



Data Reporting

Foundational Curricula:

Cluster 8: Data

Module 15: Data Analytics, Modeling and Reporting

Unit 3: Data Reporting

FC-C8M15U3

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Unit Objectives



- Describe data reporting in eHealth
- Describe how EHRs support data reporting
- Describe data fragmentation



What is data reporting and why is it important?

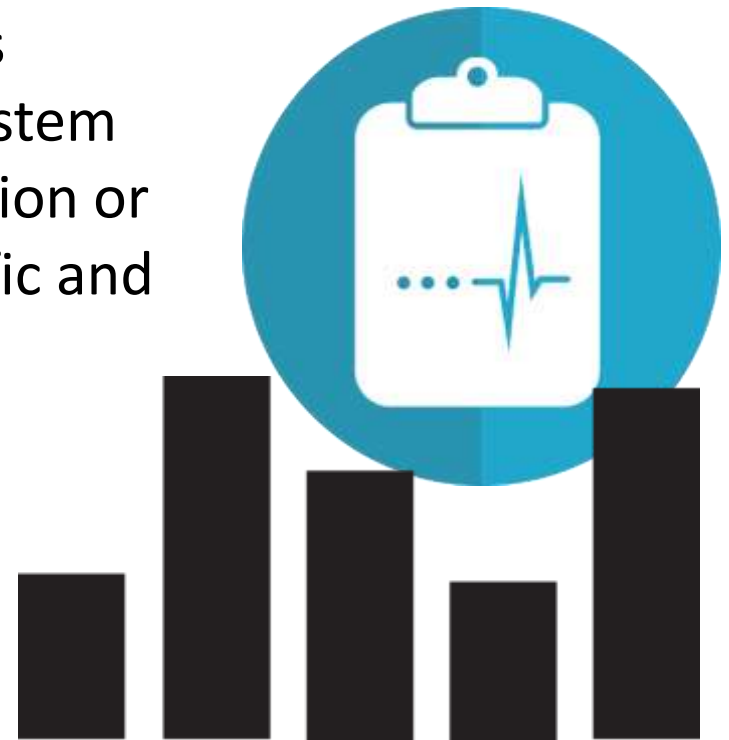


- Data reporting is the process of collecting and submitting data for evaluation of the system's performance. A reporting system provides a tool for measuring and controlling the organization's functions.
 - For example FBI has the National Incident-Based Reporting System (NIBRS)
- Data reporting is extremely important in all application areas: inaccurate data reporting might lead to bad decision-making based on missing or inaccurate information
 - Data reporting concludes all aspects or possibilities to perform the analysis



Data reporting in eHealth

- eHealth reports combine data from several sources to charts, tables and other types of information. Ehealth reports collect information of the eHealth system performance, i.e. if there is some action or part that creates heavy network traffic and slows down the connections.





Describe how EHRs support data reporting

- EHR systems can be used to support data reporting by generating automatic reports based on these records.
- For example, information of chronic illnesses or injuries can be collected based on hospital visits and services used by the patients.





Data fragmentation



- Health care data is collected by various entities and it involves various data collection systems. The data is not shared in a cohesive and standardized way among these entities. This is called data fragmentation.
- Data fragmentation leads to ineffectiveness in various situations and builds up extra load and repetition to the customer. Examples of data fragmentation:
 - If an ambulance is called for emergency care, the patient needs to tell if they have allergies or chronic illnesses / or they need to wear an informative wristband or other sign. Ambulance staff do not have mobile health record (at least everywhere)



Data fragmentation in Healthcare



- Race, ethnicity and language data are not held in a single place and patient might need to self-identify this data during every health encounter. Health care professionals might also lack the rationale and training for collecting this data (Standardizing Direct Data Collection for the health care professionals is presented in the next slide).
- Health IT might be the tool to integrate the self-reported race, ethnicity and language data better between different systems and entities.





Standardizing Direct Data Collection



- **Who:** information should always be asked of patients or their caretakers and should never be gathered by observation alone
- **When:** information should be collected upon admission or patient registration to ensure that appropriate fields are completed when the patient begins treatment, or for plans, when the individual enrolls (as permitted by state law)
- **What:**
 - Questions about the OMB race and Hispanic ethnicity categories (one- or two-question format permitted)
 - A question about granular ethnicity with locally relevant response categories selected from a national standard set
 - A question to determine English-language proficiency
 - A question about language preference needed for effective communication
- **Where:** data should be stored in a standard format for easy linking to clinical data
- **How:** patient concerns should be addressed when the information is being obtained, and staff should receive ongoing training and evaluation.

5. Improving Data Collection across the Health care System. Agency for Healthcare Research and Quality, Rockville, MD.



Unit Review Checklist



- Described data reporting in eHealth (GL03)
- Described how EHRs support data reporting
- Described data fragmentation



Unit Review Exercise/Activity



1. Describe how patient data should be collected in health care (Standardizing Direct Data Collection).
2. Give examples of how data fragmentation can be seen in health care.



Unit Exam



1. Data fragmentation refers to the process where data is transferred from patients to health care professionals.
 - a) True
 - b) False
2. Patient data should be collected
 - a) By surveys that are sent home before any possible encounter in health care
 - b) Upon admission or patient registration to a health care entity
 - c) After the treatments in health care entity



Unit Exam (cont'd)



3. Data reporting aims to
 - a) Identify the different ways of storing the data
 - b) Collect the right data for evaluating if patient is given the right medication
 - c) Evaluate the system performance
4. EHR systems can be used to support data reporting
 - a) True
 - b) False