

**Learning From Mistakes:
Error Reporting and
Analysis and HIT**

Module 12.2: Unintended
Consequences of HIT

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Objective

At the end of this segment, the student will be able to:

- Assess HIT for unintended negative consequences
- Examine common themes in HIT design deficiencies

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Version 1.0/Fall 2010 2

Types of Unintended Consequences
New or More work

- New required fields
- Alerts require response
- Multiple passwords if more than one system
- Extra time
- Sometimes systems are slow
- Some tasks have become more difficult
- Increased ordering steps

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Version 1.0/Fall 2010 3

Types of Unintended Consequences
Workflow Issues

- Workflow process
- Clinical Personnel
- Policy/Procedure
- Human-computer interaction
- Situational awareness

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Types of Unintended Consequences
Never-ending System Demands

- Need for new/upgraded hardware
- More space in which for hardware storage
- Frequent upgrade releases
- Demand for new and changed builds
- Training demands
- Decision support table maintenance

Component 12/Unit 12 Health IT Workforce Curriculum Version 1.0/Fall 2010 5

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**Types of Unintended Consequences
Communication and Emotions**

- “Illusion” of communication
- Less face-to-face communication
- Paper persistence to communicate or store information
- Emotions are high during transitions
- Negative emotions can lead to cognitive errors

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**Types of Unintended Consequences
New Kinds of Errors**

- Confusing order option presentation
- Inappropriate text entries
- Inadvertent selection of the option above or below the intended selection in a pick list (drop down lists)
- Inadvertent selection of wrong patient name from a census list
- Data omissions or data placed in wrong area

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**Types of Unintended Consequences
Unexpected Power Structure Changes**

- System configurations control who may and may not do things through role based authorizations
- Provider may not be able to order the types of tests or medications they prefer
- Provider may be forced to adhere to a clinical practice guideline
- Space may limit narrative flexibility
- Order standardization may cause confusion

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Types of Unintended Consequences Overdependence on Technology

- System failures
 - What to do when system is down
 - What to do when downtime is over
- Belief that if it is in the computer, it cannot be wrong

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Version 1.0/Fall 2010 10

Types of Unintended Consequences Copy-Paste Errors

- Erroneous or incomplete information
- Lengthy notes with loss of narrative
- Error duplication
- Perpetual problem lists that never change
- Invalid electronic attestation
- Lost revenue due to billing compliance rules

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Version 1.0/Fall 2010 11

Summary

There are known unintentional consequences to electronic health records

Most of the studies in this area have been with respect to provider order entry

Copy and paste errors are becoming problematic in clinical documentation and have resulted in billing compliance issues.

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Version 1.0/Fall 2010 12
