Practice Management Curriculum

Health Information Technology

Who should attend

- Physician Leader of the practice
  - President of the PA, Founder
- Practice Administrator
  - CEO, Executive Director, COO
- Contracting Officer
  - Contract Administrator, Director of Billing
- Clinical Manager
  - Medical Director, Nursing Team Leader

After this session, you will be able to:

- Identify reasons for implementing health information technology today
- Define important terms
- Understand how to maximize technologies which may already be in place in your office
- Describe the issues important to the decision making process for HIT in your practice
- Understand the importance of managing the technology implementation process

Why are we talking about Health Information Technology?

- Patients
- Payers
- Practice

Why? Patient Safety

- 1999 IOM report “To Err is Human”
  - 44,000 - 98,000 patients die in hospitals each year due to preventable medical errors
  - Majority of errors are caused by faulty systems, processes and conditions that lead people to make mistakes or fail to prevent them
- 2003 IOM report “Patient Safety: Achieving A New Standard for Care”
  - “The committee strongly believes that patient safety is indistinguishable from the delivery of quality care.”
  - “The development of an information technology infrastructure is essential to improve the safety of health care.”

Why? Patient Expectations

- The healthcare industry vs. other businesses
  - Only 17% of office-based physicians kept electronic medical records as recently as 2003 according to the Centers for Disease Control and Prevention
  - Consider other industries… banking, grocery stores, retail
- Hurricane Katrina increased the visibility of this lack of computerization

Why? Payers & Performance

- Pay for Performance/Reporting/Quality
  - Private payers and Medicare are increasingly interested in P4P/R/Q programs
  - Measurement is a key to these programs
    - Outcomes measures
    - Quality indicators
    - Adherence to practice guidelines
  - How can you measure without health information technology?

Why? Payers & Contracting

- Contracting
  - Health information technology is increasingly being used by practices to demonstrate their value to payers
  - Will continue to grow in importance as a tool for payer contracting

Why? Practice Efficiency & Quality

- Standardization
  - Patient flow, lab and other testing, treatment regimens by disease/stage
- Quality
  - Do we all treat a stage III breast cancer patient the same way? If not, do we understand variations in results?

Why? Practice Costs

- Cost control
  - Standardization of practice styles, supplies, drugs
  - Increased ability to measure clinical activities using electronic documentation
    - Laboratory services, imaging

Why? Practice Future

- Physician recruitment
  - Many (most?) physicians coming out of training don’t know any other system
  - Will paper-based charts become a hindrance to recruitment?

Let's Define Some Terms

- EMR – Electronic Medical Record
  - Computer-based patient medical record.
- PHR – Personal Health Record
  - The personal health record (PHR) is an electronic, lifelong resource of health information needed by individuals to make health decisions. Individuals own and manage the information in the PHR, which comes from healthcare providers and the individual. The PHR is maintained in a secure and private environment, with the individual determining rights of access. The PHR does not replace the legal record of any provider.

From the American Health Information Management Association (AHIMA)

More Terms

- EHR – Electronic Health Record
  - In it's broadest sense, the EHR is intended to integrate an individual's multiple, physician-generated, electronic medical records and the patient-generated personal health record. The EHR should facilitate optimal management of the health of an individual or, when used in aggregate, of a population. EHRs should allow sharing of information about patients between authorized providers.
    - EHR and EMR are frequently used interchangeably.

EHR

- The Institute of Medicine has identified five criteria for core functionality for electronic health records
  - *Improve patient safety*
  - *Support the delivery of effective patient care*
  - *Facilitate management of chronic conditions*
  - *Improve efficiency*
  - *Feasibility of implementation*

Key Capabilities of an Electronic Health Record System: Letter Report, Institute of Medicine, July 31, 2003

More Terms

- E-prescribing
  - A method of automating the prescription process, resulting in the generation of either an e-mail, fax or other electronic prescription from the physician's office or the hospital to a pharmacy
- CPOE
  - Computerized physician order entry

More Terms

- Interoperability
  - The ability of software and hardware on different machines from different vendors to share data.
- Interfaces
  - A device or a system that unrelated entities use to interact.

There Are Many Challenges

- National challenges...
  - Uniform standards for health information exchange still being developed
  - Significant implementation costs and debate about who gains the benefit and who should pay
- And practice challenges
  - Impact on daily workflow
  - Wide variety of products
    - Inconsistent functionality, concerns about financial stability of vendors, interface challenges
  - Large capital outlay with a return on investment that is difficult to quantify

But it’s time to start...

- Start by thinking about your existing systems
  - Can you enhance these systems to improve care and communication?
- Then start planning for EHR
  - Maybe this year, maybe next year, but it’s definitely coming

Practice Management System

- Make sure you are using all of the capabilities of your current system
  - appointment scheduling, appointment reminders, referral tracking are some examples
- Use screens that are available for staff communication
  - demographics, referrals, collections
- Be sure you are fully utilizing the reporting capabilities of your system
  - track and generate referrals, utilization trends, charges
- Electronic remittances can improve business office productivity

Maximize Use of the Internet

- Physician and staff research
- Payer manuals and newsletters, including Medicare
- Identify resources for patients
- Patient support and education
  - Use resources already available rather than create your own

Inventory Management Systems

- Interface with your practice management system for billing and reporting, inventory control
- Use reporting for outcomes measurement, quality research and reporting on the practice level

Laboratory Information System

- Physician and nurse access to lab reports for treatment decisions, to notify patients of results
- Reduce chart pulls
- Reminder system for ordering lab tests by disease, by payer

Your Website

- Do you have a practice website?
  - Basic website is inexpensive to setup and maintain
  - Important for marketing in today's world
- Consider adding interactive services to your website using a secure portal
- Patients/families can use the website to
  - Complete health histories, demographic forms online before appointments
  - Request appointments, prescription refills
  - Obtain test results
  - Read patient education materials

E-mail with Patients

- Security is important but not impossible
- Set guidelines for patients
  - Many practitioners limit email communication to routine, non-clinical issues such as appointments or prescription refills
- Put systems in place to ensure that all messages are retrieved in a timely fashion
- Eliminate “phone tag”

Personal Digital Assistants (PDAs)

- A point of service device. Use to:
  - Access drug information
  - Capture charges
  - Record referral and consultation information
- Handheld devices can also be utilized for clinical diagnosis support, drug reference, medical dictionaries and calculators, calendars, and contact lists

Computerized Physician Order Entry (CPOE)

- Electronic prescribing systems
  - Intercept errors when they most commonly occur — at the time medications are ordered.
- Physician enters orders into a computer rather than on paper
  - Orders are integrated with patient information, including laboratory and prescription data.
  - The order is then automatically checked for potential errors or problems.

The Leapfrog Group, Computer Physician Order Entry Fact Sheet, 4/18/04

e-Prescribing

- Electronic prescribing refers to the use of computing devices to enter, modify, review and communicate drug prescriptions
- Electronic prescribing has presumed value in preventing medical errors because it can apply clinical decision support
  - The computer can check each prescription as it is written for dosage errors, conflicts with allergies, interactions with other medications, and other conditions
- Systems can be stand-alone or part of EHR

"Electronic Prescribing: Toward Maximum Value and Rapid Adoption" A Report of the Electronic Prescribing Initiative, eHealth Initiative, April 14, 2004

ASCO

Are you Ready for EHR?

- A major decision for every practice
- All three domains of practice must be considered


Clinical
Operational
Financial

Making the Decision

- How can EHR help your clinical practice?
  - Integration of and adherence to evidence-based practice guidelines
  - Integration of new therapies into practice
  - Outcomes measurement
  - Clinical research
  - Medication safety
  - Patient safety
  - Point of care decision support
  - Improved access to information from hospital, home

Making the Decision

- How can EHR help with practice operations?
  - Billing and coding complexity
  - Increasing need to validate clinical decisions for payers
  - Real-time access to patient information by multiple staff; improved office productivity, less wasted time
  - Patient scheduling
  - Patient education
  - Improved patient service
    - test results, phone calls

Making the Decision

- How can EHR help your practice finances?
  - Charge capture improvement
  - Decrease in billing errors
  - Transcription savings
  - Chart pull staffing savings
  - Improved ability to meet requirements for payment under P4P plans

Set Goals

- Identify your practice goals for EHR then choose a system to meet those goals
- Goals might include:

Improve chemotherapy ordering process	Decrease transcription costs
Improve E & M documentation	Decrease overhead – chart pulls, rework, supply costs
Enhance patient safety	Access to patient records for clinicians from hospital, home
Standardize treatment regimens in group practice	Prepare for success in P4P coming environment

Assess Staff Readiness

- Not all staff will be computer friendly
  - Don’t assume everyone is comfortable with computers
- Develop a game plan to identify and train these individuals

Survey All Staff

- Start with questions like this. You may need to get more specific about skills and abilities
  - Do you have a computer at home? Do you use it more than three times per week?
  - Have you ever had any formal computer training?
  - How would you rate yourself as a computer user in general?
  - Rate your experience with the following programs: Microsoft Word, Microsoft Excel, Microsoft Outlook
  - Rate your experience with Internet Explorer and your ability to find information on the Internet

Staff Readiness

- Identify staff that need a training program, then meet that need
  - Seminars, online training, community college or continuing education courses in the community
- Bring all staff on board with computer skills as soon as possible
  - Work with them persistently and consistently until they have mastered the skills they will need to be successful with your EMR

Choosing a Vendor and Product

- Be specific about the needs of your practice
  - What systems do you have now? Will the new system need to interface with current systems? Who will use it? Where will they use it?
- Identify the critical functions for a computerized system in your practice and consider the impact on your current processes
- Will the vendor help with work flow re-design?
- Develop criteria for your practice to use to evaluate systems; present criteria to all vendors

Choosing a Vendor

- How long has the vendor been in business?
  - Minimum 5 years; 10 is better
- Is the company public or private?
  - Public companies should show a positive trend
- What is the vendor planning for new releases? Is there a cost for new releases?
- What is their vision for your product for the future?
  - Do they expect to support the product you are purchasing in the future?

Choosing a Vendor

- Are they compliant with standards?
  - HL-7
  - ASTM's Continuity of Care Record (CCR)
  - ANSI's Clinical Document Architecture (CDA)
  - Continuity of Care Document (CCD)
- Do they have interfaces already written for your other systems? What is the cost for each interface?

Choosing a Vendor

- Consider all of the costs
  - Hardware and software
  - Installation
  - Training, training and more training
  - Upgrades
  - Custom reports
  - Interfaces
  - Support for both hardware and software
  - IT staff

Choosing a Vendor

- Perform due diligence
  - Review company financials
  - Seek out other users, some provided by the company, others on your own if possible
  - Site visits are essential
    - Make site visits during the workday – see the system working
    - Ask about installation and training
    - Ask about interfaces
    - Don’t fool yourself, believe what they tell you

Choosing an Oncology Product

- ASCO's EHR Workgroup has developed a list of core functions for an oncology EHR
- Many oncology vendors worked with ASCO on EHR events in 2007 and are familiar with this list
- A tool is provided for your use in evaluating oncology EHRs

Oncology EHR Evaluation Criteria

	Vendor Name:	
CHEMOTHERAPY ORDERS AND DOCUMENTATION	1=Low, 5=High	Comments
Lists intent/goals of therapy – curative vs. palliative	1 2 3 4 5	
Specifies duration of treatment/number of planned cycles	1 2 3 4 5	
Tracks sites of disease monitored during therapy	1 2 3 4 5	
Manages chemotherapy orders; checks dosing, drug interactions	1 2 3 4 5	
Tracks extent of dose reduction, if any	1 2 3 4 5	
Prompts for supportive care drugs such as growth factors	1 2 3 4 5	
Utilizes chemotherapy flow sheets	1 2 3 4 5	
Autopopulates flowsheets with lab data	1 2 3 4 5	

Client Server or ASP?

- Two different models to access EHR software
  - Client-Server Model: The most common is the client-server model. In this model, HIT software is installed on a server located in the physician's office and is accessed through the practice's input devices.
  - ASP Model: Alternatively, in the ASP model, the software is located on a server at a remote location and accessed most commonly via the Internet.

From the Texas Medical Association, www.texmed.org, accessed 8/10/07

Client Server vs. ASP

	Client Server	ASP
Security and Backups Responsibilities	Practice is responsible for maintaining a secure data center	Decide with the vendor ahead of time who the responsible part is
Technical Staff	Practice is responsible for providing technical support for the services and operating systems	Vendor typically provides support and service

From the Texas Medical Association, www.texmed.org, accessed 8/10/07

Client Server vs. ASP

	Client Server	ASP
Cost	Higher up-front costs for hardware and installation	Lower initial fees, but there is a monthly fee payable to the vendor for access
Location of software/data	On a server located in the physicians' office	Located on a remove server and commonly accessed via the Internet

From the Texas Medical Association, www.texmed.org, accessed 8/10/07

Selection Do's & Don'ts

Do's	Don'ts
Provide specifics	Sign with the first offer
Ask for professional review of contract	Sign without legal/ implementation review
Determine "User"	Underestimate ASP
Site visit	Expect everyone to like EHR at first
Search for usability, functionality	Get sold on bells & whistles

Managing the Implementation

- EHR implementations are too often viewed as a technology project instead of a change in the way care is delivered
  - Organizations frequently underestimate the amount of organizational transformation that will be needed
- Successfully introducing information systems requires an effective blend of good technical and good organizational skills; the major challenges to system success are often more behavioral than technical

Implementation

- Establish a core committee to lead this process
  - The leader should have a clinical perspective
- Emphasize that this will be a long term commitment
- Include physicians, nurses, mid-level providers, business staff
- Committee will become the champions for this process

Change Management

- Communicate, communicate, communicate
  - Involve key staff in the decision making process and in implementation planning
  - Work flow re-design is essential – involve the staff in planning for these changes
  - Plan for operational impact and communicate this to staff

Training

- Education, training and support are important
  - Initial training - uninterrupted classroom style, off site if possible
  - Real time one-on-one training is important at go-live
  - Easy access to “help desk” for all staff

Work Flow Re-design

- Work flow re-design must be part of the implementation process
  - Use this as an opportunity for real improvement
- Allow time for re-design; involve front-line staff
- Consider all processes
  - From patient arrival to checkout; prescription refills; calls from Hospice; injections; chemotherapy administration; billing

Work Flow Re-design

- Search for ways to improve operational efficiency
  - Identify actual (and perceived) sources of inefficiency, delay, duplication of effort, and wasted time
- Standardize simple things to speed up the implementation process and encourage buy-in
  - Create templates for telephone messages or laboratory result reporting

Implementation Tips

- Many practices don’t have in-house IT expertise
  - Consider an IT consultant to review your existing data management infrastructure to make sure you have the capability to handle a new system
  - Consultant can also make recommendations for IT staffing to support your systems

Implementation Tips

- Plan your conversion carefully
  - Will you convert all sites, all providers at one time?
  - Will you convert all applications at once or one application at a time?
- Consider one application at a time for all staff
  - Don’t run dual systems; you need to know where to look for information

Implementation Tips

- Insist on extensive training support on-site at go-live, especially for clinical staff
- Prepare for your productivity to decline during this process
  - Physicians and clinical staff
  - Operations and business office staff

In Case of Emergency...

- Backup
  - The procedure of copying files from one medium, usually the primary location, to another location as a precaution in case the first one fails or is attacked
  - Must be done regularly and verified periodically
- Redundancy
  - Data – redundant backups to a remote location
  - Hardware – mirrored drives, duplicate servers
- Disaster Recovery Plan

Why EHR?

Patient Safety

Pay for Performance

Practice Efficiency

2007 ASCO EHR Activities

- EHR Policy Roundtable, January 23 – 24, 2007
  - Attendees included variety of EHR stakeholders: oncologists, vendors, governmental agencies
  - Goal of this meeting was to recommend critical components of an Oncology EHR and to encourage adoption of those recommendations
- EHR Lab, June 1 – 3, 2007
  - ASCO Annual Meeting, Chicago, IL
  - 11 oncology EHR vendors participated; hands-on demos using the ASCO Treatment Plan and Summary as a demonstration model

2007 ASCO EHR Activities

- Electronic Health Records: 2007 Oncology Symposium, September 19-20, Dallas, TX
  - 7 vendors participated with product demos based on scenarios provided by ASCO as well as a head-to-head timed "face-off" event
  - Educational sessions on EHR implementation, improving practice efficiency, return on investment, using the data and more
  - Can be accessed at www.asco.org/ehr

Next Steps

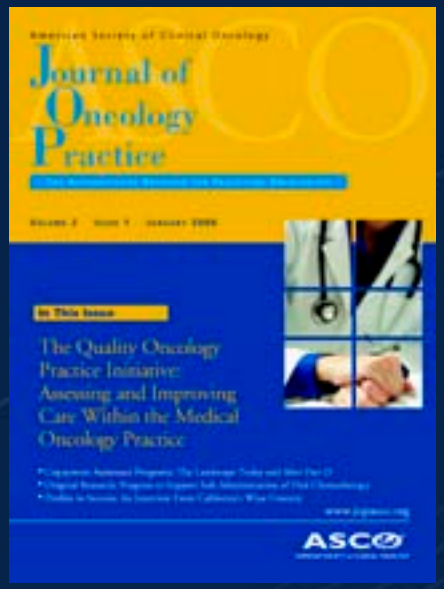
- Consumer Guide planned for Q1 2008
  - "The Oncologist's Field Guide to Selecting and Implementing an EHR"
  - Will be available at www.asco.org/EHR

ASCO Resources

- ASCO's EHR web page www.asco.org/EHR
  - ASCO activities and publications on electronic health records
  - Resources and links to help physicians evaluate, select, and implement EHR products

ASCO Resources

- *Journal of Oncology Practice*
  - Feature articles
  - IT Help Desk



Other Resources

- American Health Information Management Association (AHIMA) www.ahima.org
- American Medical Informatics Association www.amia.org and www.got-ehr.org
- Healthcare Information and Management Systems Society (HIMSS) www.himss.org
- Medical Group Management Association (MGMA) www.mgma.com
- PhysiciansEHR.com www.physiciansehr.com