Impact of Information Technology on Physician-Patient Interaction

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Electronic Medical Records (EMR)

- Medical records in digital format augmented with other tools to assist in decision making
- Various forms of computer technologies used during a patient encounter to maximize the benefits of patient care
- Desktop configuration (screen and keyboard) or tablet
- Interaction can vary from voice recognition, to hand writing recognition, but dominant interface is keyboard and mouse

Benefits of EMR

- Electronic and editable Cumulative Patient
 Profile
- Use of templates
- Legible physician's clinical progress notes
- Access to consult notes and lab results
- Electronic prescriptions with monitoring of drug interactions
- Integration with on-line resources
- Electronic billing

Benefits of EMR

- Enhance efficiencies in community-based practices and allow staff to focus on patient care
- Reduce the number of duplicate tests that are ordered, resulting in health care system efficiencies
- Improve patient safety by reducing adverse drug events
- Support improved interactions and communications among care team members and between providers and patients
- Improve health outcomes when used for preventive care and chronic disease management

Concerns with use of EMR

- Physician concerns about EMRs negatively affecting their relationships with patients
- Patient concerns about confidentiality of medical information with these systems
- Patient satisfaction with clinical encounter

Impact of EMR

- Potential to distract both the physician and patient and
- Detract from the physician-patient relationship
- Negative effect on eye contact between physicians and patients,
- Alterations in flow of discussions resulting in:
 - Longer consultation times
 - Reduced interaction with a patient
 - Decreased patient-initiated content
 - Reduced focus on psychosocial content of an interview

EMR: The third person in the room



Physician Effects of EMR

- Physician interaction with EMR system versus the patient
- Computer-based EMR systems draw eye contact to the screen and away from the patient
- Affects non-verbal cues such as nodding
- Rhythm of dialogue with long pauses between responses when information entered in system
- Content of dialogue with focus on data fields being completed vs. patient guided discussion

Inappropriate spatial arrangements



Patient Effects of EMR

- Physician's hand movements and sound of key strokes can be distractions for some patients
- Lack of eye contact may also distract patients
- Orientation of the clinician can be a distraction
- Pauses in clinician responses often met with patient silence
- Affects rhythm and content that patient is willing to discuss with the physician
- Patients also keen to be able to see what is present on the computer screen

Appropriate spatial arrangements



Possible solutions

- Greet the patient before rushing to the system
- Inform patient using EMR to take notes and access medical information (confidentiality)
- Proper positioning to address issues with eye contact, non-verbal cues and dialogue rhythm
- Don't let system dictate what is discussed in clinical encounter
 - Allow patient to initiate and direct conversation
 - Focus on the patient and not on the system especially when patient is relaying social content information

Question for consideration

I. How can we overcome the limitations of using computer-based systems (EMR) and use technology to enhance physician-patient interaction?

Medical Information Online

- Information Technology (IT) and medical information online is expanding
- Valuable resources for physicians
- Internet and search engines for patients



Doctor Google: Friend or Foe?

- According to Google, 1 in 20 searches are health related
- Around one percent of all searches on Google are related to symptoms, but that translates into millions of searches
- An update to Google's mobile app and website lets you search for symptoms and receive a list of possible conditions and other details
- Provides home treatment options
- Prompts patients to seek medical advice when appropriate

Doctor Google: Friend or Foe?

- Aims to track down information on medical symptoms
- Google provides an overview of potential conditions, possible treatments, directions on how to get more information online and which type of doctor may be able to help
- Points you to specialized sites such as WebMD, the Mayo Clinic and Medline Plus.
- Sometimes have to cull through pages and pages of information to get what you seek

Benefits of IT

- Easy access to health information
- Opens opportunities for discussion
- Aids physicians in understanding patient's worries and fears
- Informed patients are better able to provide details about their symptoms
- Informed patients aid in health care decision making
- Empowers patients to improve their health by being an active participant in diagnosis and care

Concerns and Risks of IT

- Accuracy of information
- Biased information
- Conflict of interest
- "Cyberchondria" medical anxiety after researching your own symptoms online
- Self-diagnose rather than seeing a physician
- Increased physician time of consultation
- Cannot provide real quality of care
- Dehumanizes Medicine

Possible solutions

- Use Information Technology to the physician's advantage
- Use Information Technology for patient education
- Point the patient to good information sources that are evidence based
- Online patient resources and peer reviewed websites

Question for consideration

• 2. How is available online medical information affecting the physician-patient relationship and how can we advocate for the patient?

Ethical Issues and Principles

- Physician-patient communication and the therapeutic relationship
- Patient confidentiality
- Informed decision making
- Physician paternalism versus patient autonomy

Questions or Comments?