

HEALTH DATA MANAGEMENT

Navigate Scenario LiveLab



100% Digital “eWorkbooks” - LiveLabs provide students “Live” hands-on access to the VA VistA Electronic Health Record Database via a customized virtual desktop that is available to students 24 x 7 x 365.

The customized desktop contains a **Lab Guide** or “eWorkbook” embedded on the left hand side of the frame. This 100% digital solution combines authoritative content from **Jones & Bartlett Learning** with the hands-on lab technology provisioned by **Toolwire**, a leading provider of Experiential Learning technology for Higher Education.

The **EHR Lab Guide (Pictured Above)** contains two tabs: an **Intro** tab (left) and a **Steps** tab (right). The **Intro** tab provides contextual information related to the field of Health Information Technology (HIT). The **Steps** tab walks students through step-by-step exercises that provide students with real-world hands-on experience using electronic health records.

ABOUT LIVELABS

LiveLabs combine authoritative Jones & Bartlett Learning course materials with hands-on virtual desktop labs developed by Toolwire, a leading provider of online Experiential Learning technologies. These customized virtual desktops are specifically designed to provide a more efficient, effective, and engaging way to learn Information Technology (IT) applications and are ideally suited for academic institutions seeking to increase student retention and better prepare graduates with the IT hard skills required for workforce readiness.

HEALTH DATA MANAGEMENT

LiveLab Overview

- **Lab 1: EHR Essential Data Contents**
- **Lab 2: Data Quality**
- **Lab 3: Content of Health Records**
- **Lab 4: Standards and Regulations**

The Health Data Management LiveLab contains 4 labs that each take approximately 30-45 minutes to complete. Each lab enables students to practice skills on a live Electronic Health Record (EHR) database with over 300 unique records.

Required activities are presented in the context of real-life situations. Students assume the role of a newly hired clinical analyst at the Riverside Health Center, a multi-specialty ambulatory and inpatient care center operated by the Veterans Administration.

Demonstrating how Health Information Technology (HIT) concepts apply to real world situations is extremely valuable for learning institutions focused on providing learning that is both relevant and engaging.



Lab 1- EHR Essential Data Contents - As the newest clinical analyst at Riverside Health Center, you have been hired to work with the electronic data in the VA's Vista EHR. Vista (Veterans Health Information Systems and Technology Architecture) is the name that the VA (Veterans Administration) has given to the full suite of healthcare information technology tools they are providing to their healthcare staff.

LAB 1: EHR ESSENTIAL DATA CONTENTS

Learning Objectives

- Understand the complexities associated with healthcare data (HD)
- Locate healthcare data and analyze it to manage and improve the services you deliver to your patients

Intro - Tasks

1. Becoming familiar with HD in ambulatory medicine
2. Data associated with the patient encounter
3. Understanding HD created after the encounter
4. Understanding how HD is stored
5. Exploring how local HD scope & structure can vary
6. Data storage in the database
7. Generating a report from the Veteran's Administration's Vista EHR
8. Understanding how clinical data is collected/received in an ambulatory setting

Steps - Database Lab Exercise

- Creating a report for diabetics with abnormal labs

LAB 2: DATA QUALITY

Learning Objectives

- Learn how accurate, reliable (quality) data is a major enabler of quality care
- Understand that the quality of healthcare data is different from the quality of healthcare itself

Tasks

1. Reviewing the Significance of HD
2. Getting Systematic About Understanding Data Quality
3. Learning About the Attributes of Quality in HD
4. Differentiating Between Systematic and Random Causes of Data Quality Problems
5. Applying The Concepts of Quality Management to HD
6. Understanding the Drivers for Data Quality
7. Data Quality Activities for the Data Analyst/Specialist
8. Auditing/Coding of Encounters

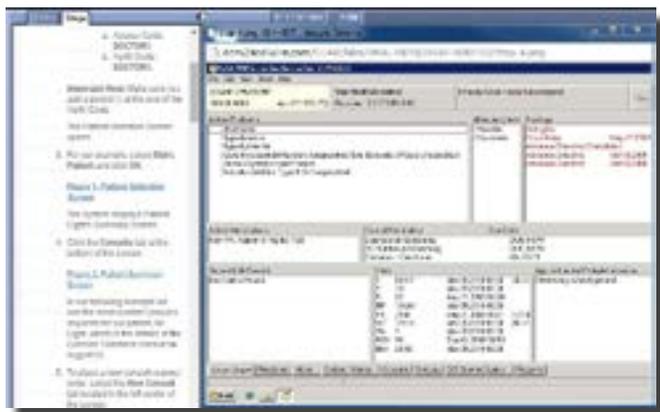
Steps - Database Lab Exercise

- Auditing 3/31/10 patient visit record using CPRS



Attribute Type	Attribute Definitions
1. Validity	4. Other essential pieces of data are present and combined to produce a sufficient set of data for a specific function
2. Accuracy	5. Data is meaningful or useful in the data set
3. Availability	7. Data that is made available when it is needed
4. Consistent/Inconsistent	6. Associated value
5. Completeness	3. Level of detail required of the data
6. Currency	8. Newly reported or new data accompanied with when data should be entry
7. Uniqueness	9. Data entered once

Lab 2- Data Quality - Melanie Pierce, the Ambulatory Services Administrator, wants you to roll up your sleeves and help Riverside Health Center improve the reliability of its information. Of particular interest to her is solving a persisting data accuracy problem that seriously impacts how fast the practice gets paid. The staff entry of patient insurance policy number is frequently wrong.



LAB 3: CONTENT OF HEALTH RECORDS

Learning Objectives

- Exposure to the range of health records in use today

Tasks

1. Understanding the genesis of healthcare records
2. Learning more about ambulatory healthcare records
3. Evaluating the use of health records
4. Common activities in a patient encounter
5. Non clinical health records
6. Exploring the data demands of external entities
7. Exploring the impact of regulations on health records and Healthcare Data
8. Becoming familiar with the concept of Protected Health Information (PHI)
9. Understanding data storage considerations

Steps - Database Lab Exercise

1. Placing a Consult Order in CPRS
2. Medication Reconciliation
3. Prescribing and CPOE
4. Clinical Decision Support (CDS)

LAB 4: STANDARDS AND REGULATIONS

Learning Objectives

- Understand the standards and regulations that accompany the use of healthcare data (HD)

Tasks

1. Standards & regulatory environment introduction
2. Exploring the regulations within HIPAA
3. Exploring the impact of state regulations on HD and records/documents
4. Reviewing the impact and understanding electronic data standards organizations
5. Role of organizations in HD standards-setting

Steps - Database Lab Exercise

- Access controls in CPRS

Lab 3 - Content of Health Records - Your supervisor Melanie advises you that the Geriatric Physicians have decided to convert to the VA's Computerized Patient Record System (CPRS). As the clinical data analyst, you must support the implementation team.



Lab 4 - Standards & Regulations - The Managing Physician at your practice had a conversation with Melanie regarding a recent medical society meeting focused on regulations and standards for Health Data (HD). The doctor concluded that the situation was more complicated than he thought and asked Melanie to provide him with a briefing to help him better understand the current environment. Melanie, in turn, is now asking you to help her frame this issue for a presentation to the Managing Physician.

HEALTH DATA MANAGEMENT LIVELAB

Hands-on Experiential Learning where students LEARN by DOING.