

Clinical Informatics Systems in Nursing

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Objectives

- Identify the use of DIKW in Clinical Informatics
- Recognize the financial push incentivisation had on electronic health records (EHR)s
- Identify eight principles of Information Governance
- Identify shared documentation data points
- Identify data driven operations
- Recognize the emergence of remote systems in healthcare
- Recognize the increasing roles for Nursing Informatics

Data, Information Knowledge, Wisdom - DIKW

- Data is collected all around us
- Data is shared all around us
- Healthcare protects our data - HIPAA
- Difference between PHI and data that can be shared
- DIKW model in nursing informatics

Technology Timeframe

- 1980's technology starting to move into healthcare
- Systems were independent
- US encourages free enterprise
- No single vendor has ever been chosen
- Enterprise-wide systems make things easier
- Competition between vendors
- Vendors create proprietary products
- Not much "buy-in" until financial incentives were assigned to electronic health record

Information Governance

Principles:

- Accountability
- Integrity
- Protection Compliance
- Availability
- Retention
- Disposition
- Transparency

Data Threats

- Simple to complicated sources
- Physical to technology in nature
- Secure Devices
- If a device is attacked by a virus
- Follow directions
- Healthcare is not the only industry at risk

Security

- PHI and HIPAA
- Enterprise-wide systems can have security issues
- Audit
- Meaningful User requires security



Data Documentation

Administrative Data

- Point of first contact
- Demographic information
- Questions have changed
 - Gender
 - Race
 - Ethnicity
 - Culture

Data Documentation

How data is pulled from place to place

- Enterprise-wide systems
- Administrative data
- Other data
- Allergies
- Why we ask the same question over and over

Data Documentation

Why data is pulled from place to place

- Makes job easier
- Saves time
- Accuracy if patient cannot respond
- Check setting if information does not pull and you think it should

Should information pull from encounter to encounter

- Diagnosis - HIV
- Diagnosis - Behavioral Health
- Potential policy driven

Demographics/Banner Bar

- Consistent on all screens of the patient record
- Major vendors use some type of a Banner Bar
- Facility has ability to add/change information on Banner Bar
- Standard demographic information
- Additional information
- Caution about overloading Banner Bar

Dashboards

- Newer and useful tool
- Can be used in house or remotely
- Built for many different levels/approaches

Clinical Decision Support

- What is Clinical Decision Support (CDS)?
- Evolution of CDS
- Simple CDS
- Complex CDS
- Applications for nurses
- Applications for providers
- Applications for multi-users

Alert Fatigue!

- Coffee is HOT!
- Alerts can be built at many levels
- Alerts will be ignored
- End users will complain about abuse of alerts
- End users will ignore alerts if abused

Remote Systems and Nursing Care

Other than telehealth type settings -

- Centralized Telemetry Monitoring Units
- Remote Critical Care Units
- Remote Pharmacy Units

Clinical Informatics through COVID-19

- Remote workers
- Documentation
- Lab test/reporting
- Surge units
- Reports (contact tracking)
- Patient/family communications - visitors restricted
- 4 months all projects were returned so we did the above plus full workload
- Always held responsible for provider training, software upgrades, new unit support, new project go-lives

Nursing Roles in Hospital Information Systems

- Clinical Informaticist
- Programmer level (not really a programmer)
- Researcher
- Educator
- Leadership

Questions?



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