VHA 2007 eHEALTH UNIVERSITY

INNOVATIONS FOR GENERATIONS

501 Clinical Software: Tools of the Health Trade

# Visionary Executive Leadership with Nursing Informatics as the Tool

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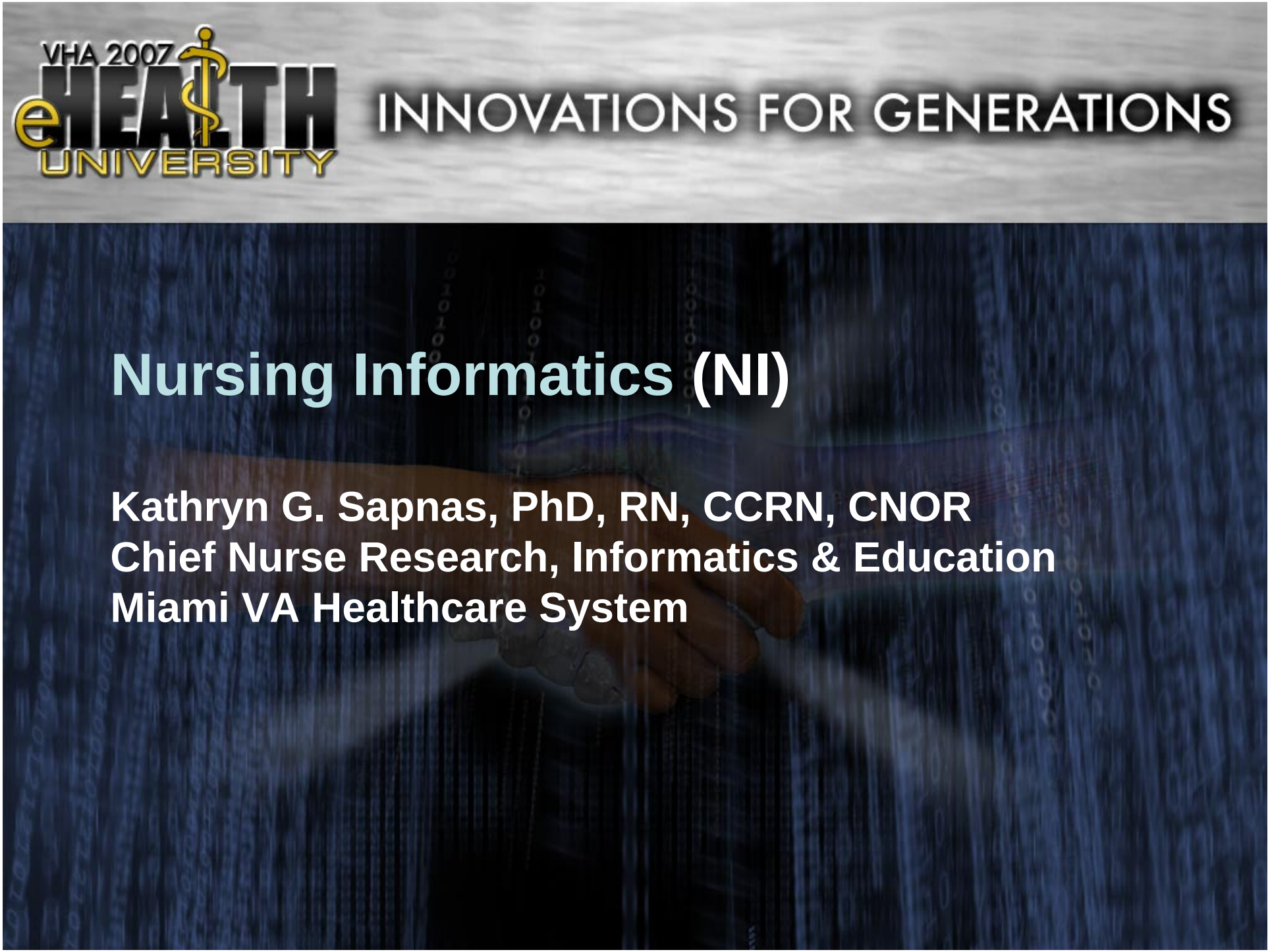
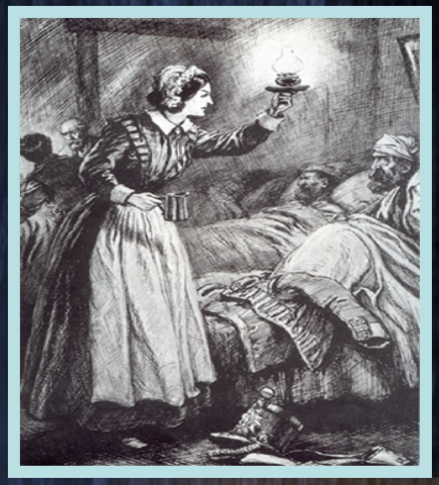



# Nursing Informatics (NI)

**Kathryn G. Sapnas, PhD, RN, CCRN, CNOR**
**Chief Nurse Research, Informatics & Education**
**Miami VA Healthcare System**

# Information Age - Natural Evolution

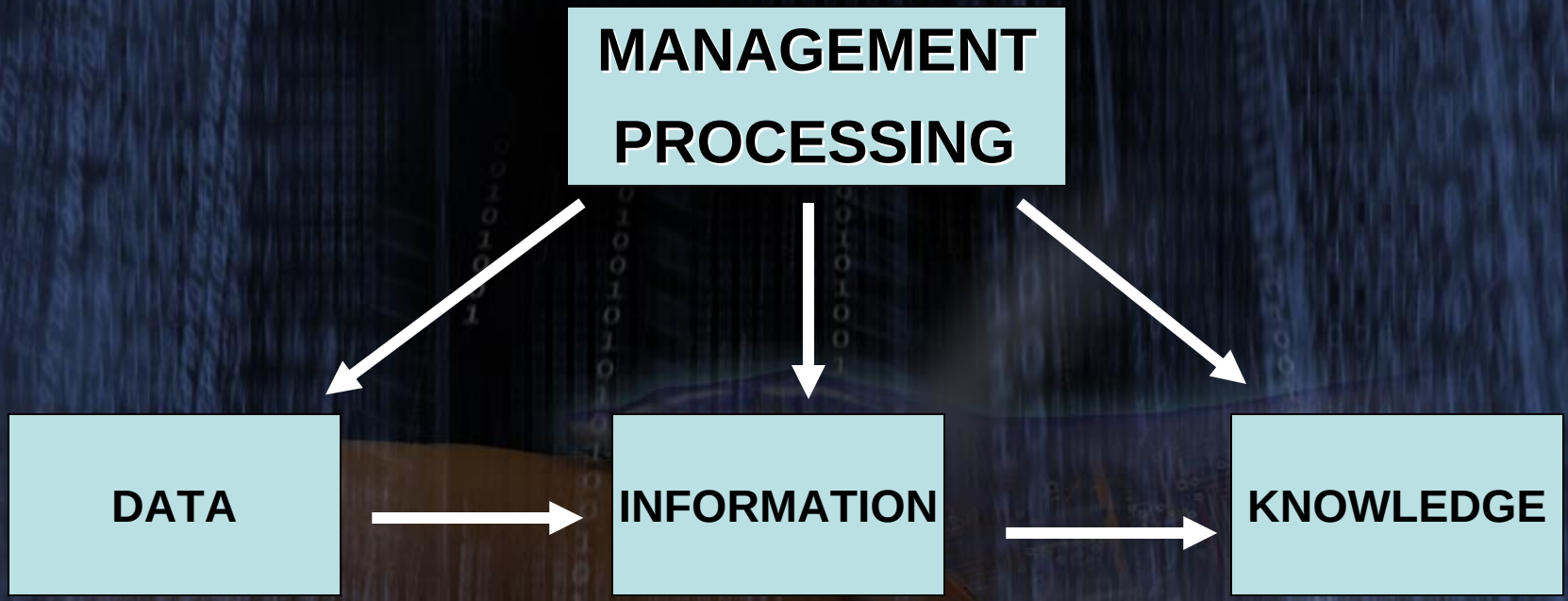


Florence Nightingale (1842) was recognized as first Nurse Informaticist for her use of data that created information used to develop knowledge & improve health.




- Modern Nursing
- Information Age
- Patient Safety
- Point of Care Technology

# Evolution Nursing Informatics




**Definition: "combination of *computer science, information science, and nursing science* designed to assist in the management and processing of nursing data, information, and knowledge to support the practice of nursing and the delivery of nursing care. "(p. 227)**

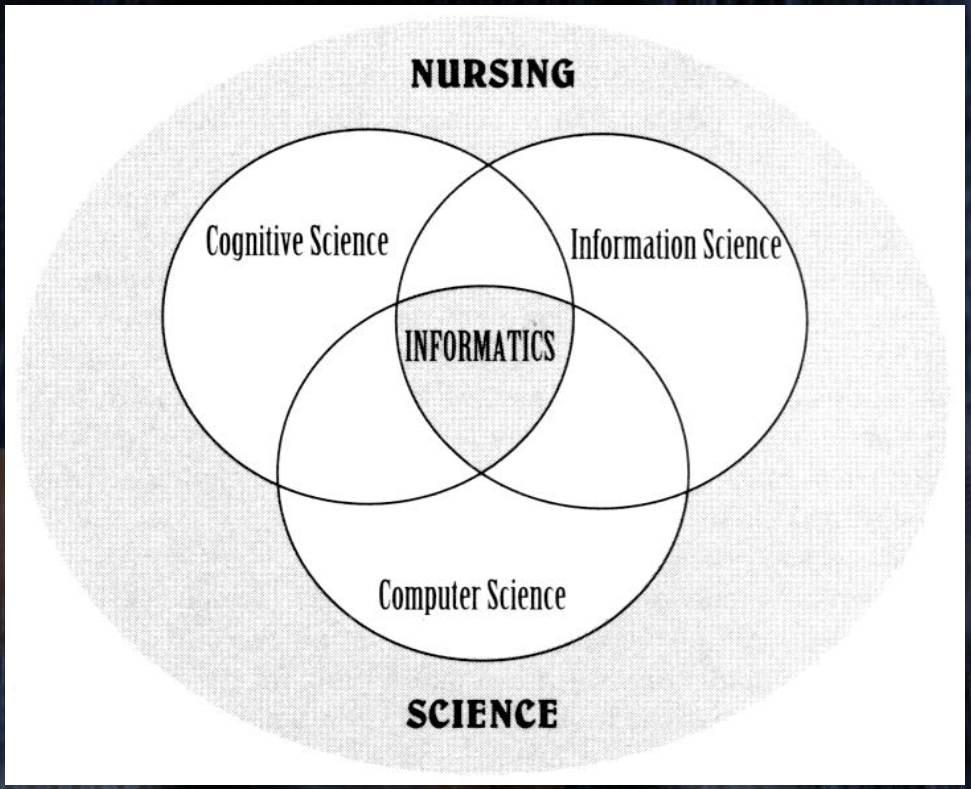
Graves and Corcoran (1989)

# Nursing Informatics Specialty

- 1st ANA Scope and Standards of Practice was expanded Graves & Corcoran (1989) definition
- Specialty NI first identified in 1992 & supporting nursing:
  - *Practice*
  - *Education*
  - *Research*
  - *Administration*
- *Focus on "management & communication of nursing information within the broader context of health informatics"*
- *NI is a specialty that contributes to advance of nursing knowledge*

*(ANA Scope & Standards of Nursing Informatics Practice, 2001 p.1)*

# Nursing Informatics…..Defined




"The use of information technologies in relation to those functions within the purview of nursing, and that are carried out by nurses when performing their duties. Therefore, any use of information technologies by nurses in relation to the care of their patients, the administration of health care facilities, or the educational preparation of individuals to practice the discipline is considered nursing informatics (p. 3)." (Turley, 1996)

# Current ANA NI Definition

## 2001 ANA Scope & Standards for NI Practice:

**"…a specialty that integrates *nursing science, computer science, and information science* to *manage and communicate data, information and knowledge* in nursing practice. Nursing informatics facilitates *integration* of data, information and knowledge to support patients, nurses and other providers in their decision-making in all roles and settings. This support is accomplished through the use of information structures, information processes, and information technology".**

- ***ANA 2007 revised NI definition pending***
  - **To include the concept of *"wisdom", reflecting complexity and human intellect in transforming data to knowledge***

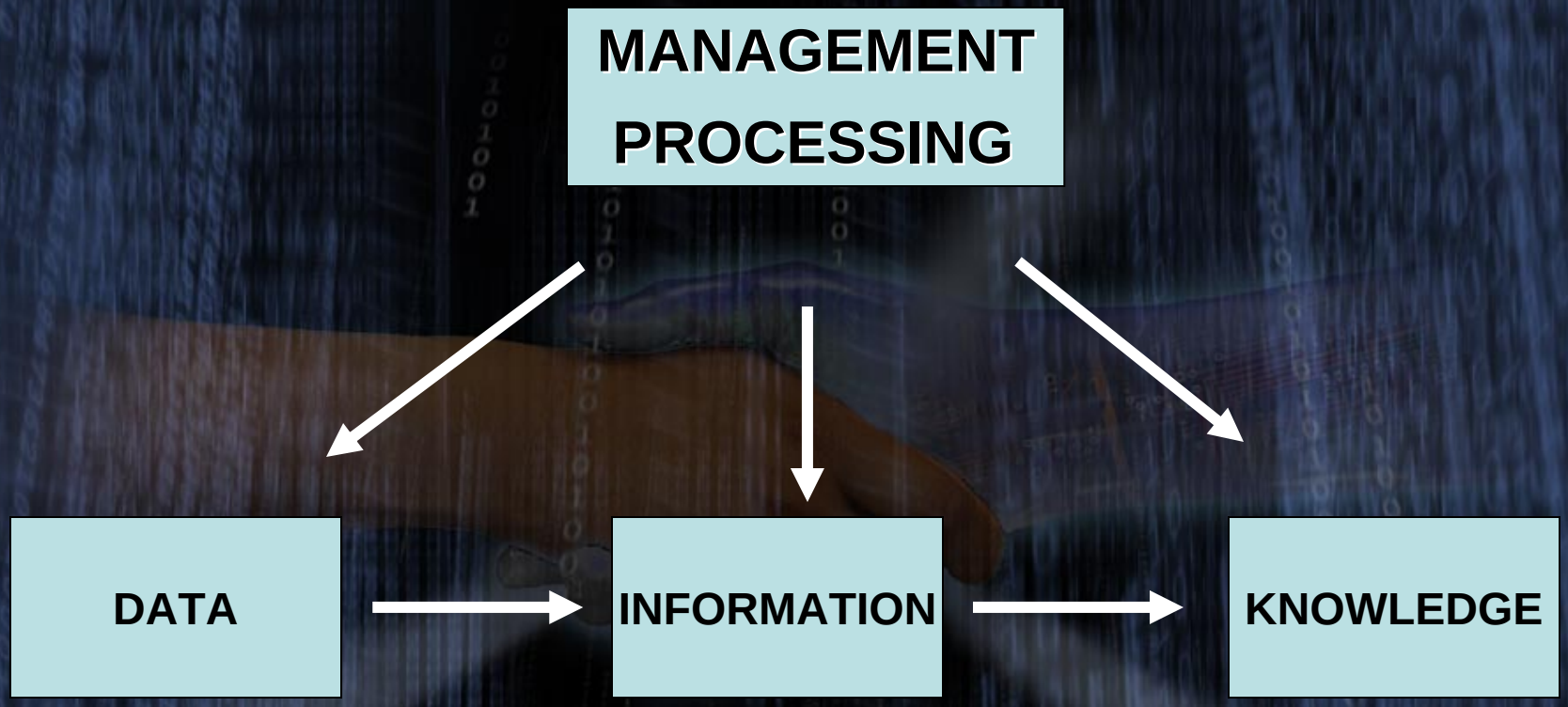
.

# Nursing Informatics Competencies

**Informatics Nurse Specialist skills common to Nurse Executive skills**

- Computer literacy skills
- Information literacy skills
- Project management skills
- Information management and communication
- Make judgments based on data trends & patterns
- Consultant

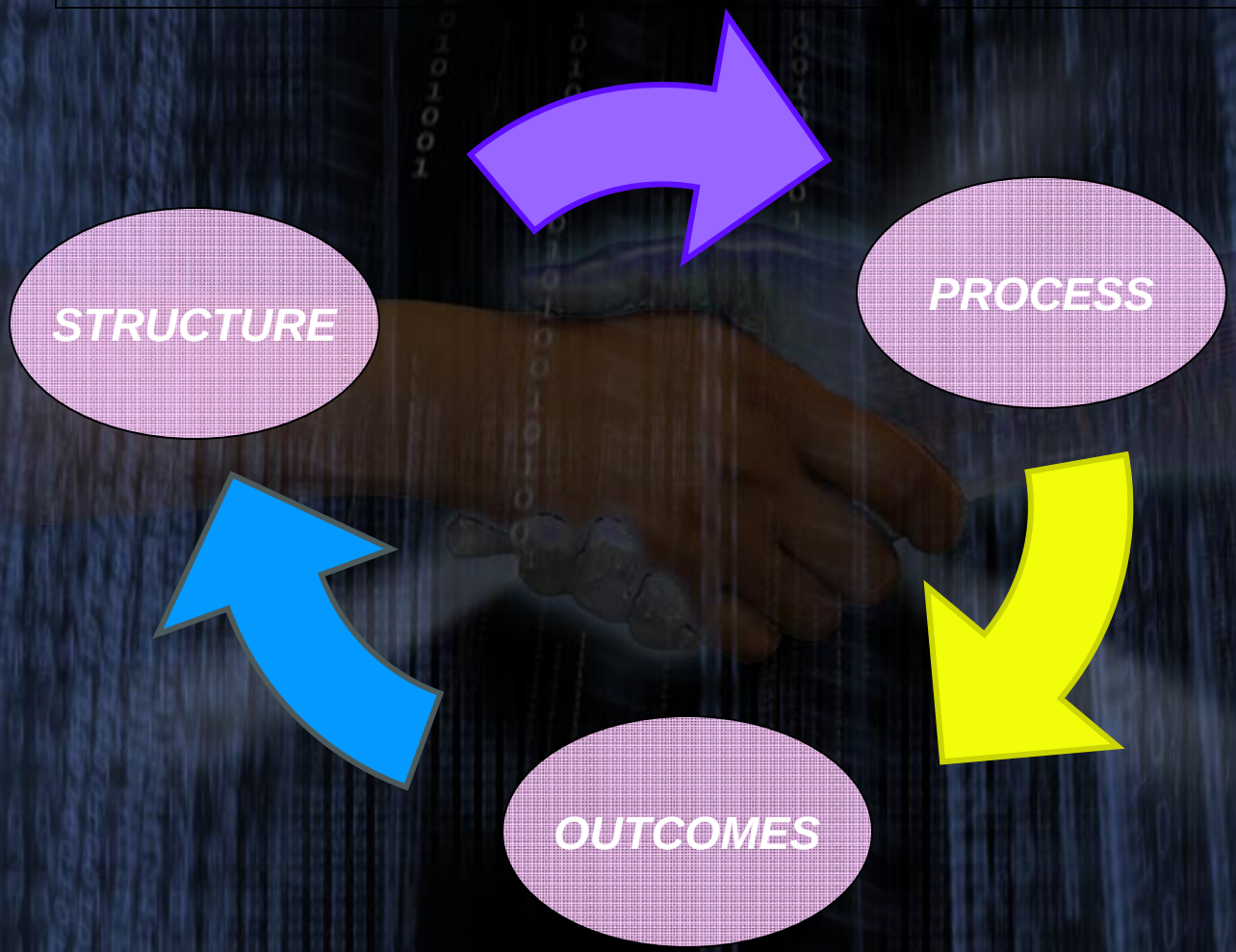
# Evolution Nursing Informatics



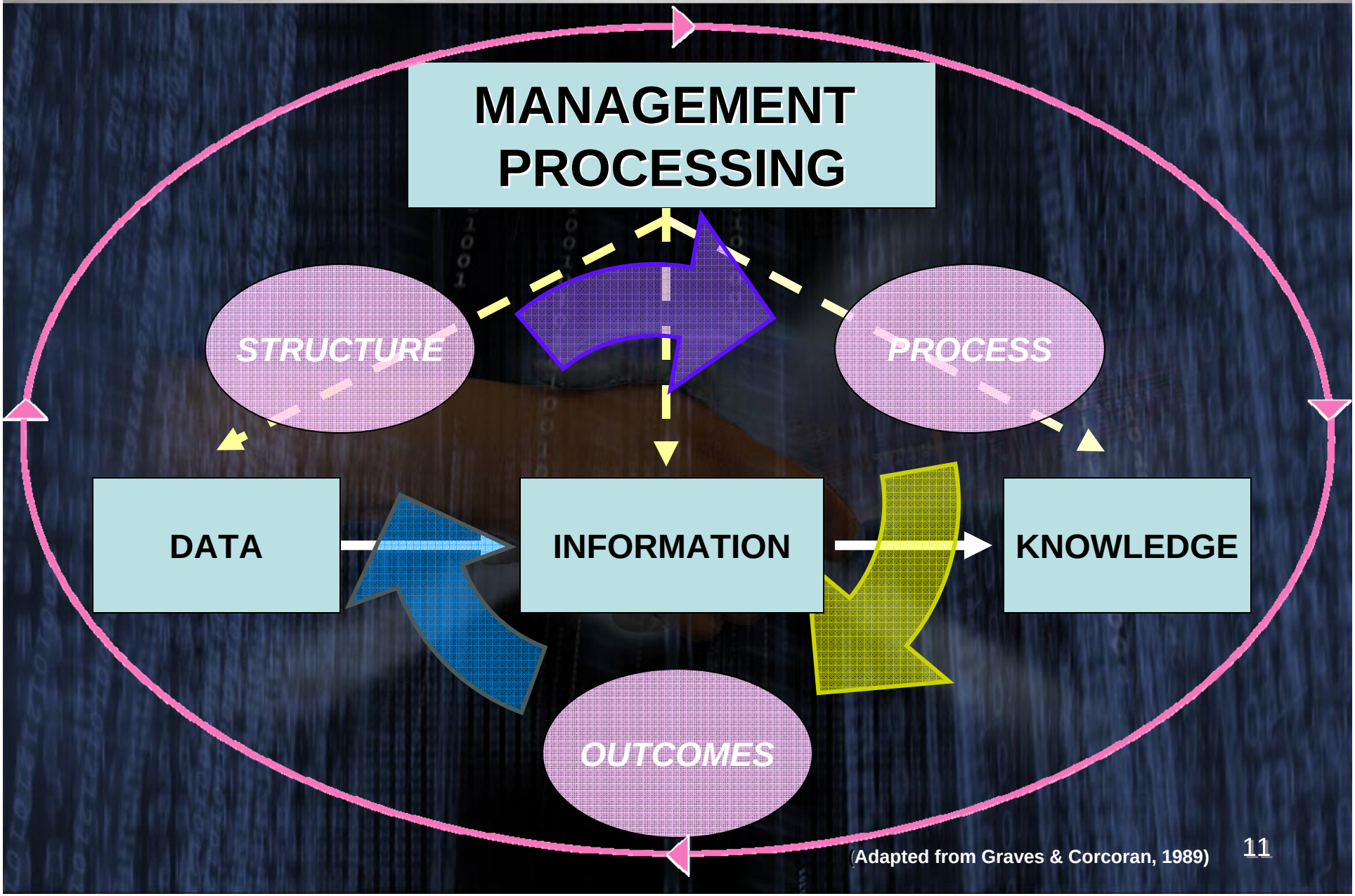

(Graves and Corcoran, 1989)

# Model of Visionary Nursing Leadership

## NURSING PRACTICE DELIVERY

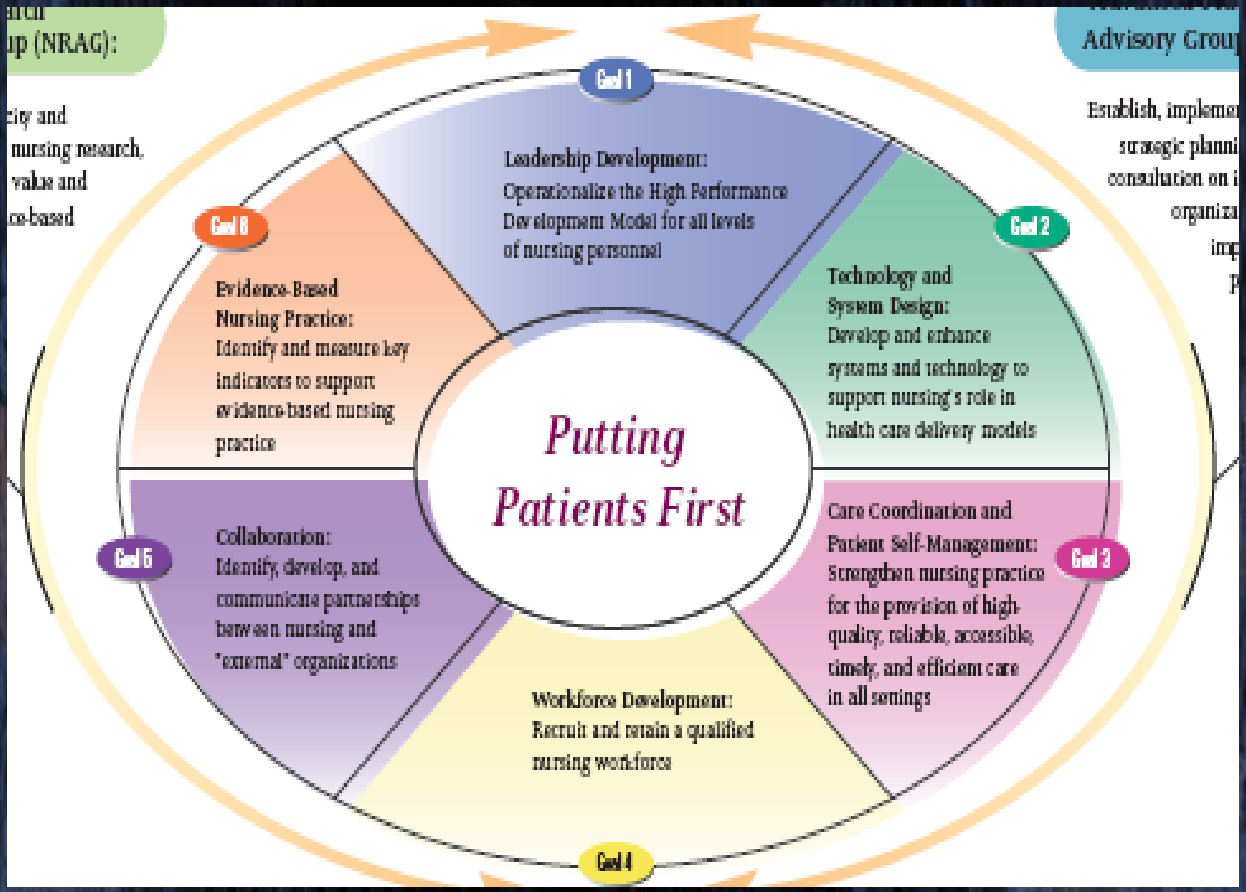


# Model of Visionary Nursing Leadership




(Adapted from Graves & Corcoran, 1989)

# Leadership & Informatics




Cuts across all ONS strategic goals

# ONS Mission

- The Office of Nursing Services (ONS) provides leadership, guidance and strategic direction on all issues related to nursing practice and nursing workforce for clinical programs across the continuum of care and across the spectrum of care delivery sites that impact our veterans.
  - ***Visionary nursing leaders use "informatics as a tool" to guide and influence improvements in patient safety, satisfaction and outcomes with nursing recruitment, recognition and retention efforts.***

# Nursing Informatics & VA Nursing Qualification Standards

**Nurse IV**

- *Practice*
  - Implements technology solutions to assess, design & measure programs
- *Quality of Care…*
  - Identifies outcomes
  - Leads PI teams
  - Designs practice changes to improve & evaluate outcomes
- *Resource Utilization*
  - *Manages resources*
- *Ethics*
  - *Data protection*
- *Performance Measures*
- *Education/ Career Development*
- *Research*
- *Collaboration*
- *Collegiality*

**Nurse V**

- *Practice*
  - Communication
  - Coordination
  - Evaluation
  - HDPM – creativity
- *Quality of Care…*
  - *- Data-driven decision making*
  - -Evaluates outcomes
  - -Benchmarks
  - -Forecasts
  - -Uses satisfaction indicators
- *Performance Measures*
  - Assess, Analyze, Predict, Respond
- *Education/ Career Development*
- *Resource Utilization*
- *Ethics*
- *Research*
- *Collaboration*
- *Collegiality*

# VA Nurse Executive Practice and American Nursing Association (ANA) Scope & Standards

## NI Examples - Nurse Executive Role

- **Incorporate technology solutions into safe and efficient patient care delivery and nursing workflow**
- **Communicate across and within services**
- **Assess workflow and patient throughput systems**
- **Implement technology- Clinical information systems, & patient-centered information systems, equipment**
- **Data-driven decisions in evaluating staff and program performance, as well as patient outcomes**
- **Forecast resources based on trends**
- **Assure ethical and moral solutions for data and information security**

# ANA Scope & Standards Nursing for Informatics Practice

- **6 Domains of NI Practice**
  - *System Lifecycle*
  - *Human Factors*
  - *Information Technology*
  - *Information Management*
  - *Professional Practice*
  - *Models and Theories*

# Domains of NI Practice

- **System Life Cycle**
  - Plans
  - Analysis
  - Design
  - Implementation & Testing
  - Evaluation, Maintenance & Support
- **Human Factors**
  - Ergonomics
  - Software user interface

# Domains of NI Practice

- **Information Technology**
  - Hardware
  - Software
  - Communication
  - Data Representation
  - Security
- **Information Management**
  - Data
  - Information
  - Knowledge

# Domains of NI Practice

- **Professional Practice**
  - Roles
  - Trends & Issues
  - Ethics
- **Models and Theories**
  - Foundations in Nursing Informatics
  - Nursing & Healthcare data sets, classification systems, & nomenclatures
  - Related theories & sciences

# Specialty NI Organization & Certification

## American Nursing Informatics Association (ANIA)

- ***Mission*** **is to provide networking, education and information resources that enrich and strengthen the roles of nurses in the field of informatics.**
- ***Purpose*** **is to provide professional networking opportunities for nurses working in healthcare informatics and a forum for the advancement of nursing and nursing professionals in informatics.**

http://www.ania.org

# Nursing Administrative Specialty

## American Organization of Nursing Executives (AONE)

- ***Vision*** is to “shape the future of health care through innovative nursing leadership”.

- ***Mission*** is to “ represent nurse leaders who improve health care”. Members are leaders in collaboration and catalysts for innovation.

# Hallmarks of AONE Leadership

**Behaviors:**

Futurist

Synthesizer

Partner

Convener

Provocateur

Designer

Broker

**Values:**

Creativity

Excellence

Integrity

Leadership

Stewardship

**Core Businesses:**

Education & Leadership Development

Public Policy Advocacy

Career Development

Information Resources

Local Chapters

Research

# AONE Strategic Plan

- Design of Future Healthcare Delivery Systems
  - Design
  - Implementation
  - Evaluation
- Leverage human, technological and financial resources
- High quality, safe & patient-centered

AONE technology related initiative developed a resource to assist Nurse Executives in technology acquisition implementation.

VHA 2007 eHEALTH UNIVERSITY

INNOVATIONS FOR GENERATIONS


# Technology Informatics Guiding Educational Reform

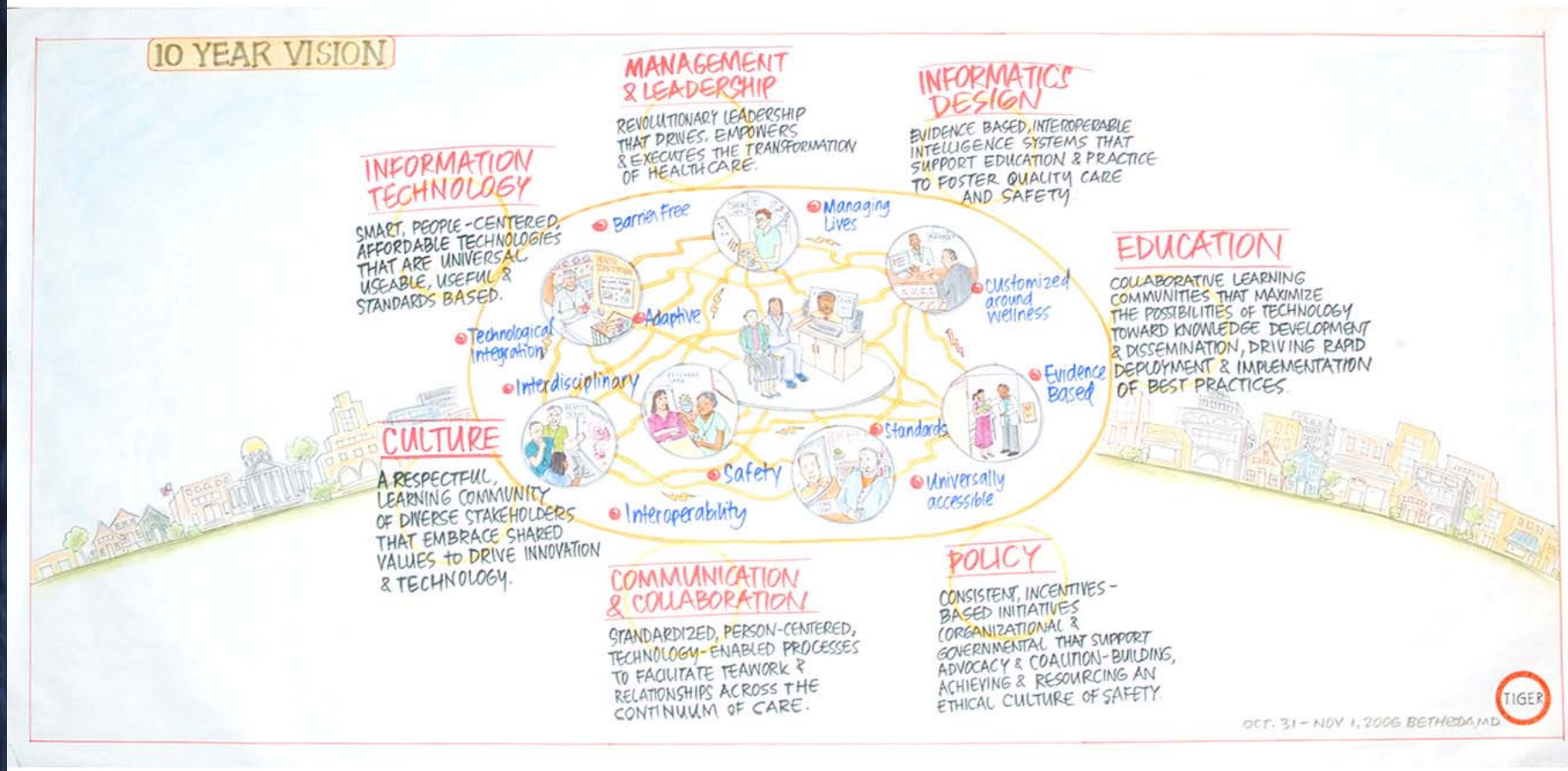
**TIGER SUMMIT 2006:**

A collaboration of “thought leaders” & stakeholders invited to create an actionable plan that will prepare nurses to practice in an increasingly automated health care environment

# TIGER Summit Collective Vision

- 10-year vision with "vision statements" for each of 7 “pillars” of the plan in the ideal, future state
- 3 year actionable plan
- 7 pillars (domains) identified:
  - Policy
  - Culture
  - Information Technology
  - Management & Leadership
  - Education
  - Informatics Design
  - Communication & Collaboration

# TIGER…a 10 year VISION




https://www.tigersummit.com/

# Assumptions

1) The "practice" of nurses is in reference to "point of care" services that nurses provide across the continuum of care (home, hospital, ambulatory, long-term care, etc.)

2) The "education" of nurses is in reference to all nursing preparation (all degree preparation and specific role preparation, e.g., Advance Practice Nurses).

https://www.tigersummit.com/uploads/TIGERInitiative_Report2007_bw.pdf

# Management & Leadership

## ***Key Actions:***

To champion & support informatics integration into the day-to-day practice of nurses and student education through:

- *Creating Shared Vision*
- *Courageous Leadership,*
- *Direction and Support*

***Vision Statement:*** ***Revolutionary leadership that drives, empowers, and executes the transformation of healthcare.***

# Communication & Collaboration

## ***Key Actions:***

- Organize stakeholders & establish, disseminate, & support vision, core values, & goals
- Benchmark, measure, & report criteria documenting communication & collaboration outcomes

***Vision Statement:*** ***Standardized, person-centered, technology-enabled processes to facilitate teamwork & relationships across care continuum***

# Informatics Design

## Key Actions

- Include multidisciplinary end-users in integration/incorporation & design of intuitive, affordable, usable, responsive, evidence-based informatics across care continuum
- Develop guidelines for integrating informatics infrastructure
- Design systems that promote the mining and use of data for analysis, clinical decision-making, and measurement to improve the quality of care.
- Create and implement multidisciplinary, multilingual standards.

***Vision Statement: Evidence-based, interoperable intelligence systems that support education and practice to foster quality care and safety.***

# Culture

## *Key Actions*

- National campaign to promote multidisciplinary value of technology that supports an accepting culture.
- Include HIT in *every* strategic plan, mission and vision statement.
- Evaluate current processes & redesign as needed.
- HIT use embraced (and value articulated) by executives, deans, all personnel (including point-of-care clinicians), staff & students.
- Establish multidisciplinary teams embracing shared vision & push for broad technology integration across entire system.
- Develop mutual respect among clinicians who may bring different skills and knowledge (ex: "two-way mentoring").
- Culture supports/promotes HIT adoption & discourages "workarounds"; is non-punitive.

***Vision Statement:*** *A respectful, open system that leverages HIT across multiple disciplines in an environment where all stakeholders trust each other to work together toward the goal of high quality and safety.*

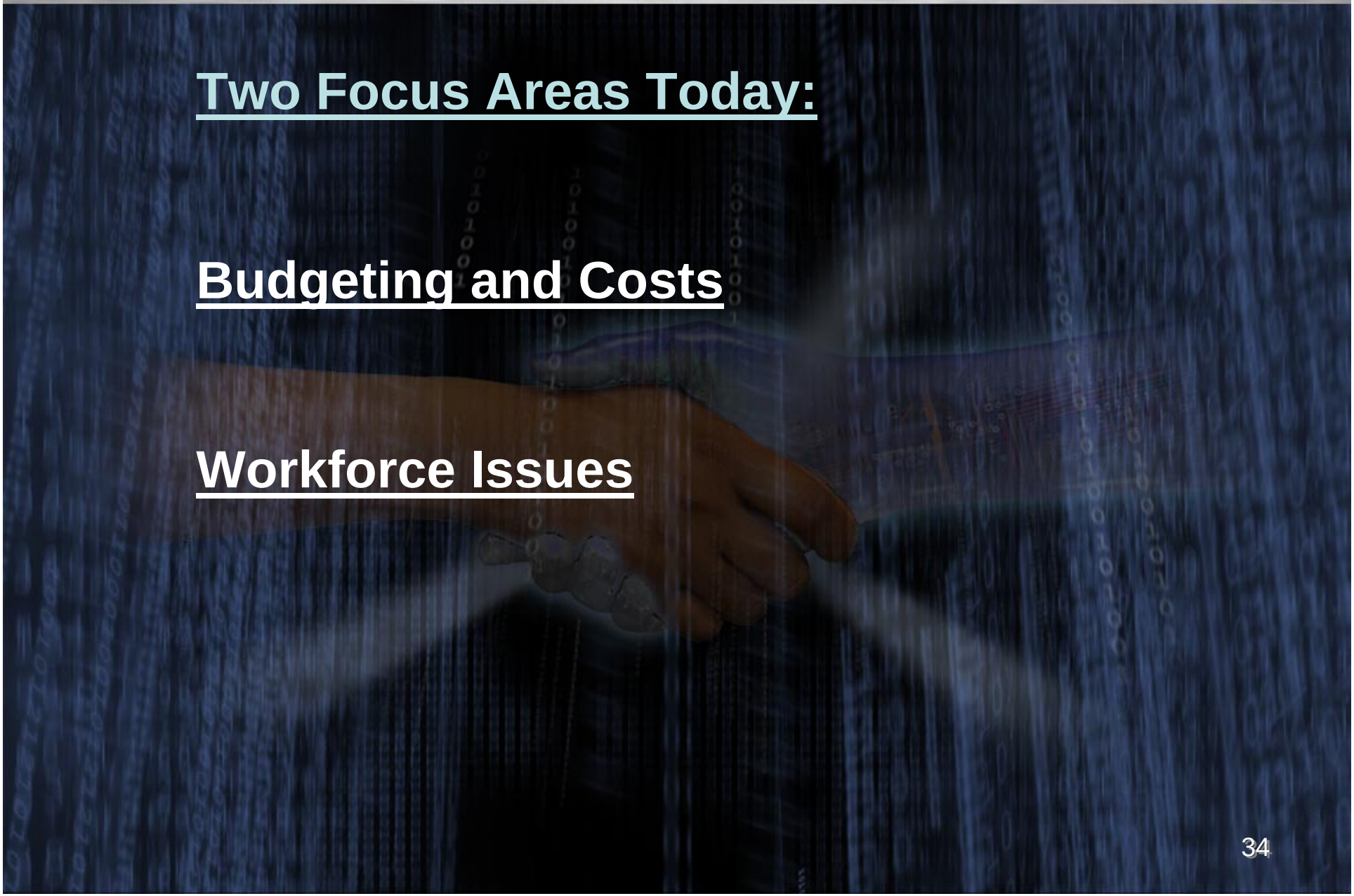
# State of VA Nursing Informatics

- Realignment of Technology Goal Group
- Clinical Databases CPRS, BCMA enhancements
- Patient-Centered Informatics (My Health e-Vet)
- VANOD
- Performance Measures
- Bar Code Medication Administration
- Bar Code Expansion
- Disaster Informatics Technology Assessment


# Data-Driven Decision-Making for the Nurse Executive

**Christine A. Gregory, RN, MS, MBA, FACHE**
**Associate Director**
**Patient Care Services/Nurse Executive**
**VA Central Iowa Health Care System**

# Data-Driven Decision Making



**Two Focus Areas Today:**

**Budgeting and Costs**

**Workforce Issues**

# Part One: Budgeting

- Opportunities for Data-Driven Decision Making
- Communication Tool

# Budget Preparation Process

- Corporate Strategy Development
- Making Projections
- Operational Planning

# Cost Concepts and Control

- **Four cost-behavior skill sets needed:**
  - Asset Valuation
  - Managerial Control
  - Decision Making
  - Volume

# Monitoring

- Ongoing process with a variety of tools that capture actual performance to goals
- Managers are expected to explain all variances

# Financial Context

- **Put data into a financial framework for better understanding:**

  - Basic accounting concepts and language of accountants

  - Assessments of the financial health of the organization and how that is affecting area of responsibility

  - Familiarity with common indicators used in financial analysis

# Putting theories to work:

- **Four skill sets needed in data-driven decision making:**

1. **Obtaining the data** (the data miner)

- A data miner is a human interface between raw numbers and the decision maker

- Miners focus on integrity, quality, objectivity, and completeness of data

- Software options available to miners: VSSC Website, national and VISN Proclarity Cubes, Crystal Reports

# Putting theories to work:

- **Skill Sets Continued……**

2. **<u>Understanding and establishing context</u>** (the subject matter expert)

- Subject matter experts like Nursing ADPACS or Nurse Managers work with the miner to validate data

3. **<u>Sharing and presenting the data</u>**

- Most software tools like Proclarity and Crystal interact with Excel to publish concise, automatically updated reports
- Sharepoint is new alternative to websites; can provide strict access, discussion boards, and contact with a wide audience in one application

# Putting theories to work:

- **Skill Sets Continued……**

4. **Translating numbers to information and action**: the decision maker

Let's get started with the real data:

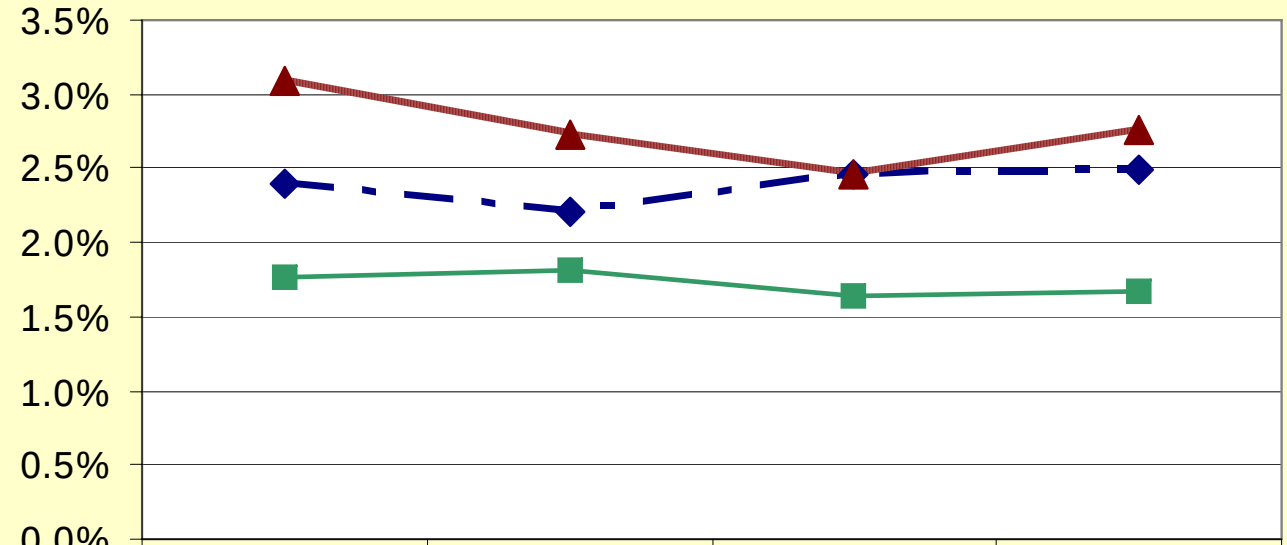
- Tracking **direct** and **controllable costs** is key function of nurse execs:

One good example (or your worst nightmare☺) :
**Overtime!**

# Understanding Data: Start with the Big Picture

- Nursing overtime at the national to local level

**Nursing % of OT To Total Worked Hours**
**(FY 04 to May 07)**



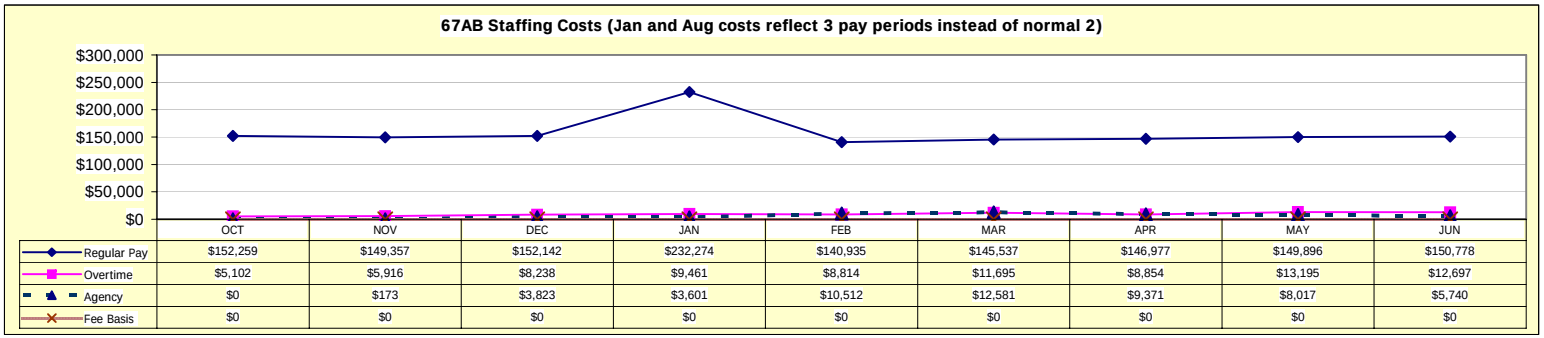

| | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| All VA | 2.4% | 2.2% | 2.5% | 2.5% |
| VHA 23 | 1.8% | 1.8% | 1.6% | 1.7% |
| Central Iowa | 3.1% | 2.7% | 2.5% | 2.8% |

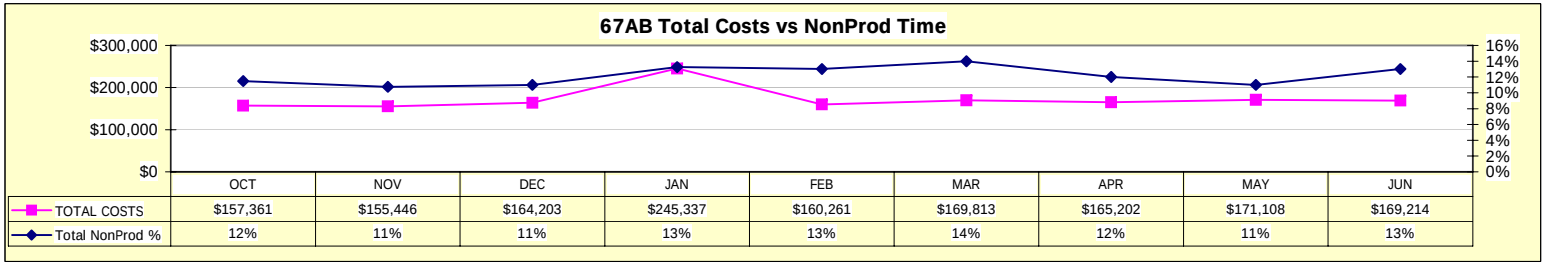
# Understanding Data: Drilling Down

Visn 23 Proclarity cubes allow us to examine each unit's budget and patient activities. Nurse Managers and service line directors receive these reports monthly.

## FY 07 67AB Unit Profile

| Unit | FY 2007 Measure | Target Range | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | FY 07 YTD (or Ave) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Patient Activity | HPPD | 4 - 5 | 4.98 | 4.30 | 4.66 | 4.42 | 4.13 | 4.15 | 4.09 | 4.01 | 4.86 | | | | 4.40 |
| | ADC | | 28.7 | 34.6 | 33.4 | 34.0 | 34.5 | 35.5 | 35.0 | 28.0 | 28.5 | | | | 32.47 |
| | Pt Turb | | 0.055 | 0.030 | 0.036 | 0.035 | 0.030 | 0.026 | 0.031 | 0.012 | 0.033 | | | | 0.03 |
| Personnel Costs | Regular Pay | | $152,259 | $149,357 | $152,142 | $232,274 | $140,935 | $145,537 | $146,977 | $149,896 | $150,778 | | | | $1,420,155 |
| | Overtime | | $5,102 | $5,916 | $8,238 | $9,461 | $8,814 | $11,695 | $8,854 | $13,195 | $12,697 | | | | $83,972 |
| | Agency | | $0 | $173 | $3,823 | $3,601 | $10,512 | $12,581 | $9,371 | $8,017 | $5,740 | | | | $53,817 |
| | Fee Basis | | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | | | | $0 |
| | TOTAL COSTS | | $157,361 | $155,446 | $164,203 | $245,337 | $160,261 | $169,813 | $165,202 | $171,108 | $169,214 | | | | $1,557,945 |
| | OT % of Total | | 3.35% | 3.96% | 5.41% | 4.07% | 6.25% | 8.04% | 6.02% | 8.80% | 8.42% | | | | 6.04% |
| | Agency % | | 0.00% | 0.11% | 2.33% | 1.47% | 6.56% | 7.41% | 5.67% | 4.69% | 3.39% | | | | 3.51% |
| | Fee Basis % | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | 0.00% |
| Unit Stats | AL Hrs Used | | 397 | 408 | 453 | 556.5 | 315.5 | 331.25 | 360.5 | 363.5 | 394 | | | | 3579.25 |
| | CT Hrs Used | | 14.5 | 5 | 4 | 27 | 33.75 | 33.5 | 8.75 | 23.75 | 9.5 | | | | 159.75 |
| | SL Hrs Used | | 257.25 | 113.25 | 218.75 | 338 | 245.25 | 258 | 266.75 | 154.75 | 263.5 | | | | 2115.5 |
| | LWOP Hrs Used | | 41.75 | 100 | 16 | 51 | 32.5 | 115 | 8 | 56 | 36 | | | | 456.25 |
| | Total NonProd % | | 12% | 11% | 11% | 13% | 13% | 14% | 12% | 11% | 13% | | | | 12% |



# Using Data in the Budget Process

•Earlier, we said financial managers also look at past performance to predict the future, as part of the corporate budgeting process.

•Access to accurate, consistent data with varying levels of detail is essential

•Requires teamwork between data miners in various departments; creates a merger of customized data

# Using Data in the Budget Process

For example, Central Iowa uses several electronic sources to publish an overall facility snapshot, including an overall nursing measure.

Several data miners collaborate on this project.

## VA Central Iowa Health Care System Dash Board

### Dash Board Menu

**Dash Board Links**

**Help**

| Sections | Key Measures | Month | FY | Status | | Measure Definition |
|---|---|---|---|---|---|---|
| | Unique By Service Line | August | FY05 | TBD | | |
| | SDM Utilization Rates | February | FY06 | TBD | | |
| | Comp & Pension Processing Tim | TBD | | TBD | | |
| | Clinic Wait Times (Performance : | February | FY07 | 80% | | Successful / Total Measures |
| | Turnover Rates | TBD | FY07 | TBD | | |
| | Vacancies | TBD | FY07 | TBD | | |
| | Training of Staff | TBD | FY07 | TBD | | |
| | FTEE | TBD | FY07 | TBD | | |
| | Facility Operating Expense | May | FY07 | $399,680 | | Cum Variance to Budget |
| | Service Line Expense | May | FY07 | -$43,833 | | Cum Variance to Budget |
| | **SVL Nursing** | **June** | **FY07** | **1%** | ***** | **Variance to FY06 Spending** |
| | MCCF Collections | April | FY07 | -$1,920,412 | | Variance to FY07 Goal |
| | Non-VA Workload | TBD | FY06 | TBD | | |
| | 12 Month Rolling Uniques | February | FY07 | -552 | | Total Unique FY07 VS FY06 |
| | Cumulative Unique Comparison ( | May | FY07 | -1278 | ***** | CUM Unique FY07 VS FY06 |
| | SDM Cumulative Unique Compar | April | FY07 | -32 | | CUM Unique FY07 VS FY06 |
| | ARC Uniques by Vera Category | March | FY07 | -606 | | Total Unique FY07 VS FY06 |
| | Non-Vested Percent | March | FY07 | 2.62% | | VS 3% VISN Goal |
| | **Percent of Measures Suc** | 3 of 8 | | **38%** | | **Percent Successful of 8 Measures** |

***** Not one of the 8 Measures above

# Using Data in the Budget Process

Service line leaders can drill down from the master dashboard to this document.

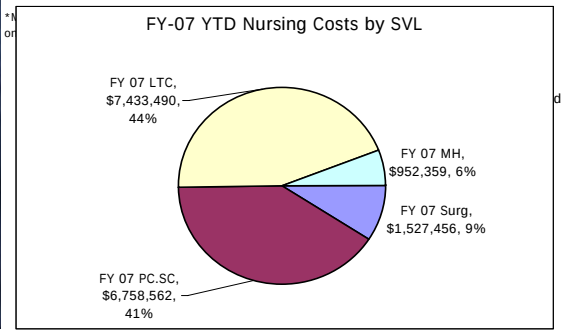
This nursing data is obtained through Proclarity VISN 23 Cubes and is automatically updated bi-weekly.

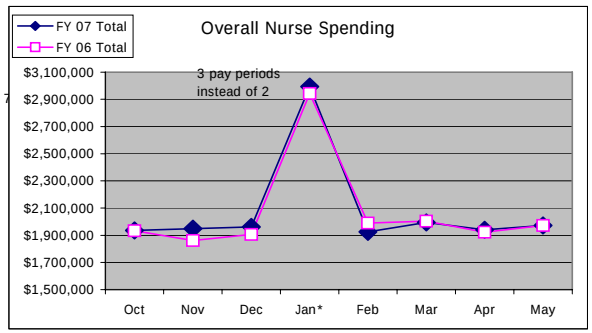
## FY 2007 VACIHCS 12 - Month Rolling Nursing Budget

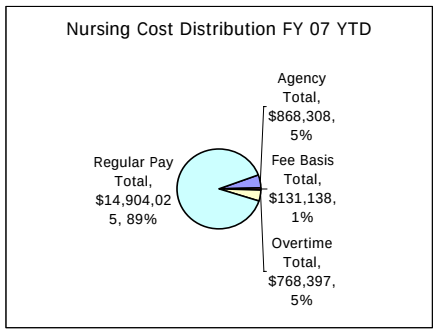
May 07 data summary: Total nursing costs are just under 1% ahead of spending at this time in FY 06. Primary Care SVL is about 2% under last year's spending. MH SVL is almost 20% ahead of FY 06 spending due to increasing agency use; however, MH's percentage of total nursing expenditures is only about 6%.

| SVL Line | Pay Category | Oct | Nov | Dec | Jan* | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | FY-07 YTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SURG | Regular Pay | $161,288 | $162,323 | $164,787 | $268,330 | $165,667 | $172,056 | $172,072 | $176,626 | | | | | $1,443,149 |
| | OT | $5,559 | $6,874 | $6,496 | $14,523 | $4,734 | $6,997 | $4,007 | $6,642 | | | | | $55,831 |
| | FB | $2,292 | $4,550 | $4,554 | $4,044 | $1,929 | $1,328 | $3,274 | $4,989 | | | | | $26,960 |
| | Agency | $452 | $1,064 | $0 | $0 | $0 | $0 | $0 | $0 | | | | | $1,516 |
| | **FY 07 Surg** | **$169,590** | **$174,811** | **$175,837** | **$286,897** | **$172,329** | **$180,381** | **$179,353** | **$188,257** | | | | | **$1,527,456** |
| | FY 06 Total | $177,102 | $168,334 | $174,474 | $279,798 | $197,041 | $199,103 | $183,003 | $186,043 | $181,880 | $179,562 | $268,631 | $185,994 | $1,564,898 |
| | Diff | -4.24% | 3.85% | 0.78% | 2.54% | -12.54% | -9.40% | -1.99% | 1.19% | | | | | -2.39% |
| PC/SC | Regular Pay | $686,180 | $692,843 | $683,840 | $1,090,879 | $701,443 | $704,101 | $689,321 | $710,792 | | | | | $5,959,399 |
| | OT | $20,675 | $24,448 | $24,247 | $29,823 | $16,609 | $24,860 | $20,149 | $22,270 | | | | | $183,080 |
| | FB | $14,051 | $9,410 | $8,675 | $9,900 | $8,263 | $7,565 | $9,424 | $9,470 | | | | | $76,757 |
| | Agency | $46,573 | $63,135 | $70,235 | $64,278 | $64,215 | $78,806 | $78,957 | $73,127 | | | | | $539,326 |
| | **FY 07 PC.SC** | **$767,479** | **$789,836** | **$786,996** | **$1,194,880** | **$790,530** | **$815,331** | **$797,851** | **$815,659** | | | | | **$6,758,562** |
| | FY 06 Total | $802,079 | $789,856 | $810,267 | $1,233,482 | $818,567 | $829,700 | $790,863 | $831,629 | $842,352 | $871,021 | $1,268,435 | $872,470 | $6,906,443 |
| | Diff | -4.31% | 0.00% | -2.87% | -3.13% | -3.43% | -1.73% | 0.88% | -1.92% | | | | | -2.14% |
| LTC | Regular Pay | $788,371 | $775,538 | $779,382 | $1,245,930 | $761,364 | $778,499 | $768,113 | $773,016 | | | | | $6,670,214 |
| | OT | $64,649 | $55,805 | $59,001 | $68,721 | $53,779 | $67,834 | $51,353 | $58,049 | | | | | $479,190 |
| | FB | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | | | | | $0 |
| | Agency | $29,226 | $40,216 | $46,011 | $32,460 | $38,500 | $43,134 | $31,306 | $23,232 | | | | | $284,086 |
| | **FY 07 LTC** | **$882,246** | **$871,560** | **$884,394** | **$1,347,111** | **$853,643** | **$889,467** | **$850,772** | **$854,297** | | | | | **$7,433,490** |
| | FY 06 Total | $865,408 | $814,928 | $823,074 | $1,297,321 | $882,480 | $880,640 | $848,876 | $853,970 | $879,944 | $893,910 | $1,289,178 | $876,274 | $7,266,697 |
| | Diff | 1.95% | 6.95% | 7.45% | 3.84% | -3.27% | 1.00% | 0.22% | 0.04% | | | | | 2.30% |
| MH | Regular Pay | $96,463 | $97,095 | $94,824 | $146,278 | $98,116 | $98,743 | $98,324 | $101,421 | | | | | $831,263 |
| | OT | $6,864 | $4,073 | $4,018 | $7,190 | $5,920 | $6,068 | $8,734 | $7,427 | | | | | $50,295 |
| | FB | $3,348 | $3,283 | $4,521 | $5,196 | $2,421 | $2,538 | $3,327 | $2,786 | | | | | $27,420 |
| | Agency | $10,023 | $8,221 | $10,917 | $5,899 | $2,165 | $1,598 | $2,232 | $2,326 | | | | | $43,380 |
| | **FY 07 MH** | **$116,698** | **$112,671** | **$114,280** | **$164,563** | **$108,622** | **$108,947** | **$112,618** | **$113,960** | | | | | **$952,359** |
| | FY 06 Total | $88,157 | $88,349 | $98,793 | $132,128 | $91,931 | $94,666 | $99,615 | $100,662 | $104,797 | $103,344 | $150,765 | $100,989 | $794,301 |
| | Diff | 32.38% | 27.53% | 15.68% | 24.55% | 18.16% | 15.09% | 13.05% | 13.21% | | | | | 19.90% |
| Facility Total | **FY 07 Total** | **$1,936,014** | **$1,948,879** | **$1,961,507** | **$2,993,451** | **$1,925,125** | **$1,994,127** | **$1,940,592** | **$1,972,174** | | | | | **$16,671,868** |
| | FY 06 Total | $1,932,746 | $1,861,467 | $1,906,608 | $2,942,729 | $1,990,019 | $2,004,109 | $1,922,357 | $1,972,304 | $2,008,973 | $2,047,837 | $2,977,009 | $2,035,727 | $16,532,339 |
| | Diff | 0.17% | 4.70% | 2.88% | 1.72% | -3.26% | -0.50% | 0.95% | -0.01% | | | | | 0.84% |

| | Oct | Nov | Dec | Jan* | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | FY 07 YTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Agency Total | $86,274 | $112,636 | $127,163 | $102,636 | $104,880 | $123,538 | $112,495 | $98,685 | | | | | $868,308 |
| Fee Basis Total | $19,691 | $17,243 | $17,749 | $19,140 | $12,613 | $11,431 | $16,025 | $17,245 | | | | | $131,138 |
| Overtime Total | $97,747 | $91,201 | $93,761 | $120,258 | $81,042 | $105,758 | $84,243 | $94,388 | | | | | $768,397 |
| Regular Pay Total | $1,732,303 | $1,727,799 | $1,722,834 | $2,751,416 | $1,726,590 | $1,753,399 | $1,727,829 | $1,761,855 | | | | | $14,904,025 |
| **TOTAL** | **$1,936,014** | **$1,948,879** | **$1,961,507** | **$2,993,451** | **$1,925,125** | **$1,994,127** | **$1,940,592** | **$1,972,174** | | | | | **$16,671,868** |



# Sharing the Data

- **Sharing data is essential!**

  - Miner and subject-matter expert share with decision-maker to add strength to eventual decisions or actions

  - Decision-maker shares with front-line staff to support rationales for decisions made, encourages buy-in and teamwork

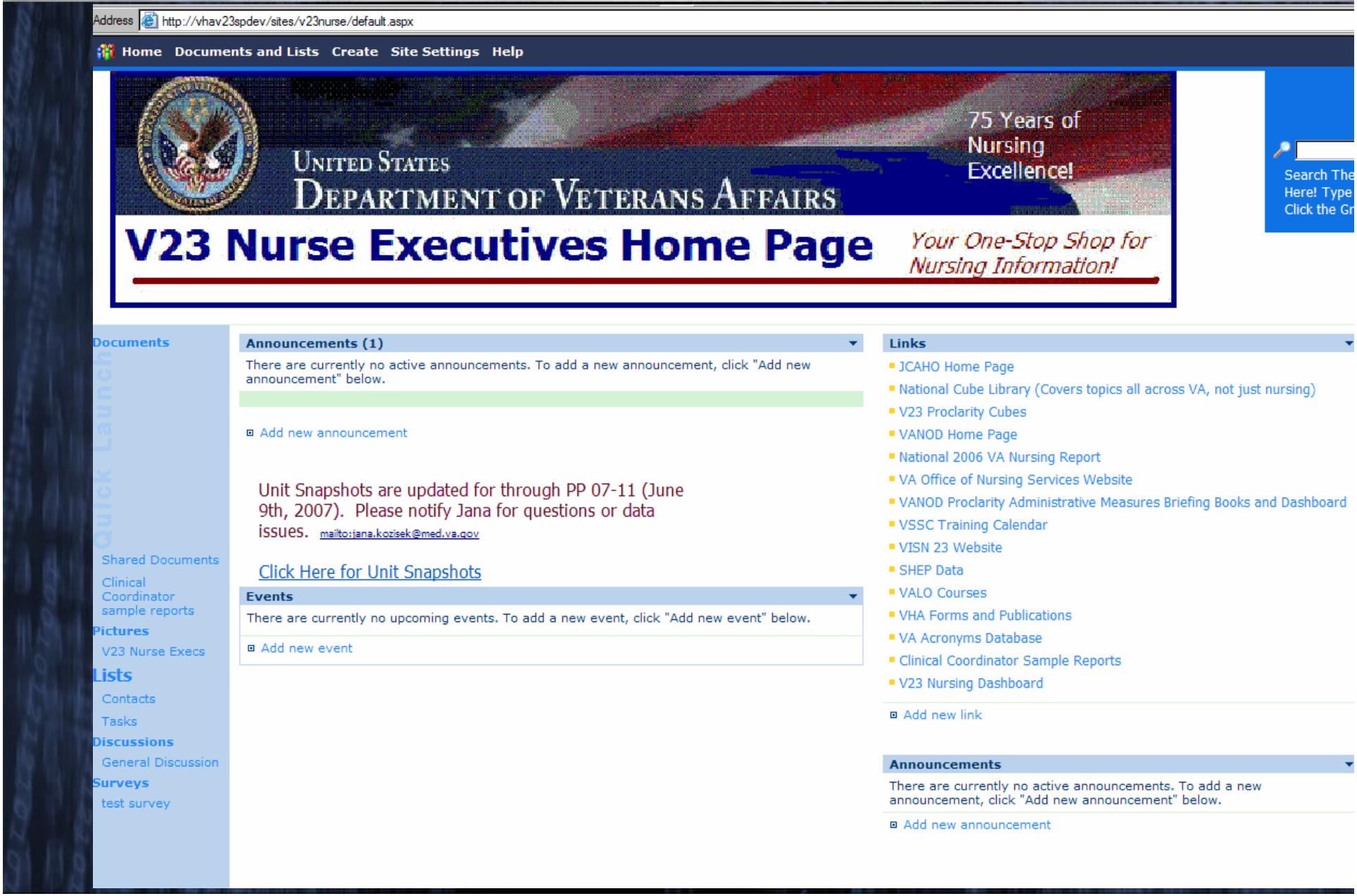
  - Several options available for sharing mechanism:

    Proclarity briefing books on VISN servers

    Excel workbooks on facility shared drives

    Sharepoint:  CIH's mechanism of choice

# Sharing the Data at the VISN Level

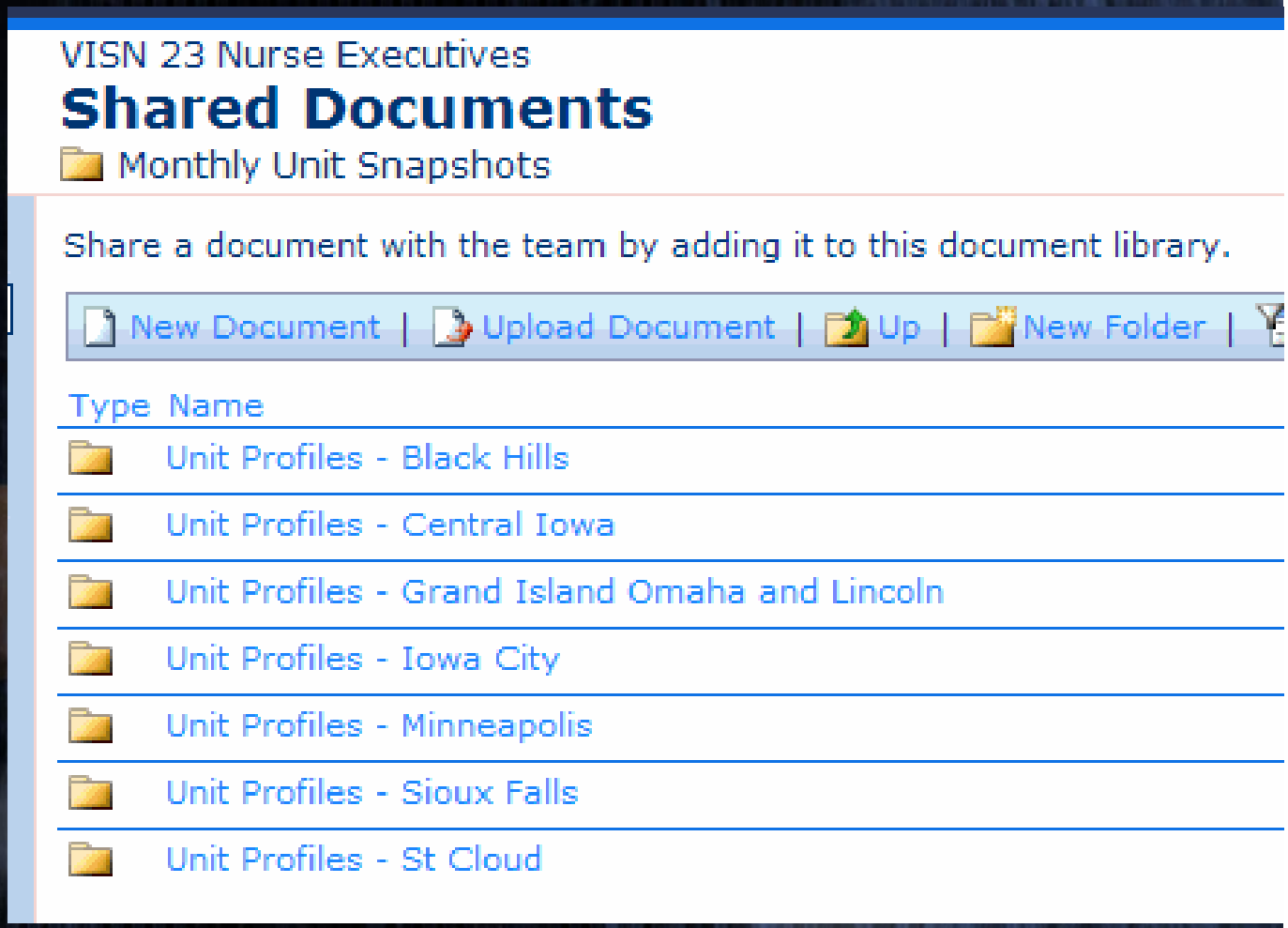


# Sharing the Data at the VISN Level

NEs can drill down from the Sharepoint home page to a document library with folders for each facility.

Each folder holds Excel documents still linked to their Proclarity data source for easy, automatic update each month. Data includes patient activity, staff and payroll information.

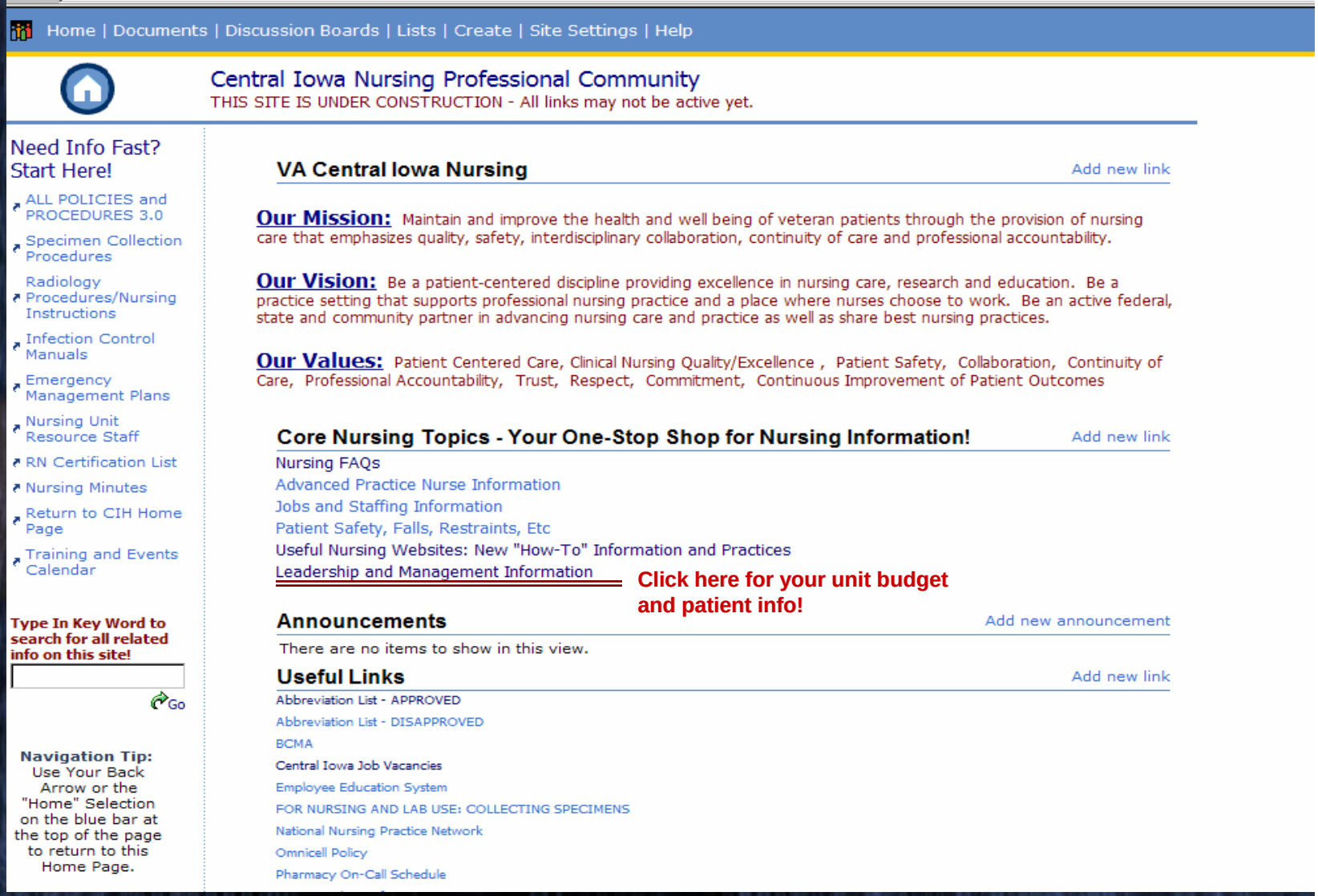
Only Nurse Execs in V23 can access these folders.



# Sharing the Data Locally

Central Iowa also built a SharePoint site for all nursing staff.

Staff can see their unit's monthly snapshots like we saw earlier, along with the budget and patient activity reports.



# Part Two: Workforce Decisions

- **Data should also drive workforce-related decisions:**

  - Succession Planning: Know what the future holds for your staff population

  - Vacancies: Track your turnover and vacancies; this data also supports cost decisions

  - RN Job Satisfaction

# Succession Planning

- **The national data shows a scary picture:**

  - The Health Resources and Services Administration (HSRA) division of the USD of Health and Human Services projects a national shortage of nearly half a million RN FTE by 2010; over 1 million by 2020

  - Iowa Dept of Public Health projects an RN shortage up to 9,000 RNs by 2020

  - VA-specific is data available to VA NEs through VSSC, HR, and VANOD for better preparation

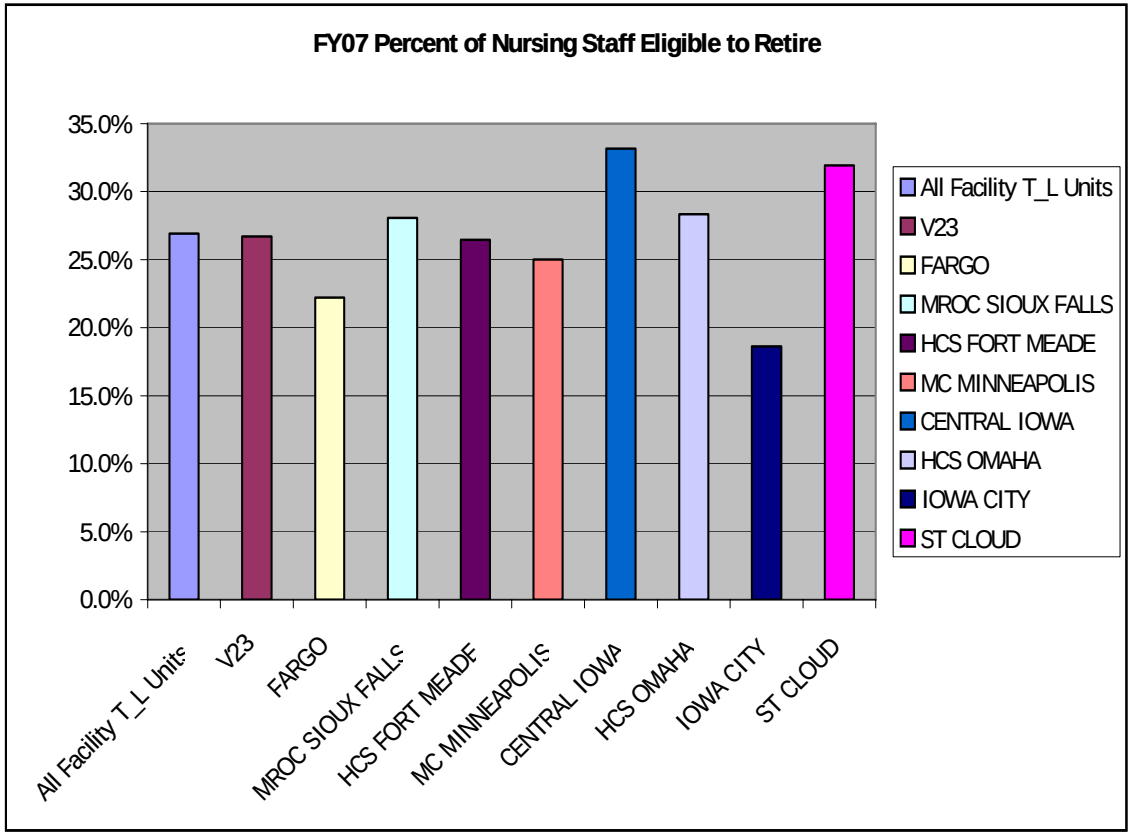
  - Our next slide shows Central Iowa leads VISN 23 in potential retirement nursing losses…..

# Succession Planning for VA Nursing at the National Level

- This VANOD data is available to all nurse execs and nursing staff
- Updated monthly

% Eligible to Retire for Nursing Occupations (FY)

| | FY07 |
|---|---|
| All Facility T_L Units | 26.9% |
| V23 | 26.7% |
| FARGO | 22.2% |
| MROC SIOUX FALLS | 28.1% |
| HCS FORT MEADE | 26.5% |
| MC MINNEAPOLIS | 25.0% |
| **CENTRAL IOWA** | **33.2%** |
| HCS OMAHA | 28.3% |
| IOWA CITY | 18.6% |
| ST CLOUD | 31.9% |

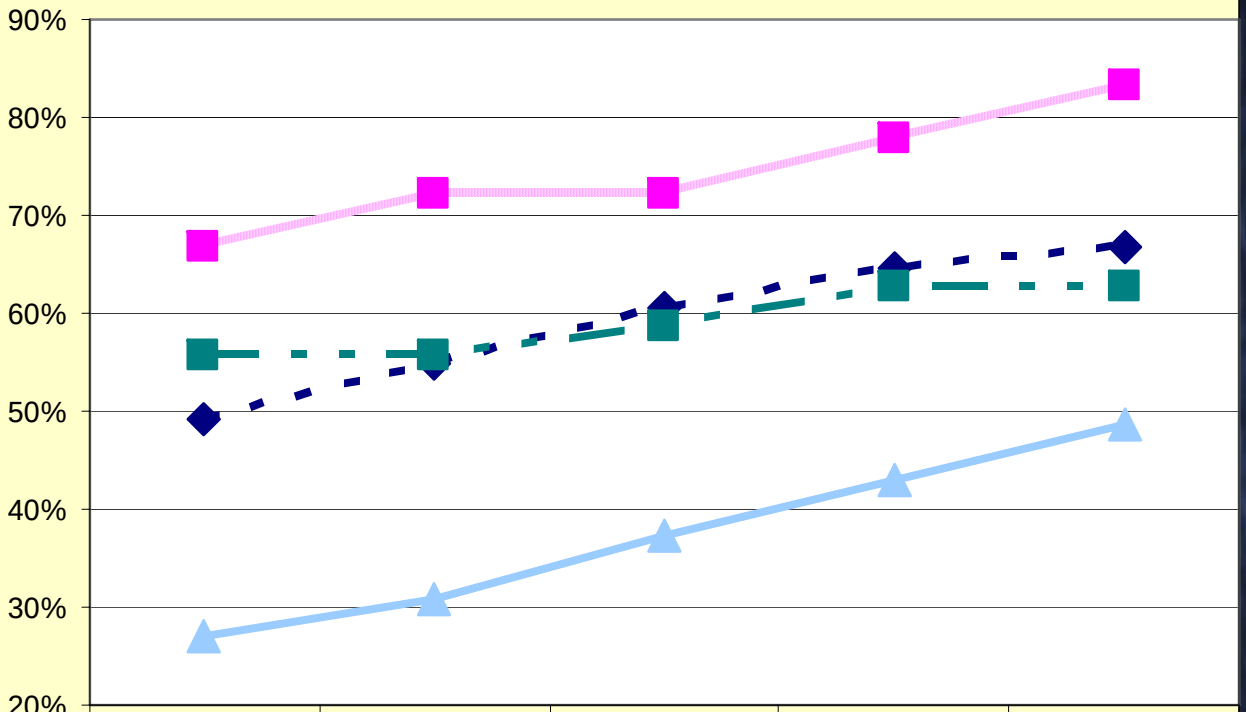



Data source: VANOD Proclarity Administrative Indicators Cube

# Succession Planning for VA Nursing at the Local Level

- By identifying patient care areas most affected by pending retirements, we can focus recruiting and retention efforts where most needed.

## % of All VACIHCS Nursing Staff Eligible to Retire by Service Line




| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Ext Care | 49% | 55% | 60% | 64% | 67% |
| MH | 67% | 72% | 72% | 78% | 83% |
| PC | 56% | 56% | 59% | 63% | 63% |
| Specialty | 27% | 31% | 37% | 43% | 49% |

# Using data to track vacancies

Data miners can combine information from disparate sources to publish easily-updated reports for Nursing leadership. Vacancies are a key issue that significantly affect managers, staff and costs. Knowing the current picture allows flexible distribution of resources.

## VACIHCS LTC Nursing Workforce Status Report July 16, 2007

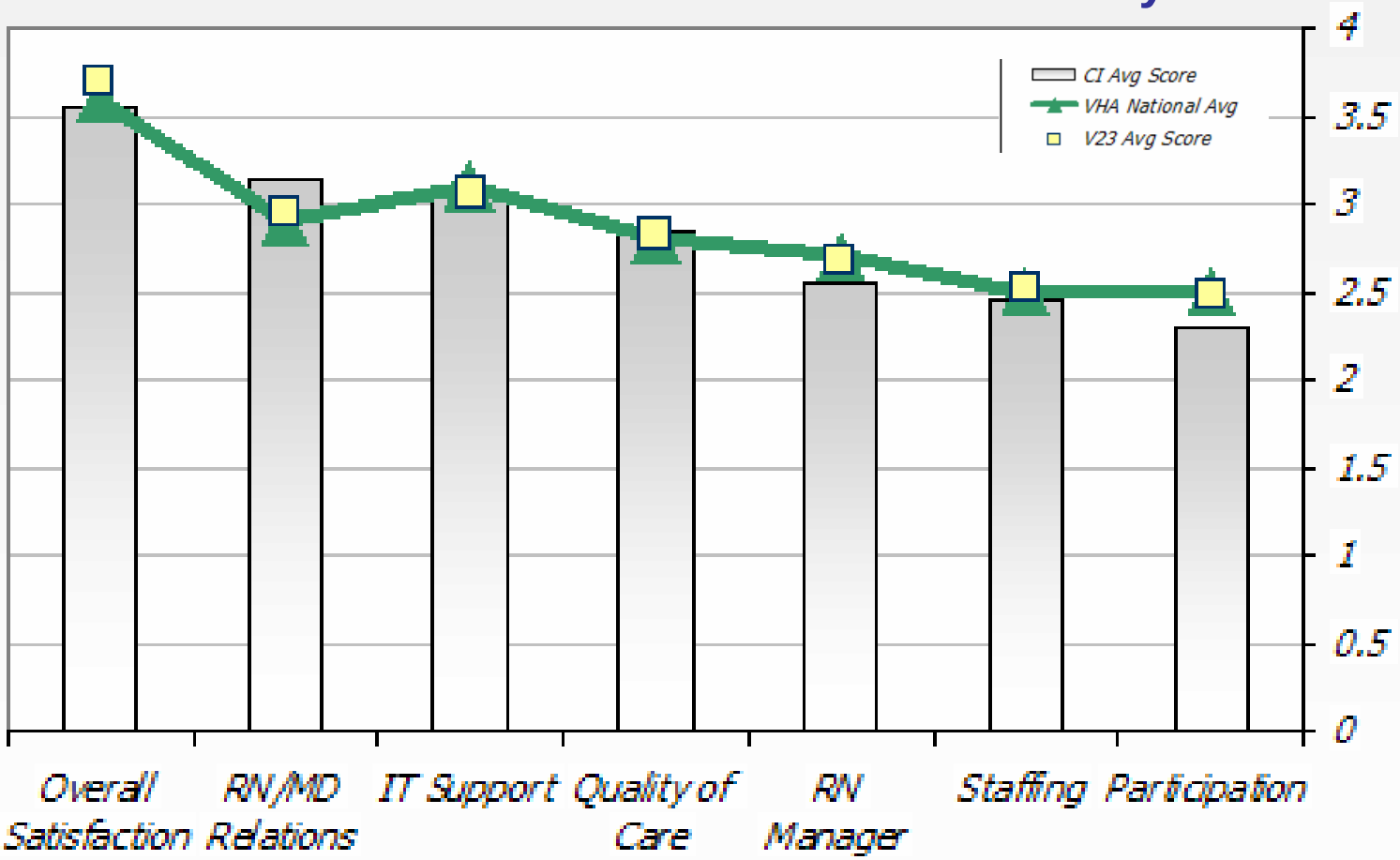
| Unit & Auth FTE | RN Vacancies | LPN Vacancies | NA/HT Vacancies | Current | Current Vacancy Rate (Vacancies only) | FTE Equiv of Paid NonProd Time (PP 07-12) | Total FTE Shortfall (Vacancies + NonProd Staff) | Overall FTE Vacancy Rate (Vacancies + NonProd) |
|---|---|---|---|---|---|---|---|---|
| 101AB (33) | 2 | 2 | 0 | 4 | 12.12% | 3.86 | 7.86 | 23.82% |
| 101CD (39) | 0 | 1 | 3 | 4 | 10.26% | 4.13 | 8.13 | 20.85% |
| 67AB (32) | 0 | 2 | 0 | 2 | 6.25% | 4.23 | 6.23 | 19.47% |
| 67CD (32.3) | 1 | 3 | 1 | 5 | 15.48% | 3.93 | 8.93 | 27.65% |
| HBPC (9) | 2 | 0 | 0 | 2 | 22.22% | 0.46 | 2.46 | 27.33% |
| **Total** | **5** | **8** | **4** | **17** | **13.27%** | **16.61** | **33.61** | **23.82%** |

# Using data to track staff satisfaction

Nurse Execs can now track RN satisfaction through both the new VANOD RN survey, and the VHA All Employee Survey.

Data can be used to implement action plans quickly to solve potential retention problems.

## VANOD 2006 RN Satisfaction Survey



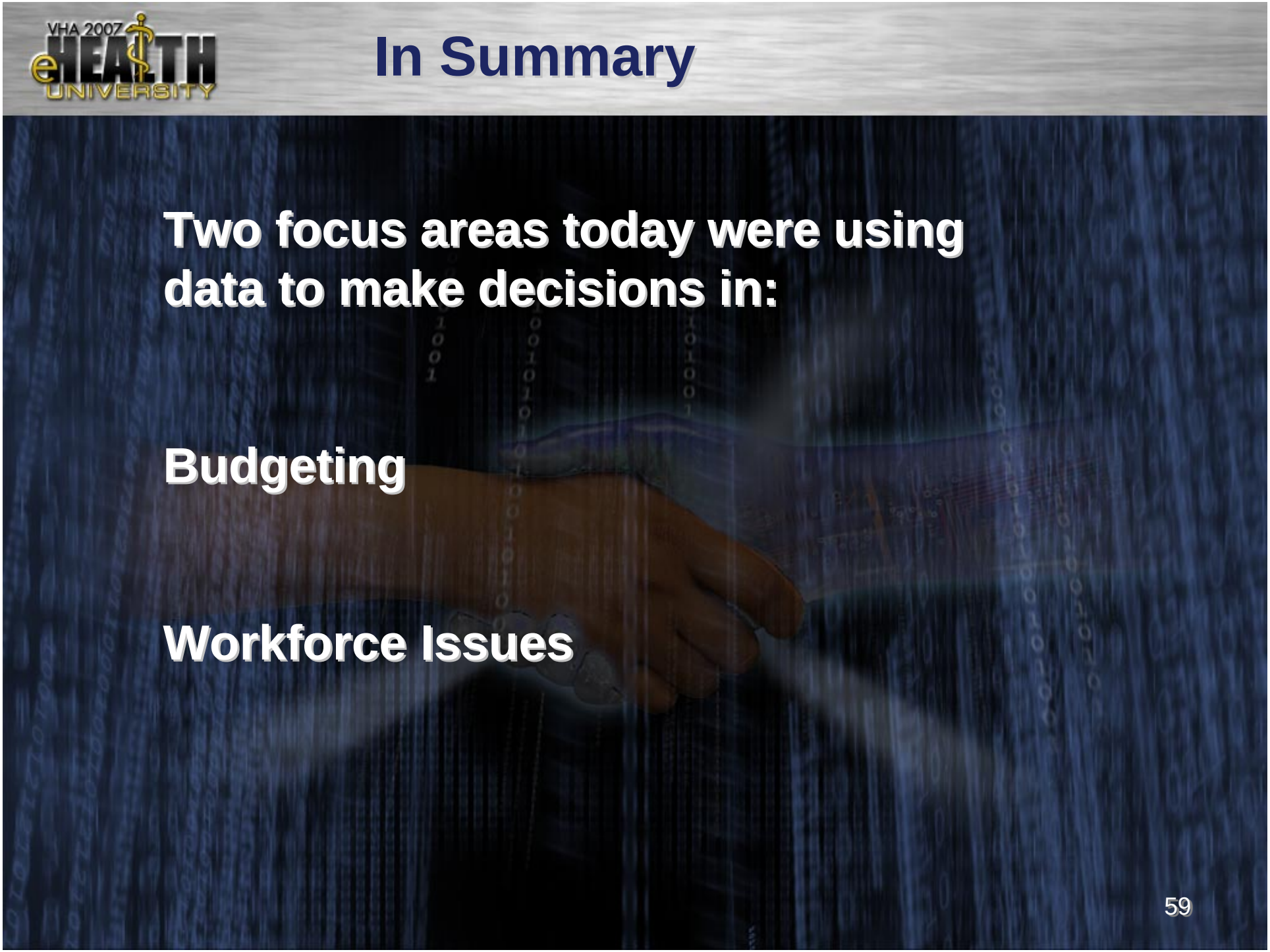

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CI Avg Score | 3.55 | **3.14** | 3.06 | **2.85** | 2.54 | 2.45 | 2.30 |
| V23 Avg Score | **3.69** | 2.95 | 3.06 | 2.82 | **2.68** | **2.53** | **2.48** |
| VHA National Avg | 3.55 | 2 .89 | **3.09** | 2.83 | 2.67 | 2.46 | 2.47 |

# Using data to track staff satisfaction

## VHA All-Employee 2006 Satisfaction Survey


| | | | | |
|---|---|---|---|---|
| CI Avg Score | 3.69 | 3.58 | 3.15 | 3.74 |
| V23 Avg Score | 3.67 | 3.68 | 3.17 | 3.74 |
| VHA National Avg | **3.73** | **3.77** | **3.23** | **3.81** |

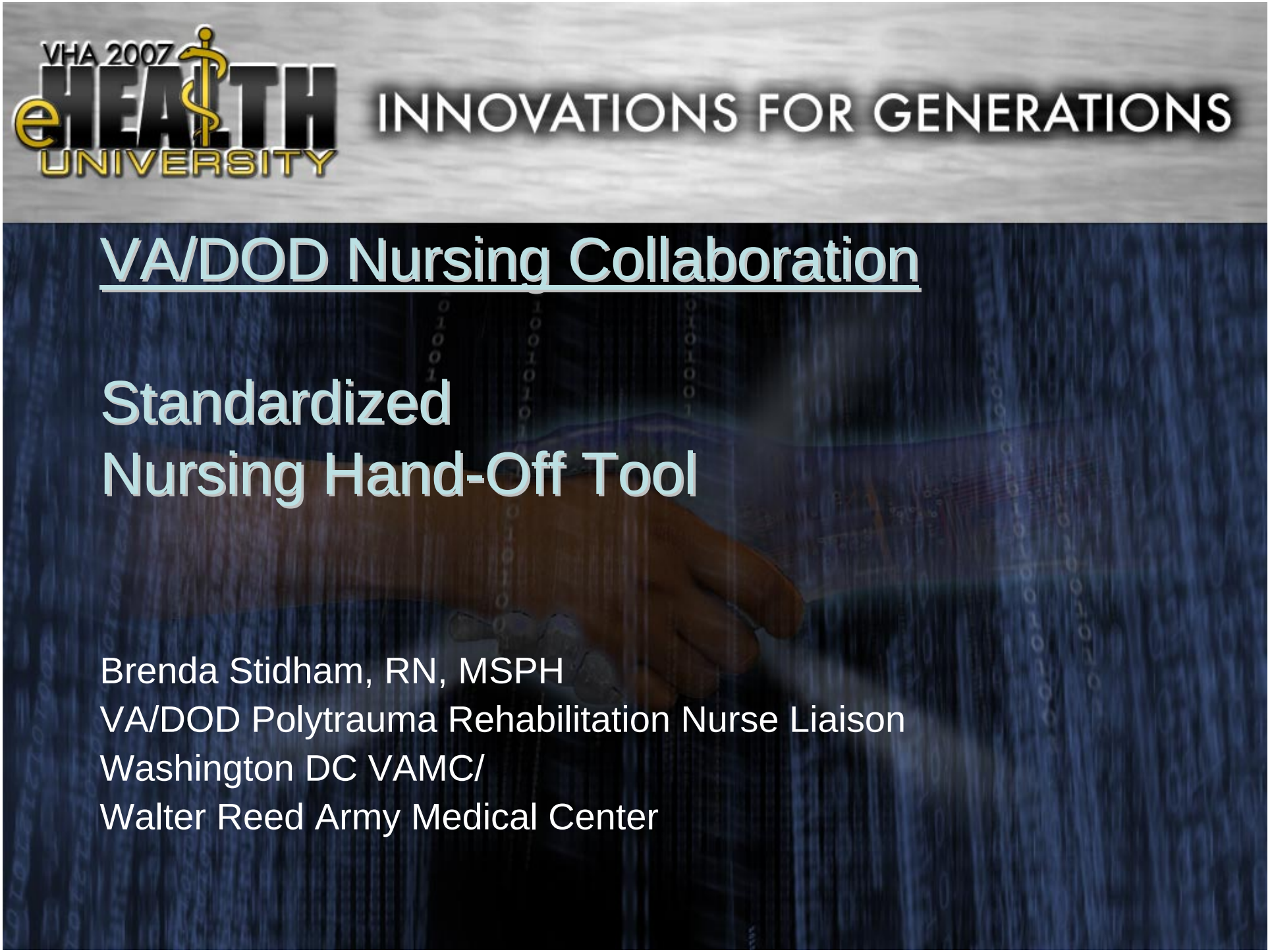
# In Summary



**Two focus areas today were using data to make decisions in:**

**Budgeting**

**Workforce Issues**




# VA/DOD Nursing Collaboration

## Standardized Nursing Hand-Off Tool

Brenda Stidham, RN, MSPH
VA/DOD Polytrauma Rehabilitation Nurse Liaison
Washington DC VAMC/
Walter Reed Army Medical Center

# Objectives

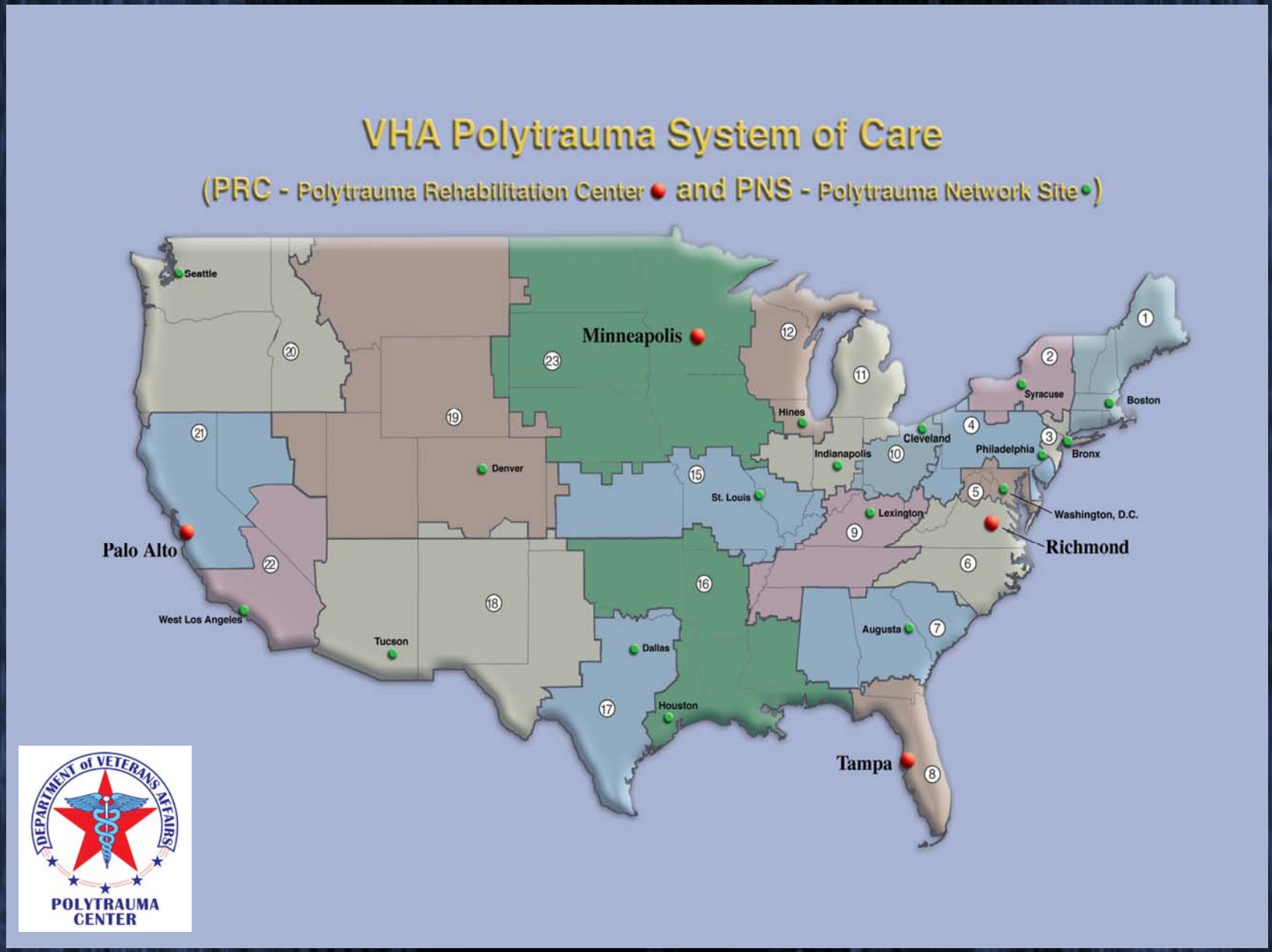
- Define my role as Nurse Liaison at Walter Reed Army Medical Center.
- Discuss the interdependence of clinical software packages and nursing practice.
- Focus on the nursing hand-off from Walter Reed to VA Polytrauma centers.

# My Role at Walter Reed

- I am the VA/DOD Polytrauma Rehabilitation Nurse Liaison based at the Washington DC VAMC and assigned to Walter Reed Army Medical Center.
- Serve as a nursing bridge for polytrauma patients transferring from Walter Reed to the VA polytrauma centers.
- Primary focus today is the nursing hand-off from Walter Reed to the VA.

# Walter Reed

# VHA Polytrauma System of Care



# VHA Polytrauma System of Care

**There are four Polytrauma Rehabilitation Centers:**

**Richmond, VA** **Tampa, FL**
**Minneapolis, MN** **Palo Alto, CA**

Each of these houses a Polytrauma Network Site as well. There are 17 additional Network Sites. (Total of 21)

| | | |
|---|---|---|
| Boston, MA | Lexington, KY | Houston, TX |
| Syracuse, NY | Cleveland, OH | Dallas, TX |
| Bronx, NY | Indianapolis, IN | Tucson, AZ |
| Philadelphia, PA | Hines, IL | Denver, CO |
| Washington, DC | St. Louis, MO | Seattle, WA |
| Augusta, GA | | West Los Angeles, CA |

# Organization of VHA Polytrauma System of Care

- **Regional**
  - **Level I** = Polytrauma Rehabilitation Centers
  - Regional comprehensive rehabilitation centers
- **Network**
  - **Level II** = Polytrauma Network Site
  - Interdisciplinary Team delivers and manages specialized care across the VISN
- **Facility**
  - **Level III** = Polytrauma Support Clinic Team
  - Provide a continuum of follow-up services in consultation with Level I/Level II sites
  - **Level IV** = Polytrauma Point of Contact
  - Lifelong care coordination close to home

# Clinical Information Flow

- With Bi-directional Health Information Exchange (BHIE) and Joint Patient Tracking Application (JPTA) there are many processes in place to exchange patient data and information.
- Access is granted to some medical providers who view medical records remotely at both Walter Reed and the VA.
- Not all VA bedside nurses have access to these clinical and tracking applications.

# Tools of the Trade

- Computers:
  - Walter Reed desktop
    - Essentris and AHLTA applications
  - VA encrypted laptop
    - VISTA-CPRS
    - CAPRI, VTA and JPTA
- Other Communications Tools
  - Two email accounts, two calendars
  - phone and fax line,
  - Blackberry

- Vtels every two weeks or as required with the Polytrauma Rehab Centers

# Human Dataport

# Location is everything…

## Ward 58/Neuro

My office is near Ward 58 where many of the TBI and SCI patients receive care prior to transfer to the VA Polytrauma Centers.

## Ward 57/Ortho

My office is located on Ward 57 Orthopedic Ward to enable me to observe the nursing hand-off process to gain the DOD perspective.

# Assessment

- Nursing reports between Walter Reed and the VA and the VA to the DOD varied in content and consistency due to factors difficult to predict or control.

- Examples:
  - Air Evac schedules which vary based on their caseload and patient acuity - patient often left the ward between 0500 and 0600
  - Length of time nurse had cared for the patient
  - Rehabilitation experience of the nurses calling report

# Nursing Hand-Off Tool

Assessment revealed that nurses at both DOD and VA were working in a very fast paced environment.

To be useful and clinically relevant the tool needed to be:

- Easy to use
- Contain information nurses needed to care for the patient at the bedside
- Available electronically 24/7 for nurses both at Walter Reed and the VAMC upon transfer.

# VA/DOD Nursing Collaboration

VA Polytrauma nurses identified the need for a standardized nursing hand-off tool accessible in the VA computerized patient record system.

Nurses at both the VA and Walter Reed collaborated in the development of the VA/DOD nursing hand-off tool.

Goal of hand off tool was to improve access to DOD clinical data to nurses at the bedside.

# Nursing Leaders at Walter Reed


LTC Abbadini, Section Chief Surg/Neuro

Major Orcutt-Cloft  Head Nurse Ward 58

# Walter Reed Command

Col. Patricia Horoho RN
Commander
Walter Reed Health Care


Col. Monica Secula
Assistant Deputy Commander Nursing Administration

Walter Reed Nursing leadership is very supportive of my role at Walter Reed.

# Request to Walter Reed Governing Body

- June 13, 2007 I presented the nursing hand-off tool to the Walter Reed Governing Body, requesting Walter Reed IT staff collaborate with VA IT staff. Goal to make VA nursing hand-off form compatible with CIS.
- Also requested a trial implementation at Walter Reed when a DOD compatible form is developed.
- Requested it be piloted on the patient transfers from Walter Reed to polytrauma centers, with an average frequency of 1-4 a week.

# Progress Thus Far

- Walter Reed Governing Body approved the request.
- VA and Walter Reed nurses collaborated to create the hand off tool.
- Hand-off tool is in development.
- VA IT is collaborating with Walter Reed IT to make form accessible to nurses on both sides of the transfer.

# Nursing Hand-Off Tool

- Format Using the **SBAR** Format:
  - **S** = Situation
  - **B** = Background
  - **A** = Assessment
  - **R** = Recommendation

  - Developed in collaboration with VA and DOD nurses at all levels of care.

KR2

# SBAR: Nursing Hand-Off

**From: <u>Drop down menus</u>**
**Military Treatment Facility**
**VA Polytrauma Rehabilitation Center**
**VA Polytrauma Network Site**
**VA Outpatient care**

**To: <u>Drop down menus</u>**
**Military treatment facility**
**VA Polytrauma Rehab Center**
**VA Polytrauma Network Site**
**VA Outpatient care**

- SBAR Format:
  - S= Situation
  - B= Background
  - A= Assessment
  - R= Recommendation

**S**

**SITUATION**

- **<u>SITUATION</u>**
- **Name of Patient and transferring facility**
  **_____**
- **OIF/OEF patient specific: (Drop down)**
- **Rank**
- **Number of deployments ____**
- **Active duty**
- **Veteran**
- **Service Organization**
- **Diagnosis**
- **Brief trauma history:**
- **Anoxic brain injury : Yes, No**
- **Anatomical location of any imbedded devices/shrapnel**
- **Advance Directive/Code status_____**
- **Vital signs are: Blood Pressure _____/_____, Pulse _____, Respiration _____, & Temp _____**
- **Pain scale_____/**
  - **Level of pain at recent assessment** Time last dose pain medication given_____
  - PCA pump use and dosage._____
- **Allergies**
  - Food_____
  - Medications_____
  - Latex_____
  - Other_____
- **Family accompanying patient: (any special family concerns – doesn't speak English)**

**Slide 79**

**KR2** Deleted:
Developed in collaboration with VA and DOD nurses at all levels of care
Merged “Nursing Hand Off Tool” slide into this one.

Kerrian Reynolds, 7/26/2007

# SBAR: Nursing Hand-Off

**B**

**Background**

**BACKGROUND**
**Infection Control (Clinician Note)**
**Infection/Isolation/colonization:**
**( drop down) Acinetobacter, VRE, CDiff, MRSA, Candida , Other**
**Intervention**
**Safety**
**Fall precautions** (drop down)
Low risk for fall
High risk for fall
**Activity of Daily Living**
**Current transferring hospital occupational therapy note**
Independent
Moderate Assist
Maximum Assist
**Restraints** Yes (Only as last resort)
Type of restraint.
No
**Alternate to restraints: 1:1**
**Sitter: Yes No**
**Other:**
**Cog/Neuro**
- **Glasgow Coma Score On admission _____ Current_____**
- **Rancho Score On admission _____ Current_____**
- **Mental status (make a drop down)**
  - Alert and oriented to person, place & time
  - Confused and cooperative or non-cooperative.
  - Agitated or combative.
  - Lethargic but conversant and able to swallow.
  - Stuporous and not talking clearly and possibly not able to swallow.
  - Comatose. Eyes closed. Not responding to stimulation

**Heart/Lung:**
- **The patient has dyspnea : Yes No**
- **Is not on oxygen.**
- **Is on oxygen drop down**
- **Nasal Cannula/rate of flow**
- **Mask**
- **Trach;**
- **Trach brand name**
- **Date inserted**
- **Trach cuff, Trach capped, Trach Collar, percent oxygen**

# SBAR: nursing hand-off

**B**

**Background**

**GI**
•Diet, supplemental feedings, amount, frequency (drop down)
•NPO
•Swallowing-fluid consistency
•Feeding Tube/ Type of Tube/Brand of tube/date inserted/Feeding supplement/Frequency/Amount /Free Water
•Tube feeding tolerance, residuals, abdominal assessment.
•Bowel : Continent
• Incontinent
•Colostomy
•Yes No
• Colostomy care appliances (text)
Bowel routine (text)
•Date of last BM (text)
**GU**
•Continent of bladder
• Yes
• No
•External catheter,
• Foley_____Self Cath Void_____
Bladder routine, Restrictions
**Skincare: The skin is: (make a drop down)**
oWarm and dry. O Pale.
Mottled.
O Diaphoretic Extremities are cold. O Extremities are warm.
Breakdown /Pressure ulcer: Yes No
**Wounds** : Yes No
Wound care (plan of care)
**Include Last note of Walter Reed wound care clinician with clinician phone number to contact.**
If Yes
•Type: drop down Surgical incision, Wound, date of initiation
•Location of wound, wounds
•Size
•Appearance
•Drainage
•Dressing status
•Treatment applied
•Product used
•Odor, increased pain or other signs of infections Yes No
•Wound Vacuum Yes No

| Braden Scale: | Score |
|---|---|
| Sensory Perception: slightly limited | _ |
| Moisture: occasionally moist | _ |
| Activity: bedfast | _ |
| Mobility: very limited | _ |
| Nutrition: probably inadequate | _ |
| Friction and Shear: potential problem | _ |
| Total Score of All Sections: | ---____ |

{If score is less than **19**, **report to unit's wound liaison representative**,
address skin integrity risk in care plan, and report findings to admitting Physician}

# SBAR: nursing hand-off

| | |
|---|---|
| **B**<br>**Background** | **Mobility**<br>**Current transferring hospital physical therapy note**<br>Orthopedic Restrictions: (drop down)<br>1) Log roll only<br>2) Spine/Cspine precautions<br>3) Non weight bearing either upper, lower extremities and right or left<br>4) Sitting degree restriction<br>5) Either upper or lower extremity limited range of motion<br>6) Either upper or lower extremity limited range of motion<br>Transfer from bed to chair utilizing:<br>1) Slide board<br>2) Mechanical lift<br>3) Stand pivot with assist of one or two persons<br>4) Medical Devices in place casts/splints/braces/fixators/pressure garments/prosthetics/<br>•**IV Fluid:**<br>•Drop down: Ste: peripheral<br>•Location<br>•Central Line<br>•PICC line<br>•When inserted<br>•Volume/type of IV fluid.<br>•**Intake / Output**/ 24 hours.<br>•**Medications**—List of meds also refer to medical discharge summary<br>•**Abnormal lab values** to be monitored and upcoming lab draw**s.**<br>**Surgery or diagnostic tests scheduled and/or completed.**<br>**Text List of recent surgical procedures (see also History and physical)**<br>**Diagnostic Procedures/**MRI/CT/EKG **(list)** |

# SBAR: nursing hand-off

| | |
|---|---|
| **A**<br>**Assessment** | •**ASSESSMENT**<br>•**I have no concerns about the patient --OR-- I am concerned about the following: (dropdown)**<br>oBlood pressure. O Pulse.<br>oRespiration. O Pain<br>oTemperature. O Nutrition<br>oConstipation.<br>oContact precautions<br>oVision loss ramifications<br>oAphasia<br>oAgitation<br>oOther.<br>o Safety issues |
| **R**<br>**Recommendation** | •**RECOMMENDATION**<br>•**Nursing report from: Name _____ Date/Time _____**<br>•**MTF/VA_____Contact Information_____**<br>•**Were you given the opportunity to ask questions regarding nursing care of the patient? Yes__ No___**<br>•**Hand off**<br>•**From: (drop down menu)**<br>•**MTF to VAMC**<br>•**PRC to PNS**<br>•**PNS to outpatient and or other facility**<br>• **Other Name and title of Case Manager**<br>•**Contact Information Phone Pager Email:**<br>•**Contact between patient or patient family and case manager (Drop down)**<br>•**Patient and or family have spoken with case manager on the phone**<br>•**Patient/patient family has communicated per Vtel Conference**<br>•**Have meeting scheduled on arrival**<br>•**Other arrangements**<br>**Plan for follow up care: Text from case manager to case manager**<br>•**Patient needs and issues with plans to address:** Patient teaching needs—family information—social work intervention. (drop down)<br>•Special patient care needs. Additional case manager concerns.<br>**Are discharge summaries and pertinent records available electronically? Yes No**<br>**Other areas of concern for interdisciplinary team hand off. (Text)**<br>_____ |

# VHA Policy

- Injured and/or ill OEF and OIF active duty service members are transitioned seamlessly from MTFs to VHA facilities.
- Care of all OEF and OIF service members and veterans treated at VHA facilities is coordinated, monitored, and tracked.
- All OEF and OIF service members and veterans are screened for the need for case management services.
- Severely-ill or injured OEF and OIF patients are case managed.

# Tool Development

- The nursing hand-off tool is funded for IT development VA wide with proposed implementation of the tool in 2nd quarter 2008.
- Development of the VA Clinical Informatics hand off tool is under the direction of:
  - Ms. Oyweda Moorer, VHA Program Director,
  - Health Systems Technology, Department of Veterans Affairs.
- Plan is to make the hand-off tool accessible to nursing in both the Department of Defense and the VA.
- VA IT will develop the software and work with DOD Information Technology Department to coordinate implementation at Walter Reed.

# JCAHO 2007 Patient Safety Goals

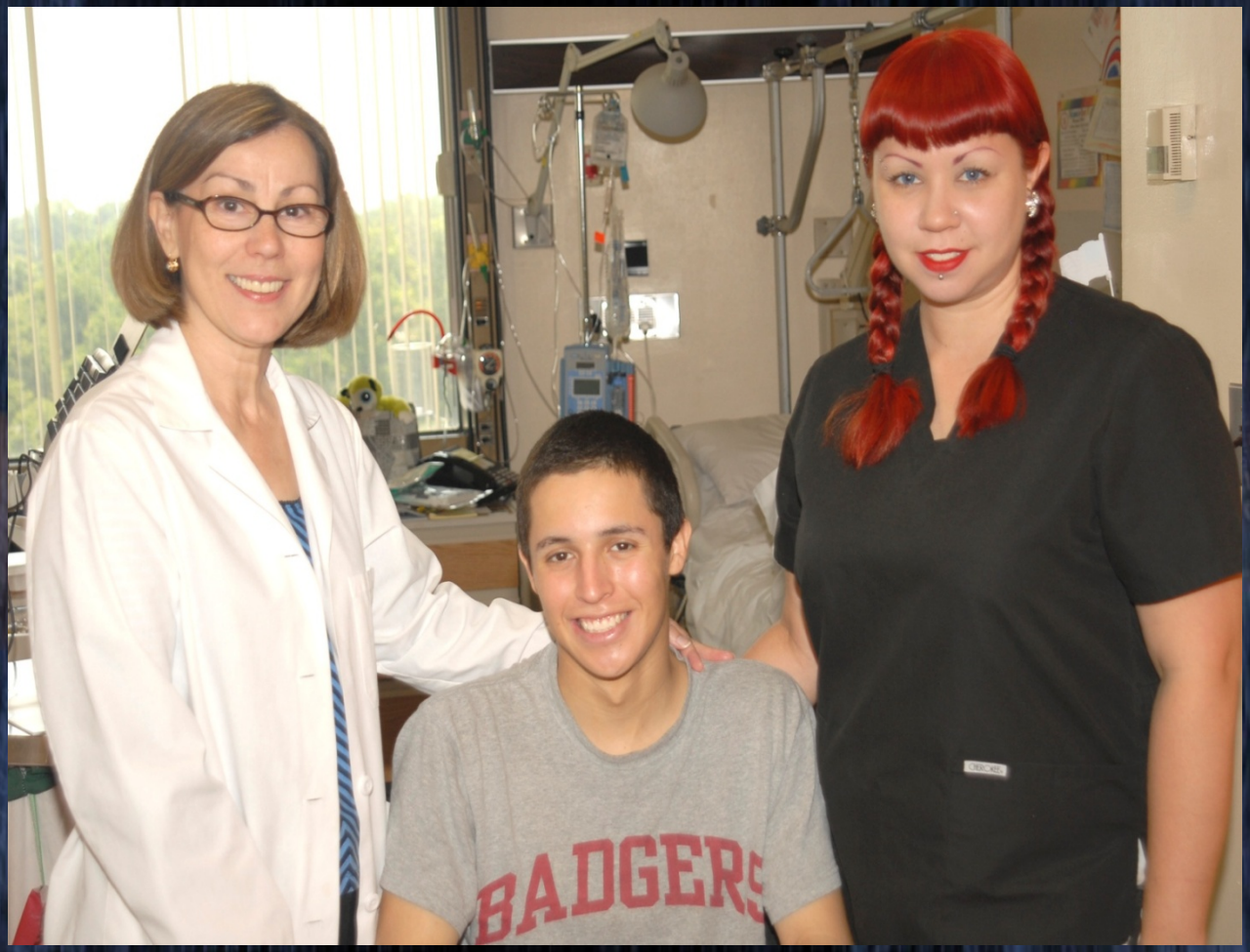
- Upon implementation, the nursing hand-off note will address one of the JCAHO patient safety goals:
  - Improve effectiveness of communication among caregivers
  - 2E. Standardize the “hand-off” communication with any patient movement including an opportunity to ask questions

# Nursing Hand-Off Tool

**Benefits:**

- Provide clinical information to nurses at the bedside
- Document patient transfers between VA and DOD
- Provide data for collaborative research between VA and DOD
- Provide tracking mechanism
- Improve patient safety and improve patient care!

# Nursing Goal




To share clinical information between VA and DOD nurses jointly serving those who serve our country

# Thank You!

I would like to thank both the VA and Walter Reed nursing leaders for supporting me in this effort.

Questions??

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