Presentation Objectives

- Describe the benefits of health information technology
- Relate the trends in electronic health record (EHR) adoption
- Review the basics of U.S. healthcare billing
- Understand how laws, HITECH, HIPAA and ACA, impact health information technology in the U.S.

Health Information Technology Overview

- Improved coordination of care through information continuity (EHR)
- Communications (telemedicine)
- Improves:
  - Access
  - Quality
  - Costs
  - Patient-centeredness

Improving Access to Care

- Telehealth
  - Rural access
  - Advice nurses
- Patient access to EHR (web portals)
  - Clinical notes
  - Laboratory results
  - Appointments
- Smart Cards

Improving Quality of Care

- Providing tools for managing patient info
  - EHR
  - Biofeedback
- Promoting adherence to current clinical guidelines and protocols
  - Reminder systems
  - Decision support systems
- Reducing medication errors
- May improve patient satisfaction

Controlling Costs

- HIT-enabled efficiencies
  - Provider time improvements (productivity)
  - Decrease in unnecessary utilization
- Improving disease management and care coordination for managed care org.
  - Identify chronic disease patients (DM & CM)
  - Predictive modeling
- Improving organization efficiency
Patient-Centeredness

- Transparency
  - Access to clinical records
- Individualization
  - Allergies, new medications
  - Recommendations to provider and patient
- Respect
  - All records are secure and private (HIPAA)
  - Advance directives

Adoption of EHR in U.S.

- Adoption trends for EHR
  - Physicians
  - Hospitals
- Barrier to adoption of EHR
- Important law for EHR adoption

Physicians’ Adoption of EHR, 2012

Hospitals’ Adoption of EHR, 2012

Barriers to Adoption of EHR

HITECH ACT

- Part of the American Recovery and Reinvestment Act of 2009 (ARRA)
- Designated ~$28 billion for (EHR) adoption
- Financial incentives for adoption
- Standards for systems interoperability
- Health Information Exchanges (HIE)
### Meaningful Use

Three main components:

1. **EHR to be used in a meaningful manner**
2. **EHR technology to be used for electronic exchange of health information to improve the quality of health care**
3. **EHR technology to be used to submit clinical quality and other measures**

### EHR Examples

- Physician systems
- Hospital system functions
- Pharmacy functions of hospital EHRs

### Physician Practice EHR

**Specific Functions of Hospital EHR Systems**


### Prescriptions Drug Functions

- Computerized system for sending prescriptions electronically
- Warning of drug interactions or contraindications
- Drug decision support
- Bar coding


### HIT: Billing Systems

- Revenue Cycle Management
- Medical coding and billing
- Diagnosis and billing codes
Revenue Cycle Management

Medical Billing

Diagnosis Codes
- ICD-9
- ICD-10
- DRGs

Billing Codes
- Healthcare Common Procedure Coding System (HCPCS)
- LOINC
- National Drug Code (NDC)

Health Insurance Portability and Affordability Act, 1996
- National standards for electronic transactions
- Protected Health Information
- Privacy Rule
- Security Rule

Affordable Care Act and Technology
- $19 billion to promote adoption and use of health information technology (HIT), especially electronic health records (EHRs)
  - Health Center Controlled Network grants
- Health Insurance Marketplace
Health Insurance Marketplaces

Deadline to enroll for coverage this year: March 31
Act now to provide peace of mind for you & your family — and save money on quality coverage.

Conclusion

- HIT improves coordination of care through information continuity
- HIT improves access, quality, costs and patient-centeredness
- Although still lacking, EHR adoption has increased impressively recently
- HIT improves healthcare billing process efficiency