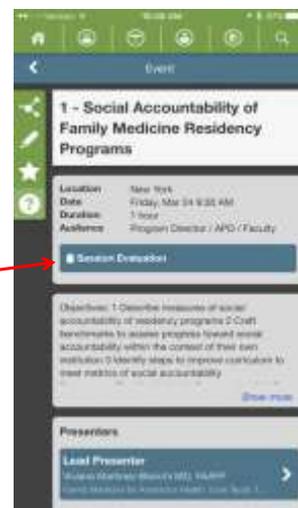
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Please...

Complete the
session evaluation.

Thank you.



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References

- Essential elements of communication in medical encounters: the Kalamazoo consensus statement. Makaul G. Acad Med. 2001 Apr;76(4):390-3.
- Rosenbaum M, Wilbur J, Skelly K, Jansen K. University of Iowa Carver College of Medicine, 2014. *Inspired by imPACT* toolkit Alkureishi (Co-Primary), M, Lee (Co-Primary) W, Farnan J, Arora V. Breaking Away from the iPatient to Care for the Real Patient: Implementing a Patient-Centered EMR Use Curriculum. MedEdPORTAL Publications; 2014.
- <http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/index.html>

Questions?

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