Reports, Decision support, Incentives, Research: Can One Click Do It All?

Rhythms in Quality
4th Annual NDNQI Data Use Conference
New Orleans, LA
January 20, 2010

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Celebrate the Progress of ANA NDNQI

- I recall the first ANA calls and meetings on the idea and the first list of indicators… could it be done?
- Congratulations on over 1500 agencies participating in NDNQI.
- ANA to Open Premier Nursing Performance Measure Database to Top Researchers

Celebrate the Progress

- These NDNQI conferences are indicators of success.
- The research and practice content at this conference is amazing and welcome

Early Questions

- Could we identify nursing quality indicators?
- What are the quality indicators that would describe nurses and nursing practice?
- Would these indicators be able to be collected, analyzed, benchmarked and used to improve the quality of patient care?
- Would stakeholders be willing to invest or buy into the process?

Current Questions

- To what extent are the NDNQI indicators matched to or included in the national indicators of such groups as CMS, NQF and the JC? (harmonization??)
- To what extent can the NDNQI indicators be used in national and regional reports; quality improvement; accreditation & certification; public reporting and for financial incentives?
- What are the additional or new indicators?
- What is the progress towards using standardized terminology and codes?

Current Questions

- To what extent can we include Nursing indicators and data in Health Information Technology (HIT) Meaningful Use Criteria?
- To what extent can we use information technology to capture essential nursing data?
- To what extent can we use information technology to control or reduce the burden on nurses?

Thus, the Title of My Discussion

Documentation
Decision Support
Reports
Incentives
Research

Can ONE Click Do It All?

CLICK CLICK CLICK CLICK

Today's Session Objectives

1) Recognize the importance of nursing sensitive indicators to practice, administration, research and public policy.

2) Describe how a successful intelligent information system can contribute to decision support, collection, analysis, use and reporting of essential nursing data.

From National and Research Perspectives

- "Meaningful use" of Health Information Technology (HIT) From the National Perspective
- Knowledge Generated Everyday; What to Do?
- Frequent New Measures/Guidelines; What to Do?
  Joint Commission? National Quality Forum?
  Government Guidelines (AHRQ, CDC, CMS)?
  Professional Associations?

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US Goal:
"Meaningful Use" of Health Information Technology (HIT)

- "Meaningful Use" for Nursing Care?
- What are the Most Important Knowledge-Based Nursing Care Areas?
- What are the measures for these?
- Where can the measures be found in an electronic information system?
- Are these measures used for quality improvement?
- Are these measures ready for public reporting?
- Are these measures ready for pay for performance.

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What are the nursing related measures today?

- ANA NDNQI (discussed elsewhere at this conference)
- CMS
- CDC
- NQF (will discuss in more detail)
- TJC

NQF Mission

The National Quality Forum (NQF) operates under a three-part mission to improve the quality of American healthcare:

1) Setting national priorities and goals for performance improvement;

2) Endorsing national consensus standards for measuring and publicly reporting on performance; and

3) Promoting the attainment of national goals through education and outreach programs.

2005

NQF-endorsed™

National Voluntary Consensus Standards

for

Nursing-Sensitive Care

NQF-endorsed™ NVCS for Nursing-Sensitive Care

1. Failure to rescue (death among surgical inpatients with treatable serious complications)
2. Pressure ulcer prevalence
3. Falls
4. Falls with injury
5. Restraint (vest and limb) prevalence
6. Urinary catheter-associated UTI - ICU
7. Central line catheter-associated BSIs - ICU
8. Ventilator-associated pneumonia - ICU

NQF-endorsed™ NVCS for Nursing-Sensitive Care

9. Smoking cessation counseling for AMI
10. Smoking cessation counseling for pneumonia
11. Smoking cessation counseling for HF
12. Skill mix
13. Nursing care hours per patient day
14. Practice Environment Scale-Nursing Work Index (PES-NWI)
15. Voluntary turnover

JCAHO/JC

Implementation Guide for the NQF Endorsed Nursing-Sensitive Care Performance Measures (2005)

- Provides detailed specifications for the 15 NQF endorsed measures.
- Available on the JC Connect Web site.

Where are the NQF Nurse Sensitive Measures in 2010?

NEW NQF WEBSITE
Sign up for updates

- A newly constructed Website contains all NQF endorsed measures, including those previously endorsed as nurse sensitive.

- Nurse sensitive measures have gone through measure maintenance and have now become part of the overall listing of 537 NQF endorsed measures.
- Smoking cessation measures have been retired.
- Let's review some examples of those integrated measures.

NQF Measure

- **NQF #0202**
- Title: **Falls with injury**
- **Status:** Endorsed
- **Endorsed on:** AUG 05, 2009
- **Steward:** American Nurses Association
- **Description**: All documented patient falls with an injury level of minor (2) or greater.

NQF Measure

- **NQF #0141**
- Title: **Patient Fall Rate**
- **Status:** Endorsed
- **Endorsed on:** AUG 05, 2009
- **Steward:** American Nurses Association
- **Description**: All documented falls, with or without injury, experienced by patients on an eligible unit in a calendar quarter.

NQF Measure

- **NQF #0101**
- Title: **Falls: Screening for Fall Risk**
- **Status:** Time-Limited Endorsed
- **Endorsed on:** MAY 01, 2007
- **Steward:** National Committee for Quality Assurance
- **Description**: Percentage of patients aged 65 years and older who were screened for fall risk (2 or more falls in the past year or any fall with injury in the past year) at least once within 12 months

NQF Measure

- **NQF #0537**
- Title: **Multifactor Fall Risk Assessment Conducted in Patients 65 and Older**
- **Status:** Time-Limited Endorsed
- **Endorsed on:** AUG 05, 2009
- **Steward:** Centers for Medicare & Medicaid Services
- **Description**: Percent of home health episodes in which the patient was 65 or older and was assessed for risk of falls (using a standardized and validated multi-factor Fall Risk Assessment) at start or resumption of home health care

NQF Measure

- **NQF #0035**
- Title: **Fall risk management in older adults: a. Discussing fall risk, b. Managing fall risk**
- **Status:** Endorsed
- **Endorsed on:** MAY 01, 2006
- **Steward:** National Committee for Quality Assurance
- **Description**: Percentage of patients aged 75 and older who reported that their doctor or other health provider talked with them about falling or problems with balance or walking

  Percentage of patients aged 75 and older who reported that their doctor or other health provider had done anything to help prevent falls or treat problems with balance or walking

NQF Measure

- **NQF #0201**
- Title: **Pressure ulcer prevalence**
- **Status:** Endorsed
- **Endorsed on:** AUG 05, 2009
- **Steward:** The Joint Commission
- **Description**: The total number of patients that have hospital-acquired (nosocomial) stage II or greater pressure ulcers on the day of the prevalence study.

NQF Measure

- **NQF** #0181
- Title: **Increase in number of pressure ulcers**
- **Status**: Endorsed
- **Endorsed** on: MAR 31, 2009
- **Steward**: Centers for Medicare & Medicaid Services
- **Description**: Percentage of patients who had an increase in the number of pressure ulcers

NQF Measure

- **NQF** #0538
- Title**: Pressure Ulcer Prevention Included in Plan of Care**
- **Status:** Time-Limited Endorsed
- **Endorsed on:** AUG 05, 2009
- **Steward:** Centers for Medicare & Medicaid Services
- **Description**: Percent of patients with assessed risk for Pressure Ulcers whose physician-ordered plan of care includes intervention(s) to prevent them

NQF Measure

- **NQF** #0375
- Title: **VTE Discharge Instructions**
- **Status**: Endorsed
- **Endorsed** on: MAY 15, 2008
- **Steward**: The Joint Commission
- **Description**: This measure assesses the number of patients diagnosed with confirmed VTE that are discharged to home, to home with home health or home hospice on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.

NQF Measure

- **NQF** #0330
- Title: **30-Day All-Cause Risk Standardized Readmission Rate Following Heart Failure Hospitalization (risk adjusted)**
- **Status**: Endorsed
- **Endorsed** on: MAY 15, 2008
- **Steward**: Centers for Medicare & Medicaid Services
- **Description**: Hospital-specific, risk-standardized, 30-day all-cause readmission rates for Medicare fee-for-service patients discharged from the hospital with a principal diagnosis of heart failure (HF).

RWJ Nursing Engagement in Performance Measurement and Public Reporting

Ellen Kurtzman, Project Leader
George Washington University

Project Report Fall, 2009
RWJF WEBSITE/Newsletter

New Priorities

- Continuation of focus on top conditions and procedures
- Begin to work on six national priorities
- Begin to focus on harmonized measures across sites of care and types of providers

(Sessions today by Gerri Lamb and Karen Pace)

National Priorities & Goals

1. **Ensure patients receive well-coordinated care across all providers, settings, and levels of care**
   - Medication reconciliation
   - Preventable hospital readmissions
   - Preventable ED visits

2. **Improve the health of the population**
   - Preventive services
   - Healthy lifestyle behaviors
   - Population health index

3. **Improve the safety and reliability of America's health care system**
   - Hospital-level mortality rates
   - Serious adverse events
   - Healthcare associated infections

National Priorities & Goals

3. **Engage patients and families in managing health and making decisions about care**
   - Informed decision-making
   - Patient experience of care
   - Patient self-management

4. **Guarantee appropriate and compassionate care for patients with life-limiting illnesses**
   - Relief of physical symptoms; meet psychosocial and spiritual needs
   - Communication regarding treatment options and prognosis
   - Access to palliative care & hospice services

5. **Eliminate waste while ensuring the delivery of appropriate care**

Nursing, Quality & HIT

- To what extent do we link quality measures and HIT?
- Can the same data elements be used in documentation, decision support, reports, incentives?
- Can an intelligent electronic system (HIT, EHR, EPR) be developed where one click becomes a significant force?

Acknowledge

- Several of the next slides are attributed to a recent presentation at an ANA, AAN, NQF invitational conference, Priority Partners New Priorities; authored by:

  Rosemary Kennedy
  NQF
  Carol Bickford
  ANA
  Norma Lang

- Note other NQF presentations at this conference

Where is Healthcare IT Today?

- "Despite a consensus that the use of HIT should lead to a safer more efficient system and higher quality care, there are no reliable estimates of the prevalence of adoption of EMR in US hospitals."

Jha, DesRoches, et al, NEJM, (2009)

Health Information Technology
Today's State

Point of Care Technology

- **Focus: Patient Level Care Delivery**
- Evidence-based not fully integrated in all HIT
- Some improvements in quality and safety
- Quality management still heavily retrospective and manual
- Data entry heavy – data overload is high
- Measurement weak – lack of clarity on what to measure

Desired HIT State

In Short……

HIT, EHRs and PHRs must capture the necessary data to calculate measures; and provide clinical decision support (CDS) to providers to enhance performance.

Establish an HIT infrastructure to fully support performance measurement and improvement requires close and ongoing **collaboration between the "quality community" and the "HIT community."**

US Goal:

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- "Meaningful Use" for Nursing Care?
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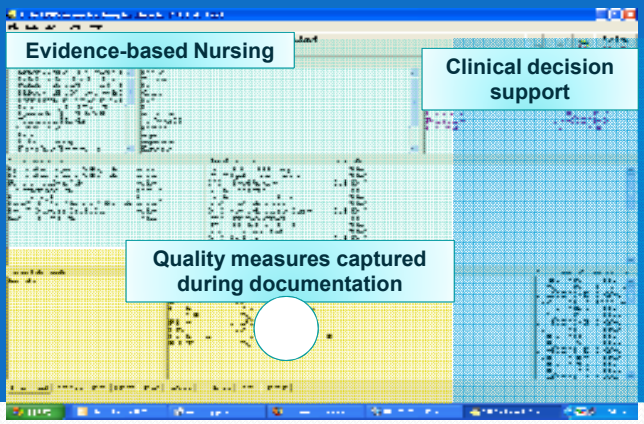
Desired State

Words on the Screen….are not just codes



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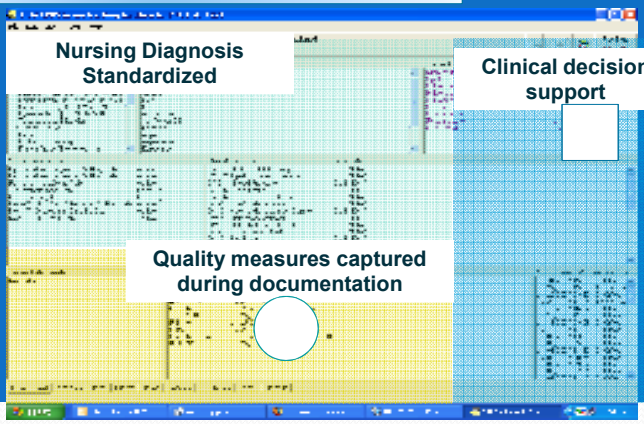
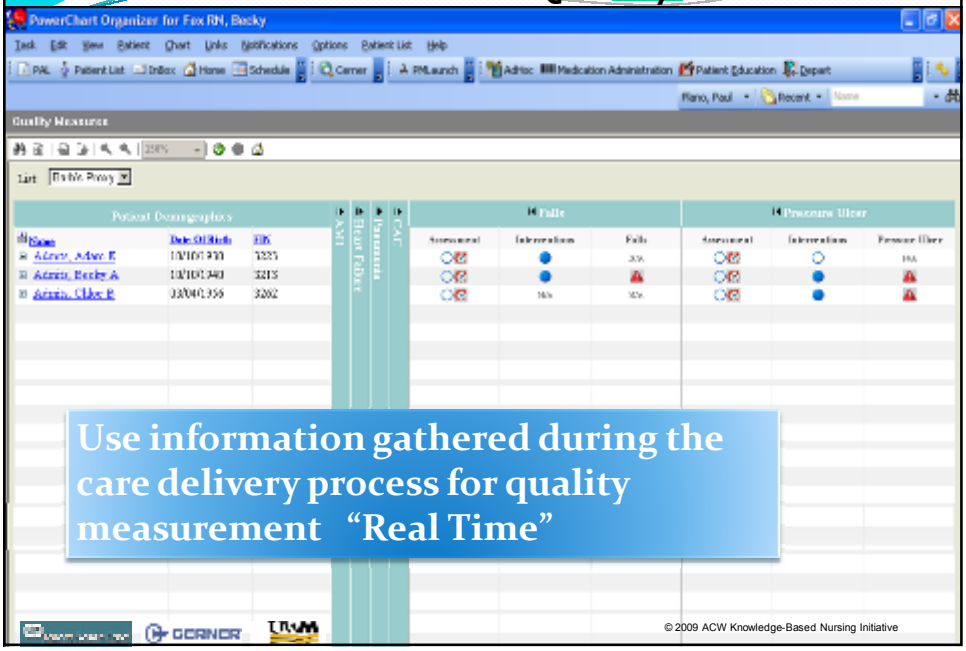
Desired State

Evidence-based Nursing Within HIT



Real Time Dashboard-Quality Measures



Use information gathered during the care delivery process for quality measurement "Real Time"

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Performance Improvement Monitoring

Weekly, monthly and quarterly
Shows trends in process and outcome indicators
Stratified by key variables (such as: facility, nursing unit, physician)

Falls Prevention Summary

		Baseline Month	LH Goal	Current Month	YTD	Jun-08	Jul-08	Aug-0
Demographic	Number of Discharges	222	222	237	689	208	244	2
	Number of Patient Days	1,110	1,110	1,067	3,212	989	1,156	1,0
	Number of Patients with a Fall	5	2	2	8	3	3	
	Number of Patients with an Injury from a Fall	2	0.7	1	3	1	1	
Assessment	% Patients Assessed within 24 Hours of Admission	73%	100%	95%	93%	92%	93%	9
	% Patients Assessed Daily	52%	100%	84%	82%	82%	78%	8
	% Patients Identified At Risk	56%	56%	57%	61%	59%	63%	5
Plan of Care	% At Risk Patients with Fall Prevention Plan Initiated	67%	100%	82%	78%	84%	79%	8
Treatment	% At Risk Patients with Education Documented	20%	100%	74%	67%	60%	80%	7
Outcome	% At Risk Patients Prior to Fall	85%	100%	75%	80%	68%	82%	7
	% Non-Risk Patients Prior to Fall	15%	0%	25%	20%	32%	18%	2
	% Falls Resulting in an Injury	40%	33%	50%	38%	33%	33%	5
	Number of Falls Per 1000 Patient Days	4.5	2.2	1.9	2.5	3.0	2.6	
	Number of Injuries Per 1000 Patient Days	2.2	0.7	0.9	9.6	1.0	0.9	
	Median Number of Admissions Between Falls	32	40	37	43	48	44	

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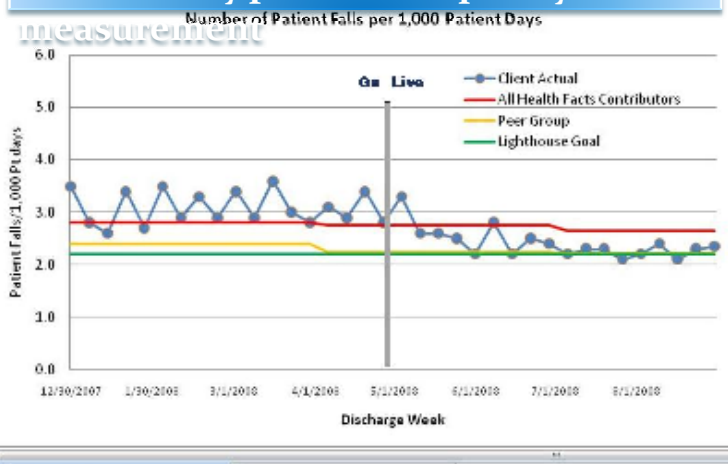
Statistical Monitoring and Analysis

Single Measure-Falls/1,000 Patient Days

Use information gathered during the care delivery process for quality measurement



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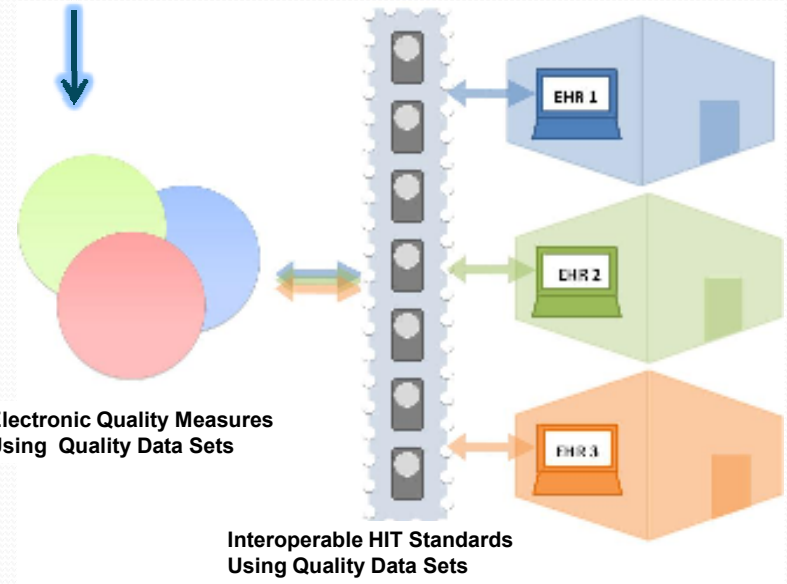
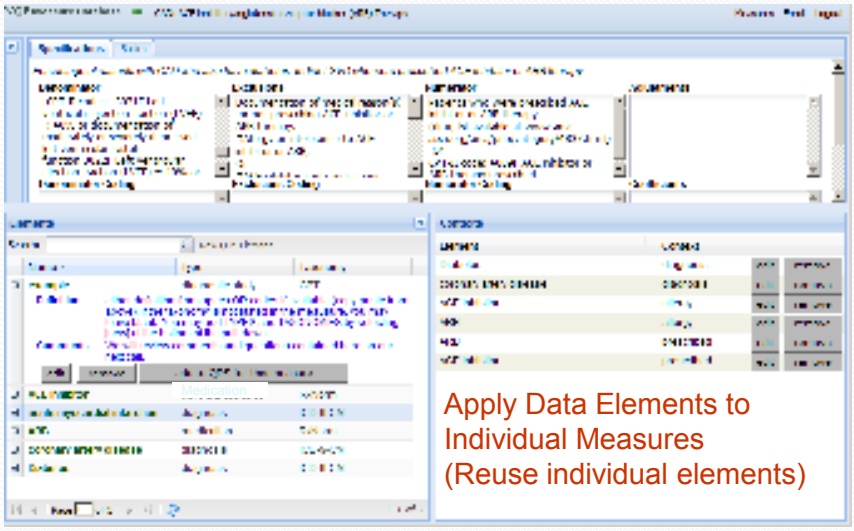
Infusing Evidence-Based Nursing into HIT – at a National Level

Evidence –Based Nursing Practice



Structure » Quality Data Set

Build Quality Data Set (QDS) from Existing Measures



Apply Data Elements to Individual Measures (Reuse individual elements)

QDS

The "Quality Data Set"
will support both public reporting
and
enhanced patient care.
It will enable both real-time feedback to clinicians on their performance
and
clinical decision-support

A Brief Update on the KBNI Project

Acknowledge the Support of:

1) AHRQ ACTION Contract

2) National Science Foundation Grant

3) A partnership of Aurora Health Care, Cerner Corporation and the University of Wisconsin Milwaukee

Possible??

Can we really simultaneously
transform
practice and research
as well as
meet the increasing
regulatory requirements?

Knowledge-Based Nursing Initiative (KBNI)

Aurora	Cerner	UWM
Integrated health system, nursing expertise	Application solutions, knowledge tools	Education, research and practice college

Goal

Infuse research/evidence-based nursing content within the workflow to support clinical decision making, populate data repositories, conduct analyses, and improve patient care across all venues.

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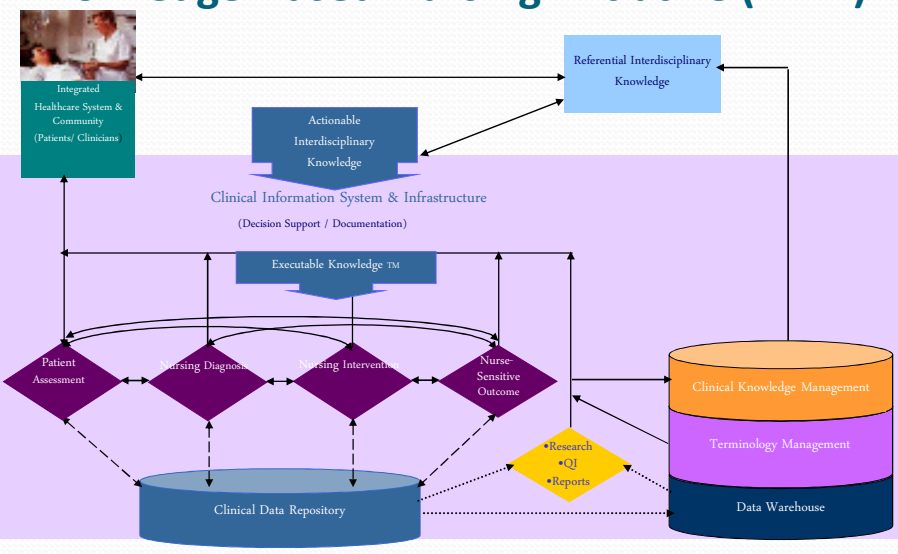
Conceptual Framework: Knowledge-Based Nursing Initiative (KBNI)



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National Quality Indicators/Measures
(for acute care)

National Quality Forum (NQF)	National Database of Nursing Quality Indicators (NDNQI)	Magnet Recognition
Falls prevalence Falls with injury	Falls prevalence Falls with injuries	Falls prevalence Falls with injuries
Pressure ulcer prevalence	Pressure ulcer prevalence	Pressure ulcer prevalence
Urinary tract infection (UTI) - ICU	Catheter associated urinary track infections	
Central line catheter-associated blood stream infection	Central Line associated blood stream infection	
Ventilator-associated pneumonia	Ventilator-assisted pneumonia (VAP)	
Restraint prevalence		
Failure to Rescue		

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Translation of Science, Research, and Evidence into Nursing Practice

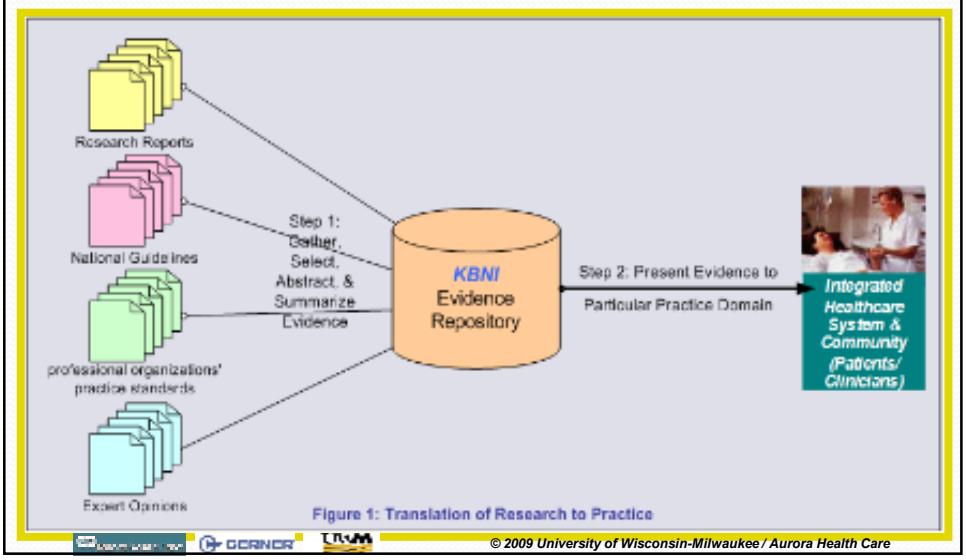

Figure 1: Translation of Research to Practice

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KBNI: Synthesizing the Evidence

Patient Assessments	➢ *Fall risk factors (confirm with Tool)* ➢ *Fall-related Injury risk factors* ➢ *Special conditions* ➢ *Patient able to participate in prevention*
Diagnosis	➢ *Risk for Falls* ➢ *Risk for Fall-related Injury*
Nursing Interventions	➢ *Environmental management* ➢ *Risk-specific interventions* ➢ *Initiate consults (MD/Pharmacy/PT/OT)*
Nurse-Sensitive Outcomes	➢ *Patient does not fall or injure* ➢ *Patient verbalizes risks & takes action*

Source: Hook, Devine, Lang (2008); Hook & Winchel, (2006)

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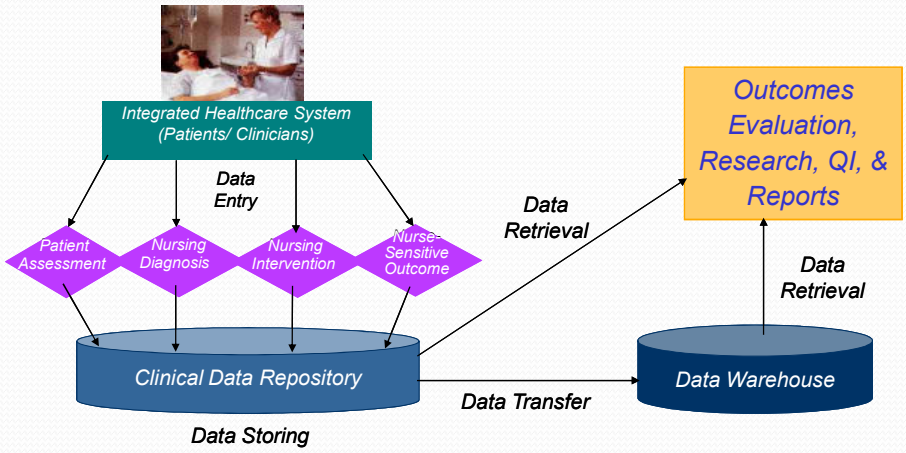
Clinical Data Entry, Storing, Transfer, Retrieval, Analysis, Feedback, Reports, Quality Improvement



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Success thus far:

- A research synthesis process that produces actionable knowledge for key nursing conditions/phenomena (twenty topics completed and in process)
- Standardized Terminology and coding for each data element used in designs and builds
- Design, build and implementation that includes researchers, IT experts and clinicians.

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Success (continued)

- Capability to secure and analyze valid and reliable operational and research data
- Implementing an AHRQ contract and a NSF grant to improve reports and to utilize other disciplines to help improve the use of terminology and data analysis.
- Celebrating when the best description of success comes from the clinicians.

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Success Brings New Challenges Need Thoughtful Solutions

- Increase clinical centered research.
- The use of standardized terminology in nursing research and practice.
- Be aware of the increasing number of clicks, alerts, triggers in electronic information systems.

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New Challenges (continued)

- Build relational data bases for the overlap of assessments, patient problems, interventions and outcomes.
- Carefully interface nursing and medical data elements.
- Consider the use of successful intelligent information systems to be included in direct patient care hours.

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Many

Opportunities

Challenges

Thanks !!!!

QUESTIONS? ☺

Comments? ☺