

Standardized Nursing Documentation Templates: Development, Deployment and Data



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Objectives



- Discuss the evolution of the VA Nursing Outcomes Database (VANOD)
- Describe the drivers and business rules for development of standardized clinical nursing documentation tools in the VA
- State the concepts behind the development, deployment and evaluation for the upcoming comprehensive Patient Assessment

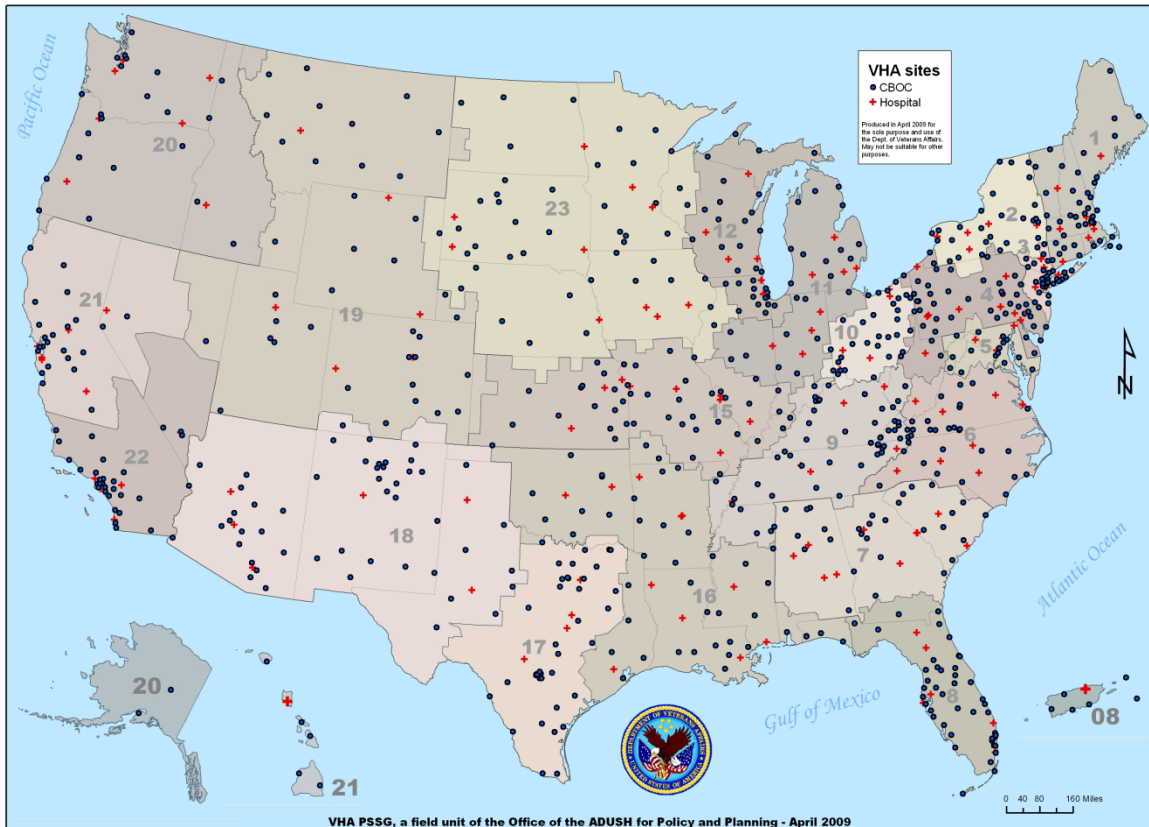
Acknowledgments



- **Mimi Haberfelde RN-BC MS**
 - Nursing Informatics Specialist
VHA Office of Informatics and Analytics
Nursing Data Services Team
- **Alicia Levin RN, MS**
 - Nursing Informatics Specialist
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About the VHA Network

DEPARTMENT OF VETERANS AFFAIRS
Veterans Integrated Service Networks



- **8.15 million enrollees**
- **152 Hospitals & Medical Centers**
- **17,252 beds (average)**
- **166,100 Admissions**
- **958 Outpatient Clinics**
- **134 Community Living Centers (Nursing Homes)**

4th Q FY 10 VAST
VHA Office of the Assistant Deputy
Under Secretary for Health (ADUSH)
for Policy and Planning (10A5)

VHA Staff



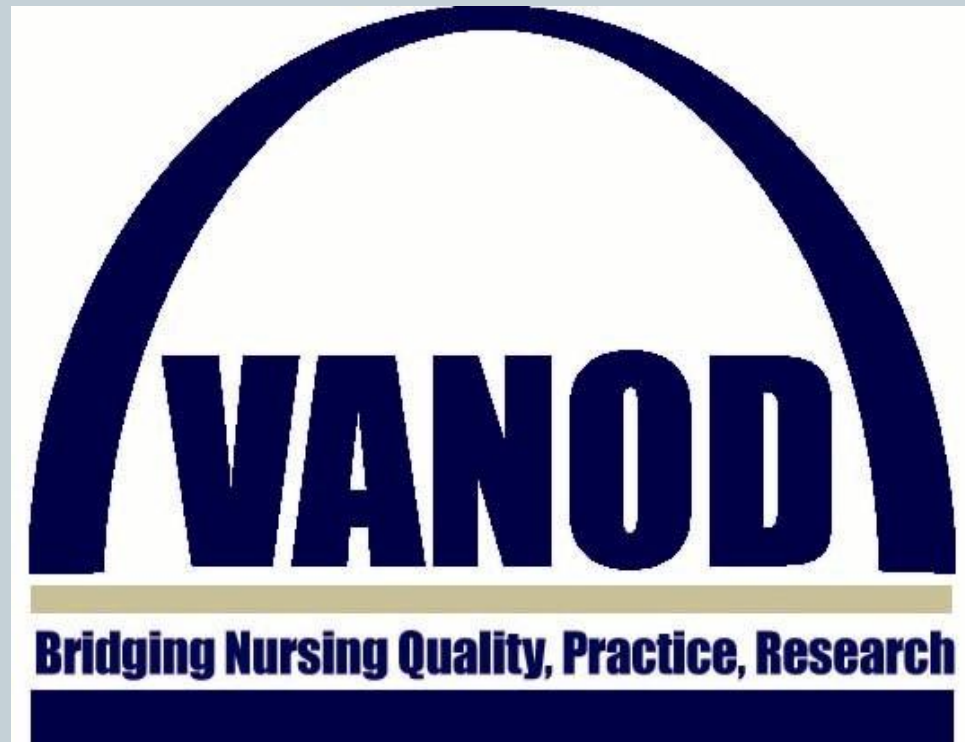
- 308,070 VHA Employees
- 77,894 Nursing Employees
- Approximately 60,000 Direct Care Nursing Staff
- Nursing represents 25 % of the VHA workforce

FY 2010

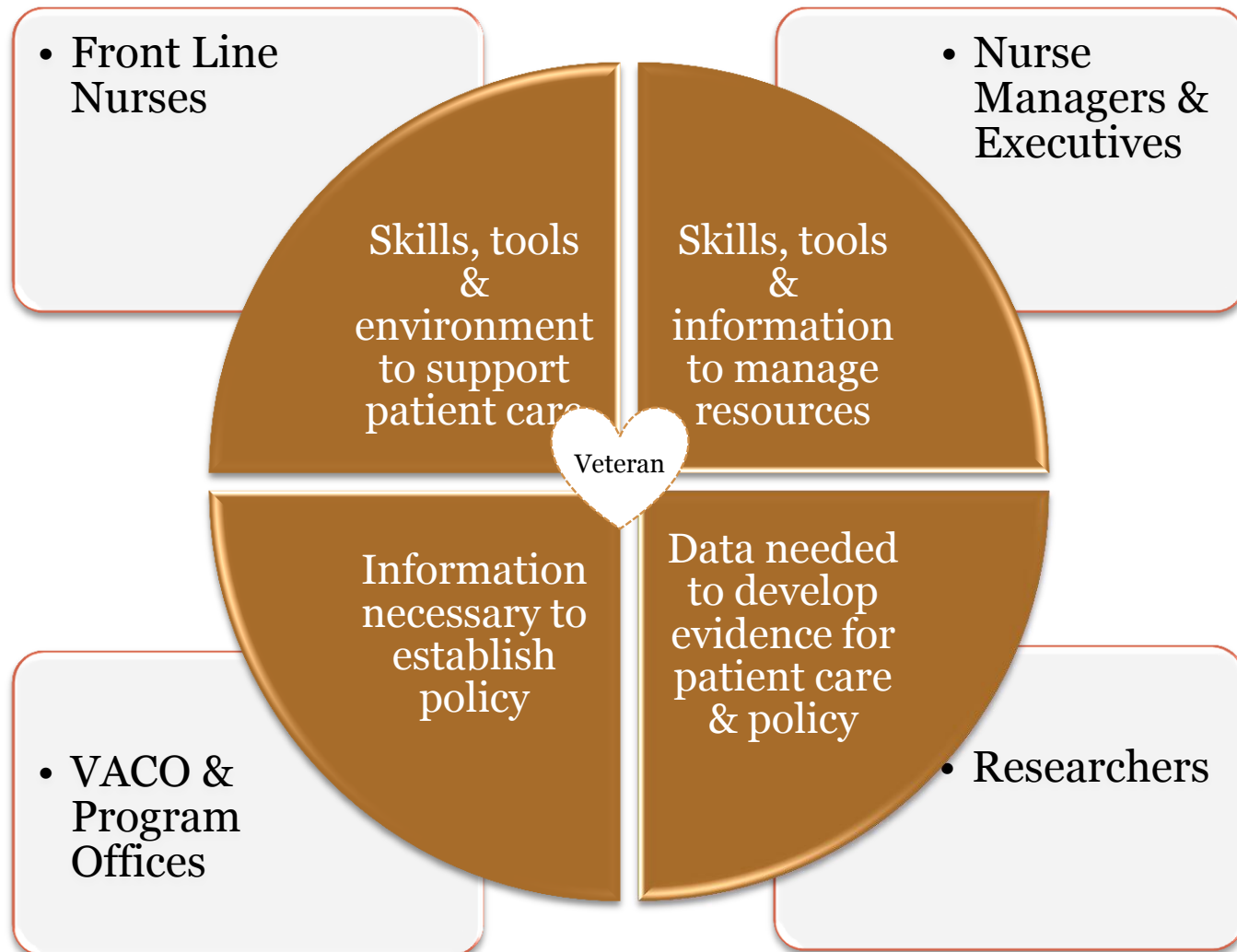
VANOD Annual Summary Report and VANOD
Demographic and Financial Cube

What is VANOD?

(VA Nursing Outcomes Database)



Nursing Informatics Vision



Business Rules



- **Data Entry** – minimal burden; integrated or transparent in the process of doing work. Minimize duplicate documentation
 - Provide front line nurses the tools to document their care at the point of service (Nationally standardized skin assessment and patient assessment templates)
- **Data Extraction** from the EHR – no manual data collection
- **National roll-up** of extracted data – no manual reporting
- **Timely**- data should be provided as close to ‘real time’ as possible
- **Start with the end in mind**

Development of Skin Risk Indicators



- First clinical indicator – required a new process
- Two nationally standardized nursing documentation templates – Initial & Reassessment
- Data content sources: VHA Handbook; IHI; Wound Care Nurse Workgroup
- Data successfully extracted - April 2008
- Data is available from January 2008 for all VHA Medical Centers

Template Deployment



- **Skin Templates:**

- Initial Skin Assessment – completed within 24 hours of admission to acute care
- Skin Reassessment – daily skin inspection section for all patients with LOS > 48 hours.
- Reassessment template identifies previously documented pressure ulcers

☒ Skin Assessment

Monitoring:

Skin Inspection in all settings at least every 24 hrs.

Braden scale frequency:

On admission, transfer (inter or intra-facility), discharge,
or change in condition

Acute Care: Braden score 18 or less --> reassessment with Braden
scale at least every 48 hrs

Long-Term Care: Reassessment with Braden scale
weekly X 4 then at least monthly

[Braden Risk Assessment Scale Details](#)

☒ Braden Scale - For Predicting Pressure Sore Risk

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Sensory Perception: *

Moisture: *

Activity: *

Mobility: *

Nutrition: *

Friction: *

Choose one Braden scale score

- ☐ 19-23 No Risk
- ☐ 15-18 Mild Risk
- ☐ 13-14 Moderate Risk
- ☐ 10-12 High Risk
- ☐ 6-9 Severe Risk

The template provides a consistent skin risk tool and scoring for Braden and has hyperlinks for additional reference

SKIN PATCHES

Does the patient have any patches on the skin? (EKG, medication...)

SKIN PATCHES *

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Med/Surg Nursing Assessment

* Skin Assessment

Braden Scale - For Predicting Pressure Sore Risk

Sensory Perception:

Moisture:

Health Factors: SKIN COLOR (Historical), SKIN MOISTURE (Historical), SKIN TEMPERATURE (Historical), SKIN TURGOR (Historical), VANOD SKIN INITIAL

* Indicates a Required Field

SKIN PATCHES

Does the patient have any patches on the skin? (EKG, medication...)

Skin Patches *

- ☐ No
☐ Yes

MAJOR RISK FACTORS / SPECIAL POPULATIONS

Does the patient have spinal cord injury, paralysis, amputation or neurological disease?

Risk Factors *

- ☐ No
☐ Yes

CURRENT SKIN ASSESSMENT

Complete each section

Skin Color:

Color: *

- ☐ Normal for ethnic group ☐ Pale ☐ Flushed ☐ Dusky ☐ Mottled ☐ Jaundiced ☐ Cyanotic ☐ Other

Skin Temperature

Temp: *

- ☐ Warm ☐ Hot ☐ Cool ☐ Cold

Skin Moisture

Moisture: *

- ☐ Dry ☐ Moist ☐ Diaphoretic

Skin Turgor

Turgor: *

- ☐ Within normal limits ☐ Abnormal

Tagged data elements from
the assessment



Med/Surg Nursing Assessment

* Skin Assessment

Braden Scale - For Predicting Pressure Sore Risk

Sensory Perception:

Moisture:

Health Factors: SKIN COLOR (Historical), SKIN MOISTURE (Historical), SKIN TEMPERATURE (Historical), SKIN TURGOR (Historical), VANOD SKIN INITIAL

- ☐ Wound - other than pressure ulcer (includes surgical wounds)
- ☐ Other use to describe skin tears, tape burns, perineal dermatitis, maceration, etc
- ☒ Pressure Ulcer

For each stage, click on all pressure ulcer locations that apply.

☐ Suspected Deep Tissue Injury

Purple or maroon localized area of discolored intact skin or tissue from pressure and/or shear. The area may be preceded or cooler as compared to adjacent tissue.

☐ Stage I

Intact skin with non-blanchable redness of a localized area; may not have visible blanching; its color may differ from the

☐ Stage II

Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister. *This stage should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation. *Bruising indicates suspected deep tissue injury.

☐ Stage III

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.

☐ Stage IV

Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.

☐ Unstageable

Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

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Med/Surg Nursing Assessment

* Skin Assessment

Braden Scale - For Predicting Pressure Sore Risk

Sensory Perception:

Moisture:

Health Factors: PRESSURE ULCER (Historical), SKIN COLOR (Historical), SKIN MOISTURE (Historical), SKIN TEMPERATURE (Historical), SKIN TURGOR (Historical), VANN
INITIAL

Provides stages and definitions based on the NPUAP for consistent documentation of pressure ulcers

How Are the Skin Data Obtained?



- Captured via tagged data elements from use of the nursing documentation templates (VANOD Skin Initial and Reassessment Templates were released to the field through Office of Information October '07)
- Report updated by the second week of the month for the prior month's discharged patients
- “Real Time” skin data reports currently in development

What Do the Skin Data Provide?



- Raw data that show the numerators and denominators for each indicator's calculation
- Patient-level data for comparison to station results/numbers
- A tool for viewing local, VISN and VHA data extracted from the VANOD Skin templates
- A tool that supports indicator trouble-shooting and identifying local documentation or education issues
- At present, a way of gauging local performance

Add... Organize...

VHA/VISN/Facility Trend

Facility VISN and Facility:

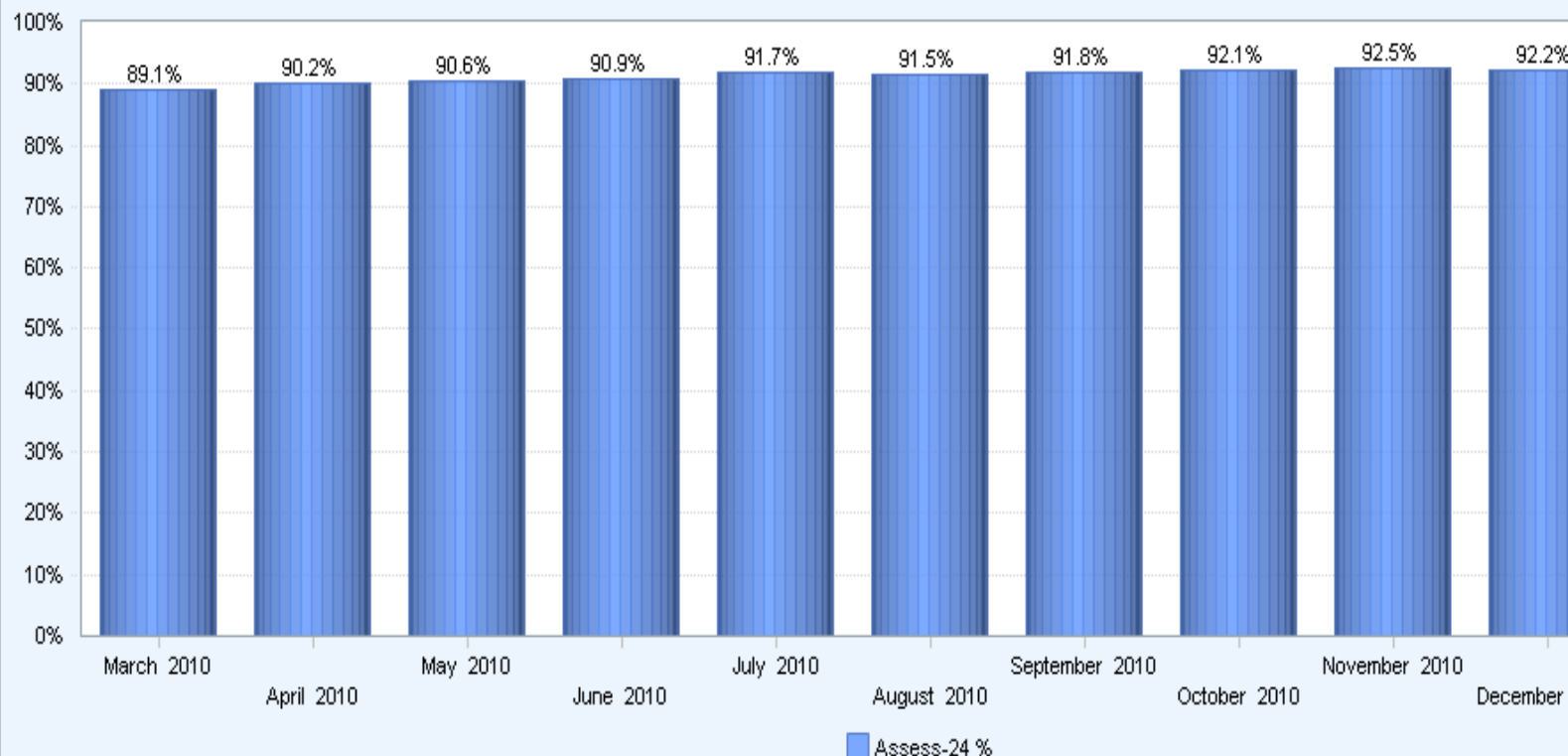
Facility Complexity:

Admitting Bed Section:

Treating Specialty: All Treating Specialties

- Assess-24
- Braden-24
- No Braden
- Daily Inspection
- At Risk-Initial
- At Risk & Plan-Initial
- Hi Risk-All
- Hi Risk-No PU
- No Risk-Initial
- No Risk-All
- No Risk-New PU
- Commun 2+
- HAPU 2+
- HAPU 3 & 4
- All PU 2+
- HAPU Rate
- Hi Risk-All-- Stacked Ba
- Commun 2+- Stacked E
- HAPU 2+ Stacked View
- BedSections by Month
- Med/Surg Perf Measure
- Summary by VISN / Facility
- Link to web Skin Risk Report
- FAQs
- Create your own view
- Data Definitions

Initial Risk Assessment (Initial Assessment and Braden score) within 24 hours of Admission
(higher is better)

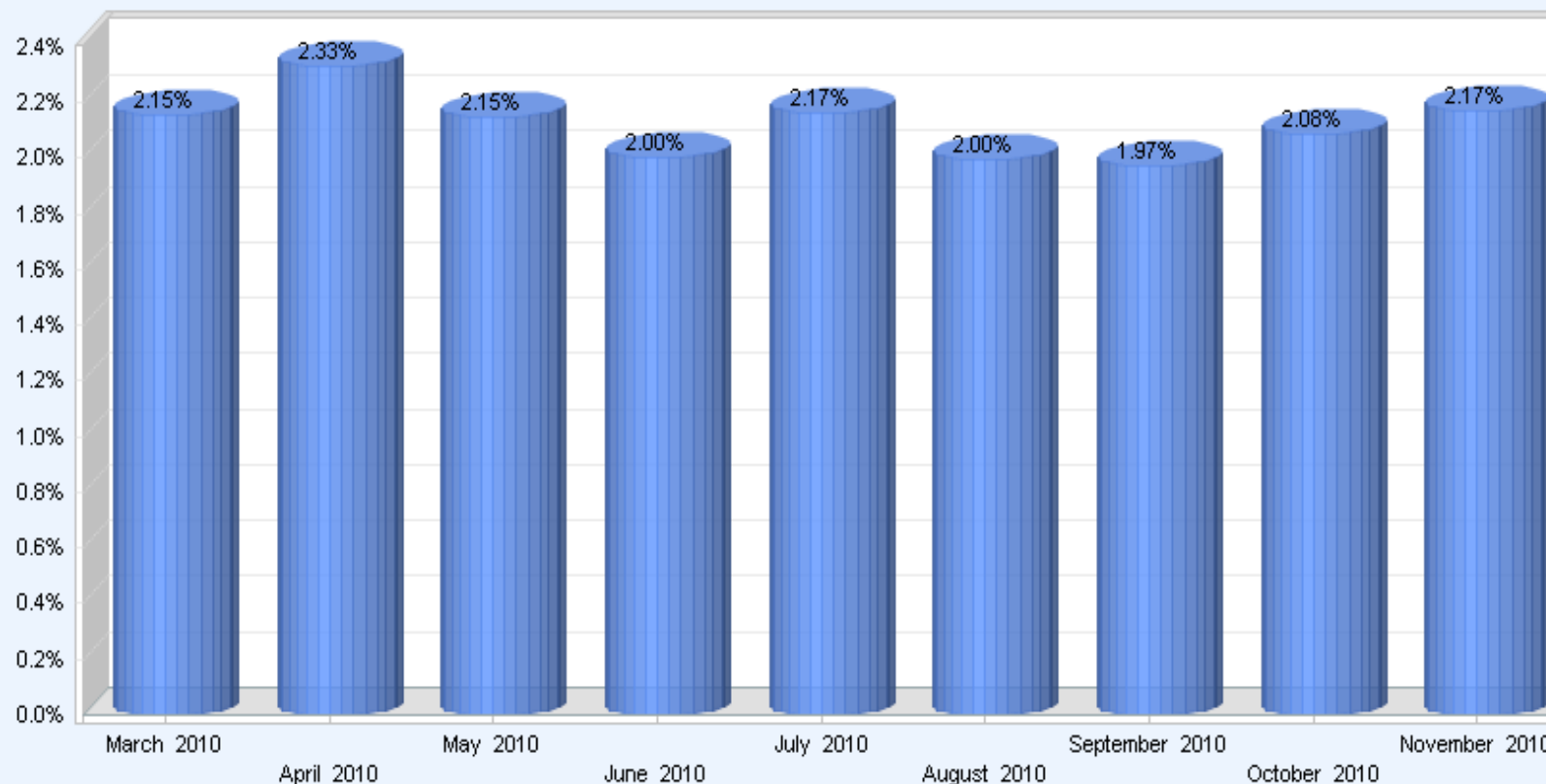


	March 2010	April 2010	May 2010	June 2010	July 2010	August 2010	September 2010	October 2010	November 2010
Assess-24 %	89%	90%	91%	91%	92%	92%	92%	92%	
Assess-24 Count	44,559	43,173	41,836	43,293	43,708	43,445	42,469	42,933	
Discharges LOS 24 hrs or longer	50,009	47,874	46,170	47,614	47,665	47,456	46,284	46,593	



Assess-24: % of patients with an Initial Skin Risk Assessment (Initial Assessment and Braden score) recorded within 24 hrs of admission with a length of stay 24 hours or longer

- Assess-24
- Braden-24
- No Braden
- Daily Inspection
- At Risk-Initial
- At Risk & Plan-Initial
- Hi Risk-All
- Hi Risk-No PU
- No Risk-Initial
- No Risk-All
- No Risk-New PU
- Commun 2+
- HAPU 2+
- HAPU 3 & 4
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Hospital Acquired Pressure Ulcers Stage 2+
(lower is better)

Note: Scale adjusted for illustration.

	March 2010	April 2010	May 2010	June 2010	July 2010	August 2010	September 2010	October 2010	November 2010
HAPU 2 plus %	2%	2%	2%	2%	2%	2%	2%	2%	2%
HAPU 2 plus Count	873	891	797	769	827	769	734	734	734
Discharges LOS 48 hrs or longer	40,534	38,268	37,042	38,418	38,172	38,543	37,183	37,183	37,183

HAPU 2+: % of patients with hospital-acquired pressure ulcers (HAPU) Stage II and above with a length of stay 48 hours or longer

VA Transparency Program - ASPIRE



- Dr. Robert Petzel Department of Veteran's Affairs Under Secretary for Health committed to transparency: “giving Americans the facts”
- Aspirational goals identified
- <http://www.hospitalcompare.va.gov/>

Domains · Measures · Aspirational Goals

Aspirational Goals Met · click VISN (01 to 23) to expand

		Avg.	Goal	01	02	03	04	05	06	07	08	09	10	11	12	15	16	17	18	19	20	21	22	23
Safety	▲ ?																							
Healthcare associated infections	0																							
MRSA infection rate	0 _A	0.23	0.00	0.36	0.41	0.18	0.34	0.14	0.17	0.56	0.16	0.20	0.16	0.41	0.17	0.05	0.27	0.20	0.11	0.00	0.11	0.15	0.44	0.23
VAP infection rate	0 _A	2.01	0.00	3.12	0.00	2.60	0.00	1.36	2.52	2.23	0.67	1.10	4.68	5.90	2.74	0.83	2.49	1.34	0.87	0.00	4.77	1.22	1.48	2.62
CLAB infection rate	0 _A	1.34	0.00	2.32	0.84	0.69	3.89	1.59	1.95	1.56	1.87	0.65	0.00	2.25	1.75	2.43	0.90	0.91	0.47	2.12	0.48	0.00	0.34	0.53
Surgical Care Improvement Project	P																							
Composite SCIP	P ^A		99	98	99	99	99	97	98	98	98	98	98	98	99	99	99	97	98	96	97	99	98	98
Hospital acquired pressure ulcer rate	0																							
Hospital acquired pressure ulcer rate	0 _A	3.12	0.00	1.77	2.35	2.71	1.59	1.57	1.99	2.29	2.20	2.62	1.91	1.77	2.22	1.88	2.39	1.76	1.89	1.44	2.07	2.37	4.19	1.83
Effectiveness	▼ ?																							
Efficiency	▼ ?																							
Timeliness	▼ ?																							
Patient-Centeredness	▼ ?																							
Equity	▼ ?																							

Are we there yet?



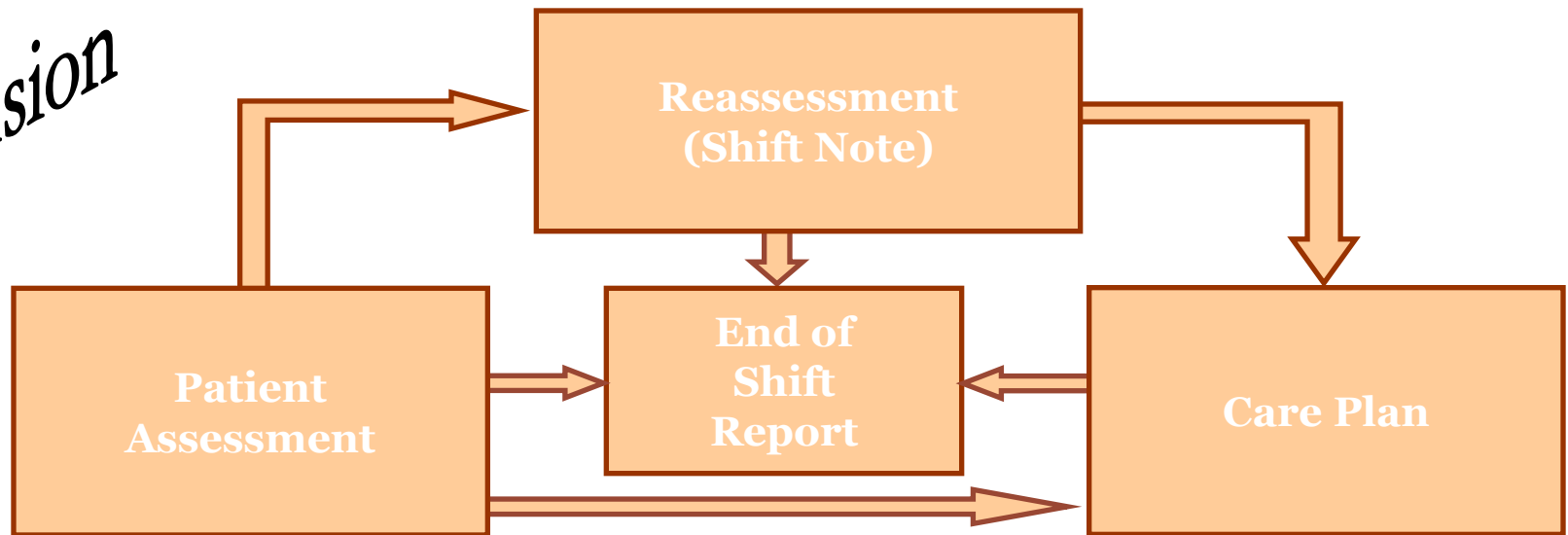
- **There are still challenges to overcome:**
 - Correction of erroneous entries
 - Correct Staging / Identification of pressure ulcers
 - “Real time” skin care reports designed to assist in daily workload management and to identify areas where incorrect staging may have occurred and may be corrected
 - Differences in practice
 - Workflow - pre-admission screening clinics
 - Templates in use for 3+ years – posting on external web site has piqued interest of top leadership
 - Changes / updates must be coordinated through the Office of Information Technology – lengthy review process

Patient Assessment Documentation Package



- Patient Admission Assessment
- Patient Reassessment
- Interdisciplinary Plan of Care Prototype
- End of Shift Report

Vision



Key Data Elements from Patient Assessment, Reassessment & Care Plans

Embed in Files: Clinical Observations (CLiO), Health Factors, Vital Signs

Local Reports
Examples: Summary & Detail Display of Patients with:

1. MRSA Swabs
2. Admission Assessment done within X hrs
3. Skin risk assessment done within 24 hrs
4. Fall risk assessment done within 24 hrs
5. List of patients at risk for??

**Extracted Data
for National
Reports**

Template Development: The Process



- 38 nurses from across VHA representing:
 - Multiple VISNs/facilities
 - Various nursing roles
 - Clinical Nurse Leaders
 - Nurse Executives
 - BCMA Coordinators
 - Clinical Nurse Specialists
 - Informatics Nurses
 - Educators
 - Researchers
 - Clinical Application Coordinators
- Representatives from Data Standardization

Who Participated (continued)



- National representatives from other professional healthcare disciplines e.g. chaplaincy, social work, nutrition services, pharmacy etc.
- Representatives from other specialty groups/offices within the system e.g. pain nurses, MRSA coordinators, Office of Ethics, dialysis experts etc.
- Representatives from the technology arm (Information Systems) of the VA

Content Selection



- Licensing Body (e.g. Joint Commission) requirements
- VHA directives and policies/procedures
- Indicators determined to be “Nursing Sensitive” (Nursing Quality Forum) and captured by other nursing databases.
- Evidence based practice (what does current evidence in healthcare point to as best practices for patient care)
 - Assessment tools
 - National guidelines for care
 - Patient care interventions

Patient Admission Assessment



- Completed within 24 hours after admission to acute care (or sooner based on facility policy)
- Provides a clear comprehensive view of the patient as he/she arrives at the facility
- Pulls from administrative data for background information
- Assessment allows for problem identification and development of interventions - pulls forward into interdisciplinary care plan

GASTROINTESTINAL ASSESSMENT

* Patient/family/support person

* Why could no one respond

* Other reason no one could respond

* Information obtained from

* Other source of information

able to respond to questions

☒ Yes ☐ No

- ☒ Patient
- ☐ Authorized surrogate
- ☒ Family/Support Person
- ☐ Medical Record
- ☐ Other

* Patient has a history of

* Other history

- ☐ Abdominal Pain
- ☐ Bleeding - Emesis
- ☐ Bleeding - Stool
- ☐ Constipation
- ☐ Diarrhea
- ☐ Hemorrhoids
- ☐ Hernia
- ☐ Incontinence of stool
- ☐ Nausea
- ☐ Vomiting
- ☒ Other

Abdominal Assessment

* Abdomen

* Other abdominal assessment

- ☐ Distended
- ☐ Firm
- ☐ Flat
- ☐ Guarding
- ☐ Non-tender
- ☐ Obese
- ☐ Rigid
- ☐ Round
- ☐ Soft
- ☐ Tender
- ☒ Other

* Bowel sounds

☒ Present ☐ Absent

* Present bowel sounds

☐ Normal ☐ Hypoactive ☐ Hyperactive

* Last Bowel Movement Date

☒ Known ☐ Unknown

Bowel sounds comments

* Date of Last Bowel Movement

3/15/2011

Bowel regime

* Bowel pattern

- ☐ Daily
- ☐ Several times a week
- ☐ Weekly
- ☒ Other

* Other bowel pattern

* Laxative name and frequency of use

☐ Laxative use

☐ Enema use

☒ Bowel program

* Other bowel program schedule

* Bowel program schedule

None

* Bowel care - start time

02/15/11 12:47

* Bowel care - completion time

02/15/11 12:47

Bowel care position

- ☐ Bowel chair
- ☐ Bed
- ☐ Toilet

Time required for bowel care

Template contains tagged data elements that will be used for report development

- ☐ Glycerin suppository
- ☐ Fleet enema
- ☐ Digital stimulation

GI Page 1

GI Page 2

GI Page 3

GI Page 4

Gen Inf Belong Orient V/S Educ Pain IV Resp CV Neuro GI GU M/S Skin P/S MH Func DP PCE View Text

* Designates a required field

Go to radiogroup: Bowel sounds

Go

Where are we?



- Initial pilot testing completed at 25 sites representing large & small; urban & rural; teaching & non teaching; all regions of the country
- Enhancements / changes made based upon test site feedback
- Final “sign off” from the VA Office of Information Technology still pending

Implementation Challenges



- Diversity of current practices – workflow
- Potential for “double documentation” at sites using ICU flow sheet software
- Buy-in from multiple disciplines (Interdisciplinary Plan of Care)
- Technical support both locally and system wide (hardware, wireless infrastructure)

Looking to the future



- Systems that “share” data – background coded terms that capture data regardless of the tool
- Data available “real time” – for patient care and quality reporting

Summary



- Today we have discussed
 - the evolution of VA clinical nursing indicators data capture,
 - the creation and use of the VANOD Skin templates
 - the current effort to develop a comprehensive patient assessment tool for wider capture of electronic nursing data

Questions?