Leading the Way...Integrating Technology in a Neuroscience Unit

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Integrating Technology in a Neuroscience Unit

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Leading the Way...

Abstract:
Healthcare technology can be quite an investment; but an investment in today’s technology can lead to a better tomorrow. Healthcare, software, clinical applications…there are many advances for any organization to implement. Determining the right technology for the environment is not an easy task; many factors must be examined to clearly define the expected advantages of new technology. A review of recent implementations in a Neuroscience Unit will be explored, highlighting the implications of the integrations. Implementation of technology to the bedside can present challenges; the team must closely examine the planning and implementation phases of each project. While there is a significant financial commitment in the technology, there must also be a commitment to time and energy and resources for a successful implementation. Commitment must remain evident post implementation of any technology. Lehigh Valley Health Network (LVHN) has proven a commitment to technological initiatives that lead to more efficient work process and improved patient care decisions.

Objectives:
• Review the integration of technology to the bedside in a Neuroscience Unit.
• Describe the challenges of integrating technology to the Neuroscience Unit.
• Discuss the implications of investing in technology to the bedside of a Neuroscience Unit.

Advantages of Technology:
The healthcare arena has been consistently investing in healthcare information systems which improve medical decision-making while increasing user efficiency. In recent years, healthcare technology has transformed the healthcare workplace. Healthcare networks have adopted information systems at a pace which fits their overall healthcare environment. There are many advantages to early adoption of healthcare technology:

• Comprehensive data to facilitate patient care decisions
• Real time data
• Real time accessibility to patient data
• Clinical efficiency
• Improve quality of care
• Reduce medical errors

Challenges of Integrating Technology:
• Real time documentation
• Remote accessibility to data utilizing Internet
• Development of super users & go-live support
• Weigh pros versus cons of investment

Clinical Documentation

Objectives:
• Improve quality of care
• Streamline handoff communication
• Automated data retrieval for quality improvement
• Evaluate the current environment for hardware and work processes
• Assist with the ability to institute high performance work systems

Clinical Documentation

Ge Lucidchart

4.3.5

- EMR and CPOE (Computer Provider Order Entry) implemented prior to BCMC; allowing users to access, create, and maintain patient documentation in real-time using a user-friendly interface.
- EMR/Metavision – Integrate EMR with Metavision documentation tools to assist with comprehensive patient care decisions.
- EMR/Metavision – One time entry of medication administration, flow sheet, lab results, medication administration, and flow sheet

Electronic Medication Administration (eMAR) and Barcode Medication Charting (BCMC)

Electronic Medication Administration (eMAR) and Barcode Medication Charting (BCMC) provides flexibility to customize views for Neuroscience specialty, inclusive of Neuro, Stroke, Neurosurgery and other Neuroscience units. The eMAR and BCMC capabilities provide the ability to perform remote patient identification, medication administration and results entry. The system is integrated with various floor level narcotic management systems, providing a seamless transition to online charting. Results/reports to assist with coordination of care.

Metavision®

Metavision® by McKesson

- Complete online documentation system developed to streamline documentation and retrieval of patient care data
- System provides flexibility to customize views for Neuroscience specialty, inclusive of Neuro, Stroke, Neurosurgery and other Neuroscience units
- Data integration with integrated view
- User-friendly interface
- Cloud based system which offers access to electronic medical record from anywhere in the hospital

Web Based Applications

Lehigh Valley Health Network has implemented the use of several web based applications to augment documentation and the electronic medical record. The web based applications have been developed to complement the current applications. Each web based application is introduced in the following sections:

Palliative Care Management Tool - online web document which allows the nurse to communicate electronically to the physician.

- Xray tool - online web document which allows the nurse to view the patient’s x-ray

Menor’s Discharge Instructions

Menor’s Discharge Instructions is a customized template to assist the patient.

- Specific instructions are legible and incorporated into the discharge form

References:

