ANNALS OF FAMILY MEDICINE

Online Supplementary Material

http://www.annfammed.org/cgi/content/full/8/4/316/DC1

Supplemental Appendix 1. Observation Protocol

Encounter code ___

Date

Consent signed ___

Physician's code #   Resident ___ Faculty ___

Is this the patient's regular physician? ___ yes ___ no

Reason for visit: Acute ___   **Scheduled follow-up** ___

TIME SPENT

Time visit began _____ Time visit ended _____ Total length of visit _____

Total length of time spent with patient (total minus time out of room) _____

Total time spent using computer _____

          PDA or related _____

          Writing notes in room _____

CHRONOLOGY OF VISIT

Below list time sequences and describe what happened in the session, including topic areas covered and whether these were raised by the patient or the physician (add space as needed):

PATIENT-DOCTOR INTERACTION POST-CONSULTATION

Time in hallway _____ At nurses' station _____ Phone _____ Computer ____ Other _____
Comments:

TOOLS

Did the physician use   ___ Computer   ___ Paper record   ___ Both?
Did physician use ___ PDA   ___ Other:

<u>Computer-based activities:</u>

<u>Other activities using electronic tools:</u>

1. General flow of visit

- What is the overall nature of the visit? Check all that apply and describe.

    ___ Routine (acute) ____Ceremony (chronic follow-up or life transitions)

    ___ Drama (crisis)

- Overall, how is the computer, paper record, or other tool structuring the visit? How does tool use/documentation affect the doctor's ability to maintain a patient-centered visit?

    Indicate on each horizontal line below how much the documentation process may be structuring the consultation.

    Computer
    |_____|
    Not at all   Dictates

    Paper chart
    |_____|
    Not at all   Dictates

    Documentation process overall
    |_____|
    Not at all   Dictates

    Describe:

    o What drove the flow or nature of the visit? (computer template driven, patient's agenda, or questioning, doctor's agenda, etc)

    o Physician-patient communication style:

2. **Use of computer and documentation**.
How much is the physician writing or using the computer or PDA, and the percentage interacting with the patient?

- Assess where the overall focus of interaction is (prioritize 1-3):

  ___ Patient-physician   ___ Physician-computer   ___ Patient/physician with the computer

  Describe:

- What role does the EHR or chart play in this encounter?

  ____ Central role   ____ Peripheral role   ____ No role

  Indicate on each horizontal line below how great a role the documentation process seems to have in the consultation session.

  Role of computer
  |_____|
  No role   Dominant role

  Role of paper chart
  |_____|
  No role   Dominant role

  Role of documentation process overall
  |_____|
  No role   Dominant role

  Describe:

- Describe nature, style, amount of physician eye contact with patient:

- Patient's reaction to computer and physician behaviors during computer use:

  ____ Patient is engaged in computer

  ____ Patient seems to notice but not bothered or interested

  ____ Patient seems bothered

  ____ Varies (or other)

  Describe patient's demeanor and behaviors while physician uses computer:

3. **Method or style of writing notes or using computer or PDA**
   - Physician takes notes ____ Long hand ____On computer ____Both ____Other

     ___ Physician talks to patient while doing so

     ___ Patient talks while physician is writing/typing

     ___ There is silence during the note writing/typing

     ___ Physician asks patient questions while noting the data

     ___ Physician maintains eye contact while using the computer or writing notes

     Describe: (may vary in style through the visit)

   - What does the physician use the computer to do?

   - Does physician share anything to discuss with patient on the computer?

     ____ Shows patient screen to patient

     ____ Prints something out to discuss (other than prescription forms, etc)

     Describe:

   - Does the physician share anything written with the patient? (such as, items from or for the paper chart—not standard preprinted patient education materials, prescriptions, lab slips, out-of-work notes, forms for exit or referral)
     - What is it?

   - Does the physician share anything on the PDA with the patient? ____
     - What?

     Describe process, reactions, etc.

4. **What does the patient do when the physician is out of the room?**

5. **What is the impact of the observer?**

6. **Unexpected insights overall**

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Supplemental Appendix 2. Patient Interview Guide: An Ethnographic Investigation into the Impact of Information Technology in a Family Medicine Clinical Practice

Note: Tailor this interview somewhat to reflect what the observer saw during the clinical encounter. Following the general question, refer specifically to what occurred, as appropriate.

1. How did you feel about having me observe your visit with your doctor?

2. Was this your regular primary care doctor?
   a. If not: How often have you seen this particular doctor before?

3. How do you think your visit with the doctor went?
   a. Was there anything especially different about this visit from your other visits with this doctor?

4. How would you describe the doctor's style of talking to you?

5. What did you think about the doctor's style of talking with you?
   a. Did you feel you could ask questions if you wanted to?
   b. Did you get information about things you were concerned about?

6. Is your doctor using an electronic health record for you?

7. Tell me about how the doctor recorded notes during your visit.
   a. Did the doctor record information about you during the visit?
   b. How did the doctor do this?
      i. Writing in a chart?
      ii. Typing on a computer?
   c. About how much of the time do you feel the doctor spent looking at you and talking?
      i. About how much of the time did he/she spend recording notes?
   d. How did you feel while the doctor was recording notes?

8. [If used computer for medical record]: Did the doctor use the computer for anything besides typing notes?
   [If did not use computer for medical record]: Did the doctor use a computer for anything during your visit?
   a. If yes:
      i. What did the doctor do on the computer?
      ii. How did you feel about the doctor using a computer during your visit?
      iii. Did you feel that you could look at the screen while the doctor was working on the computer? (Probe.)

      iv. Was anything the doctor did on the computer helpful to you? (Probe.)

    v.   Did the doctor involve you in any way while using the computer? (Probe.)

    vi.   Would you have liked to have seen the information the doctor was working with on the computer?

9. Did the doctor use any other kind of tool during your visit? If yes:
   a. What did the doctor use?
   b. How did the doctor use it?
   c. Did the doctor involve you in any way while using it?

10. How do you feel about having your medical information recorded electronically, that is, kept in a computer database rather than in a paper chart? (Probe for concerns, worries, fears, benefits, etc.)

11. Would you be interested in being able to access your own medical record (your Personal Health Information record) via a computer you use at home or somewhere else?
    a. Why or why not?
    b. If yes:
       i. Where is the computer you would use to get the information?
       ii. What information would you want to see?
       iii. How would having that information help you?

Wrap-up questions: We're just about finished with the interview. I'd just like to ask a few questions about you.
   1. What is the highest grade of schooling, or highest degree that you have?
   2. What ethnic group do you identify with?
   3. Do you use a computer at home or at work or anywhere else? I(f yes, probe about where, and for what purposes.)
   4. Great, thank you. Is there anything else you would like to tell me about the visit with the doctor you just had?