Nursing Informatics for Excellence in Data Driven Decision-Making: Developing Nursing Administrative Dashboards
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INTRODUCTION
• The objective was to develop nursing administrative dashboards that would enhance data-driven decision making and forecasting while supporting the structure, process and outcomes of nursing practice.
• Overwhelming attention to patient safety, fiscal and resource management, staff-driven performance improvement, evidence-based practice and regulatory compliance drives the need for administrative transparency using data.
• Achieving results that drive clinical excellence and quality requires a nursing informatics infrastructure.

VISION / MISSION
Miami VA Healthcare System Vision to become the Best Healthcare System in VA
- Baldrige, Carey, Magnet Journey concurrent
Office of Nursing Service Vision includes
“Communicating nursing data using IT as an information management tool to manage easy access to forecast, access & communicate data”

ISSUES
• Historical absence of administrative or informatics infrastructure
• Disparate data sources and reports
• Multiple manual reports that were not reconciled
• No formal process for data validation
• No formal process to assess data accuracy
• Under resourced Nursing Informatics team
• Lack of clerical support for Nurse Managers
• Culture change with new executive management style

BEST PRACTICE
• Successful system redesign process in developing administrative nursing dashboards recognized by VANOD
• Careful planning and execution of Nursing Informatics infrastructure supports the executive alignment and integration of administrative and clinical data and operations.
• Nursing Informatics leadership and support for creating an infrastructure is key in supporting effective and efficient Chief Nurse Executive decision-making.
• Developing the administrative nursing dashboards provide the nurse executives and nurse manages a baseline for sound fiscal and resource management and placed Miami VAHCS in a proactive posture to expand and grow with VANOD.

DESCRIPTION OF THE ACTIVITIES
NURSING RESEARCH & INFORMATICS
Strategy: Build Nursing Informatics (NI) leadership, infrastructure & support
NI Vision: To provide accurate and useful data that will drive decisions for nursing and patient care.
NI Mission: To collect, validate, interpret and disseminate quality data that will guide administration and management decisions about staffing and patient care.

• Multidisciplinary team building and capacity building
• Nursing FTEE reallocated and Nursing Informatics structure was identified.
• Assessment of data sources, structure, merging multiple data sources, assessing data accuracy and validity, representation and analysis.
• Nursing-sensitive administrative and clinical indicators outcome assessment was identified early in 2004.
• ProClarity purchased in late 2004, data sources were identified, data structure assessed, data extraction cubes were built
• Reports initially identified were: staffing costs, overtime, 1:1 care, and nursing demographics.
• By 2006, Nurse Managers began using the dashboards to manage resources.

CONCLUSIONS
• Creating a Nursing Informatics infrastructure is critical in supporting nurse executive data-driven decision making
• Administrative dashboards provide sound baseline for fiscal and resource management optimizing decisions impacting patient care.
• Using dashboards, the chief nurse executive and managers have been able to:
  • Monitor, control and reduce overtime costs
  • Plan staffing recruitment and retention activities
  • Develop and sustain a succession plan

SETTING
• Miami VAHCS is an urban tertiary academic medical center which has acute and critical care, long term, psychiatric and rehabilitation care beds in VA Medical Care Complexity Group 1a.
• The Miami VAHCS includes outpatient and primary care clinics that cover a 250 mile south Florida, Nursing has 585.98 FTEE and a 65.5% RN staff mix.

REFERENCES
Department of Veterans Affairs (2005), Miami VA Healthcare System, Nursing Data Operations Committee, Miami, FL.