

## Unit 4: The Effective HIT System

This material was developed by Johns Hopkins University, funded by the Department of Health and Human Services, Office of the National Coordinator for Health Information Technology under Award Number 1U24OC00013.

---

---

---

---

---

---

---

---

## Unit 4 Objectives

- Identify characteristics of an effective HIT system.
- Define and provide examples of how evidence-based practice can be supported in HIT Systems.
- Define and cite examples of usability, configurability, scalability and reliability in HIT systems.
- List and contrast different types of reports/queries (predefined vs. ad hoc) required for internal and external reporting.

Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

2

---

---

---

---

---

---

---

---

## Effective HIT

- Integrated/Interactive exchange
  - Patients, providers, government agencies, insurers
  - Increase of overall quality, safety, efficiency, decreased costs, & increased patient acc
- Improved public health
  - Early detection of outbreaks
  - Tracking & evaluation in chronic diseases
  - Post-marketing surveillance of medications
  - Evaluation/reimbursement based on value.



Webster & Shapiro, 2010

Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

3

---

---

---

---

---

---

---

---

## Characteristics of Effective HIT

- Flexible
- Adaptable
- Configurable & Agile
- Dependable/Reliable
- Useable
- Scalable



Image Source: <http://upload.wikimedia.org/wikipedia>

Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

4

---

---

---

---

---

---

---

---

## Facilitates "Best Practices"

- Evidence Based Practice (EBP)
  - the integration of best-researched evidence and clinical expertise with patient values (IOM)
- Guideline-enhanced Care
  - <http://www.guideline.gov/about/about.aspx>



Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

5

---

---

---

---

---

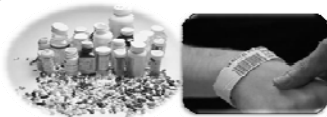
---

---

---

## Medication Reconciliation

- Process of determining what medications patient is taking
- Med errors
  - Admissions
  - Transfers
  - Discharge
- Polypharmacy
- Bar Code Medication Administration (BCMA) & e-MAR
- E-prescribing & digital medication records



Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

6

---

---

---

---

---

---

---

---

## Supporting Workflow

- HIT – organizes work, integrates knowledge, supports decision-making
- Decreased memory demands
- Routing and prioritizing



Image Source: MS Clipart



Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

7

---

---

---

---

---

---

---

---

## Supporting Workflow

- Automates tedious aspects
- Effective use of resources – balancing supply and demand



Image Source: MS Clipart



Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

8

---

---

---

---

---

---

---

---

## Supporting Workflow

- Data extraction & reporting
  - Ad hoc & pre-defined
- User centered design
  - “a design and evaluation process that pays particular attention to the intended users, what they will do with the product, where they will use it, and what features they consider essential”



Image Source: MS Clipart

Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

9

---

---

---

---

---

---

---

---

## Reviewing the Objectives

- Identify characteristics of an effective HIT system.
- Define and cite examples of usability, configurability, scalability and reliability in HIT systems.
- Define and provide examples of how evidence-based practice can be supported in HIT Systems.
- List and contrast different types of reports/queries (predefined vs. ad hoc) required for internal and external reporting.

Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

10

---

---

---

---

---

---

---

---

## This completes Unit 4 “The Effective HIT System”



Image Source: MS Clipart

Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

11

---

---

---

---

---

---

---

---

## References

- Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century. Institute of Medicine of the National Academies. c2011. Available from: <http://www.iom.edu/Reports/2001/Crossing-the-Quality-Chasm-A-New-Health-System-for-the-21st-Century.aspx>
- Dennison J, Eisen S, Towers M, Clark CI. An Effective Electronic Surgical Referral System. *Annals of The Royal College of Surgeons of England*. 2006; 88(6): 554-556 Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1963768/?tool=pubmed>
- Gibbons R, Antman E, Smith S. Has guideline development gone astray? *No. British Medical Journal*. 340:343. 2010.
- National Guideline Clearinghouse. Agency for Healthcare Research and Quality. Available from: <http://www.guideline.gov/about/about.aspx>
- Webster L, Spiro R. Health information technology: A new world for pharmacy. *Journal of the American Pharmacists Association*. 2010 April; 50(2): e20-e34. Available from: <http://japha.metapress.com/openurl.asp?genre=article&id=doi:10.1331/JAPH.A.2010.09170>

Component 7/Unit 4

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

12

---

---

---

---

---

---

---

---