



## Database & Methods Cyberseminar Series

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# Chart Review using National EHR Tools

July 10, 2017

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# Database & Methods Cyberseminar Series

Informational seminars to help VA researchers understand how to use VA and non-VA data in research and quality improvement

## Topics:

- Application of VA and non-VA data to research and quality improvement questions
- Limitations of secondary data use
- Resources to support VA data use



## FY '17 Database & Methods Schedule

First Monday of the month\* | 1:00pm-2:00pm ET

Date	Topic
10/3/16	Overview of VA Data & Research Uses
11/7/2016	Requesting Access to VA Data
12/5/2016	Healthcare Utilization with MedSAS & CDW
1/9/2017	VA Medicare Data (VA/CMS)
2/6/2017	Assessing Pharmacy Utilization with VA Data
3/6/2017	Mortality Ascertainment & Cause of Death
4/3/2017	Assessing Race & Ethnicity
6/5/2017	Pharmacy Data
7/10/2017*	Chart Review Using National EHR Tools
8/7/2017	Applying Comorbidity Measures Using VA and CMS (Medicare/Medicaid) Data
9/11/2017*	Using CDW Microbiology and Pharmacy Data in Outcomes Research

Visit our Education page for more information & registration links.

[www.virec.research.va.gov](http://www.virec.research.va.gov)



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# Chart Review Using National EHR Tools

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## Learning Objectives

*By the end of this cyberseminar, attendees will be able to:*

- Identify when chart review is an effective data collection methodology
- Compare different strategies for conducting chart review
- Anticipate common steps needed to plan and conduct a rigorous chart review project
- Be familiar with tools that can support electronic chart review activities

## Poll #1: *What is your role in the VA ?*

- Research investigator/PI
- Data manager, analyst, or programmer
- Project coordinator
- Clinical or operations staff
- Other – please describe via the Q&A function



## Poll Question 2: *What is your previous experience using chart review for research?*

- Never did chart review
- Used paper charts
- Used my local electronic health record only (CPRS)
- Used VistAWeb or CAPRI
- Used some other platform for central chart review (please describe using central Q&A)



# Topics

- When to use chart review for research
- Planning and conducting chart review studies
- Examples of VA EHR tools for chart review
- Lessons learned
- Additional Resources



# Project examples:

- INSPIRE SDP (L. Williams, PI)
- CARE TIME SDP (D. Bravata, PI)
- Operational projects/Office of Clinical Analytics and Reporting

## References:

- Williams LS et al. A cluster-randomized quality improvement study to improve two inpatient stroke quality indicators. *BMJ Qual Safety* 2015; doi: 10.1136/bmjqs-2015-004188
- Phipps M et al. Validation of stroke meaningful use measures in a national EHR system. *J Gen Internal Med* 2016;31(Suppl 1):S46-52.
- Bravata D, Myers L, Cheng E, et al. Quality of Care for Veterans with TIA and Minor Stroke. *Stroke*. 2015;46(Suppl 1):ATMP73.

# Topics

- When to use chart review for research
  - Confirm data in VA administrative datasets
  - Capture data not available in VA administrative datasets
  - Local vs. Central Chart Review
    - Cost/accuracy vs. local chart reviews
    - Using notes in the CDW
- Planning and conducting chart review studies
- Examples of VA EHR tools for chart review
- Lessons learned
- Additional Resources

# Confirm data in VHA administrative datasets

- **Validate case ascertainment strategies**

- Assess the accuracy of your administrative data-based case ascertainment or outcome assessment and adjust if needed for a retrospective administrative data analysis
- Chart review serves as “criterion standard”

- TIA cohort identified by ICD-9 TIA code in ED or hospital discharge
- Minor stroke cohort identified by ICD-9 hospital discharge codes and other administrative data (clinical severity data not available)

Electronic Health Record Data	Chart Review Data			Total
	Minor Stroke	TIA	Not TIA or Stroke	
Minor Stroke	234	66	4	304 (39.8%)
TIA	19	436	4	459 (60.2%)
Total	92% (33.2%)	87% (65.8%)	8 (1.0%)	763 (100%)
	755 (99.0%)		8 (1.0%)	

## Confirm data in VHA administrative datasets

### Assess clinical vs. administrative completion of an action

**Example:** How many patients received a rehabilitation consult during their stroke admission?

- Joint Commission stroke quality indicator included in VA facility SAIL reports
- Research question: How accurate are administrative measures of this quality indicator?
- Administrative data includes completed consult information
- However, consults may be completed without an actual rehab evaluation taking place, or may be done without administrative documentation:

If infrequent it may not be a problem, but assessing a random sample of cases may be important to understand the variability in your estimate of the % of patients receiving this care

Type of error (of 1948 eligible admissions)	Reason
False negative (13)	1- discharge date incorrect 12-admin data did not capture consult
False positive (12)	1- consult after discharge 3- patient not seen 4- consult cancelled 4- consult was for diagnostic test only

## Other types of errors found when confirming administrative data via chart review:

- Incorrect ICD-9/ICD-10 code used
- Admission with stroke ICD9 primary discharge code in VA administrative data is actually for an episode of non-VA care paid for by the VA
- A medication noted as given in VA Bar Code Medication Administration (BCMA) data has a note entered that says “held, patient off floor.”
- An outpatient medication is active electronically but provider note records instruction to stop the medication

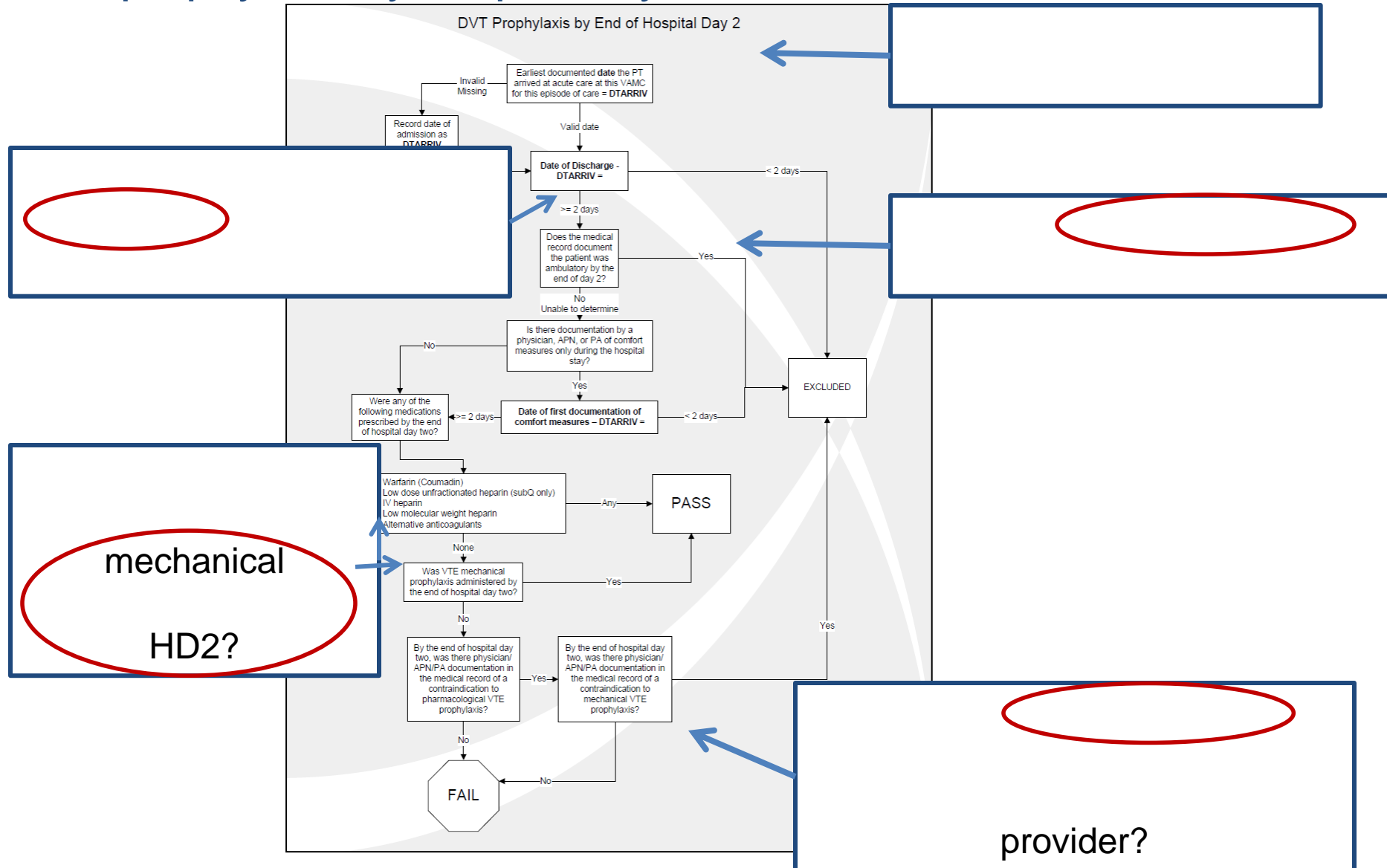
# Capture data not available in VA administrative datasets

- **Unstructured data**

- Written orders
- Comment fields
- Data elements that reflect complex aspects of care
  - Discussion of comfort care or advanced directives
  - Coordination of care between providers
- Data elements that reflect clinician judgment
  - Documentation of reasons of providing or not providing care (patient declines treatment, ineligibility, etc.)

- **Scanned records** (many VA and non-VA examples)

# Example of need for unstructured data in quality measurement: VTE prophylaxis by hospital day 2 flowchart



# Using chart review to develop electronic clinical quality measures for use in clinical quality management:

		N	% matched	PPV/NPV
<b>STK-1: VTE Prophylaxis</b>	Denominator	2130	99.3%	99.5% 33.3%
	Numerator	2113	86.4%	99.5% 50.6%
<b>STK-5: Antithrombotic by hospital day 2</b>	Denominator	2130	98.7%	99.1% 85.2%
	Numerator	2036	98.4%	99.1% 85.2%
<b>STK-10: Consider for rehabilitation</b>	Denominator	2130	97.5%	99.1% 85.2%
	Numerator	1948	99.3%	99.1% 85.2%
<b>STK-2: Antithrombotic at discharge</b>	Denominator	2130	97.6%	99.1% 85.2%
	Numerator	1948	98.3%	98.4% 19.5%
<b>NIHSS by 24 hours</b>	Denominator	2130	99.7%	100.0% 36.4%
	Numerator	2126	98.7%	96.9% 98.8%

**Compared to chart review**

**Only one < 97.5% matched due to non-standard names/orders for mechanical devices**



# Using chart review to develop electronic quality measures for use in implementation trials

Measure	Measure Validation							Pass Rates			
	Denominator (N=528)			Numerator (for patients in both admin & chart denominator)				Admin Pass Rate		Chart Pass Rate*	
	Disagree	% Agree	% Valid Disagree	N	Disagree	% Agree	% Valid Disagree	Eligible	Pass Rate	Eligible	Pass Rate
Carotid Imaging	44	91.7%	100.0%	472	39	91.7%	23.1%	8325	51.4%	516	69.0%
Carotid Stenosis Management	10	98.1%	100.0%	8	0	100.0%	-	314	25.2%	12	33.3%
Antihypertensive Intensification	77	85.4%	100.0%	133	16	88.0%	0.0%	2781	27.0%	169	27.8%
Hypertension Control	60	88.6%	25.0%	384	41	89.3%	0.0%	18533	91.2%	431	67.7%
Lipid Measurement	33	93.8%	100.0%	485	50	89.7%	0.0%	8371	79.2%	529	79.6%
Cholesterol Lowering Medication	72	86.4%	100.0%	352	44	87.5%	13.6%	6647	75.3%	401	85.3%
Cholesterol Med Intensification	85	83.9%	82.4%	283	27	90.5%	14.8%	5016	27.5%	345	25.8%
Brain Imaging	59	88.8%	100.0%	453	22	95.1%	77.3%	8283	86.1%	497	98.4%
Holter Monitor	27	94.9%	100.0%	442	13	97.1%	0.0%	7271	4.8%	492	2.8%
Antithrombotics at Discharge	43	91.9%	97.7%	461	65	85.9%	32.3%	8019	82.3%	508	91.3%
Atrial Fibrillation: INR Ordered	25	95.3%	0.0%	36	1	97.2%	0.0%	723	82.6%	44	95.5%
Atrial Fibrillation: INR 2-3	21	96.0%	95.2%	29	2	93.1%	0.0%	593	28.8%	42	23.8%
HbA1c Measurement	40	92.4%	72.5%	184	7	96.2%	0.0%	3465	78.0%	207	79.2%
Speech Language Pathology	14	97.3%	-	394	32	91.9%	-	5727	35.1%	443	21.2%

# Strategies for Chart Review: Local vs. Central

- **Local (CPRS) chart review**

- Effective if few sites
- Best for simple chart review questions
  - **Example:** Retrospective cohort study of Veterans at two VAMCs that received sleep apnea screening post-stroke
    - Small (two VA facilities)
    - Focused (diagnostic case ascertainment, receipt of sleep apnea screening within a given time frame)
    - Chart review needed because completion and results of non-VA consults not easily tracked with administrative data

- **Central (national EHR tools) chart review**

- Cheaper for large studies
- Optimal training and quality control

# Chart review expense example

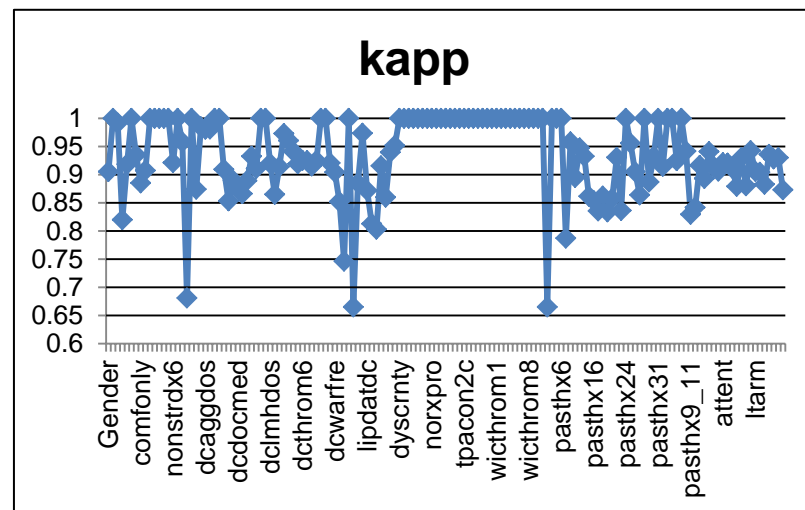
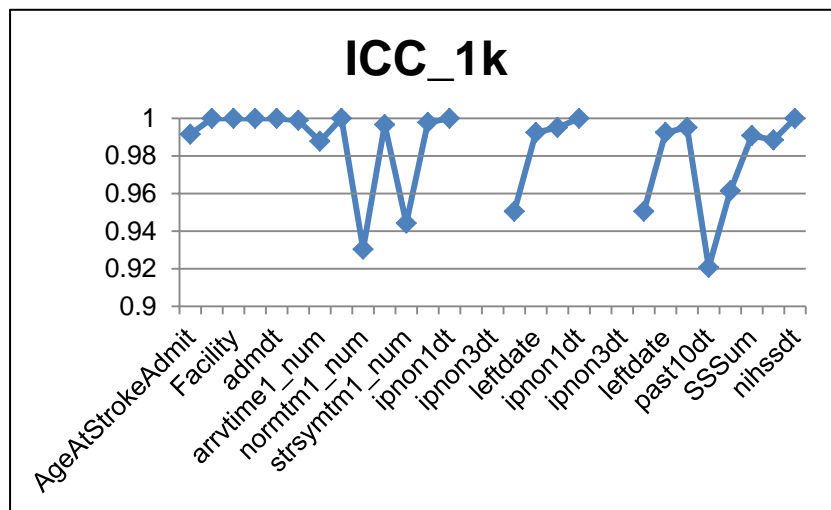
- **INSPIRE SDP**

- 11-site cluster randomized study, reviewing 2.5 years of stroke admissions
- Primary outcome: performance on various stroke quality indicators (were patients eligible to receive a process of care and did they receive it?)
- Site level volume approximately 75 stroke admissions per year
  - If prospectively reviewing cases, volume small
  - Difficult to find sites willing and able to hire some small % of a research assistant to conduct the chart reviews
  - 11 staff at 0.25 FTE vs. 3 full time central staff
- Still need central EHR review to assess local chart review accuracy due to complexity of review
- Training, maintaining, retaining the off-site personnel over a 3-year study is not feasible

# Central Chart Review Quality Example

## • INSPIRE SDP

- 1,600 admissions with full chart review
- Random 10% inter-rater reliability (~ 160 admissions)
  - Essential to track inter-rater reliability throughout the project to detect and address variability in reviews
- 118 variable chart review form, 11 quality indicators
  - 113/118 variables > 0.8 ICC/kappa
  - QI result agreement (ineligible, passed, failed) excellent,  $k = 0.84-0.96$



## Using notes in the CDW

- TIU (Text Integration Utilities) notes are available in the CDW
- These notes can be useful for extracting unstructured (text) data, but also have some disadvantages:
  - Not inherently chronologically oriented (requires data manipulation if sequence of notes/information was important)
  - Date and time of note entry is stripped from TIU notes so you can't see this when you view them
  - Need data management skills (SQL) to manipulate, although some tools are being developed to aid in human-assisted review of text strings in TIU notes, as well as for annotation in NLP projects



**eHost and ChartReview tools Cyberseminar 8/10/2017**

# Topics

- Using chart review for research
- **Planning and conducting chart review studies**
- Examples of VA EHR tools for chart review
  - CAPRI
  - VistAWeb- retirement planned for end of FY17
  - CDW TIU notes
    - eHOST—refer to VINCI seminar
  - Joint Legacy Viewer (JLV)- VistAWeb replacement
- Lessons learned
- Additional Resources

# Steps to conducting high quality chart review

- **Define the data you will collect**
  - “Symptomatic intracerebral hemorrhage” after thrombolysis
    - What time frame?
    - Required diagnostic test(s) to diagnose?
    - “Symptomatic” definition?
  - Construct and define your variables to minimize any reviewer judgement
- **Develop a chart review form and test it**
  - Consider grouping of information for improved efficiency
  - Identify skip patterns (if one variable is answered x then skip to y)
  - Identify other important data that are missing
  - Measure the time it takes for chart review to set goals for project staff

## Steps to conducting high quality chart review

- **Develop a chart review manual** for training and to document changes throughout the project
- **Obtain access** to needed tools
  - Local CPRS or national tools for chart review at other facilities



# Developing a chart review manual

**A standard chart review manual is key to the quality of your chart review data.**

**For each variable, include:**

- Explicit definitions and response options
- Sources to use for review
  - Diagnoses from problem list? Discharge summary? Clinic visit?
- Standardize search features and terms
  - Find specific text, all reviewers should use same text, same dates for search
- List of common abbreviations
- Local examples as they are noted
  - Which note titles or templates contain the variable of interest
  - Modify this with dates as information changes

# Example of manual chart review

64. <u>prestamb</u>	←	Name of variable
Was the patient ambulatory prior to the stroke?	←	Descriptive text/meaning
Code 1. Yes 2. No 99. Unable to determine	←	Response options

## Ambulatory includes:

- Patient ambulating without assistance from another person (with or without use of assistive device)
- Patient ambulating to and from the bathroom without assistance
- Ambulation with supervision

## Non-ambulatory includes:

- Patient is on bed rest
- Patient is only getting out of bed to the bedside commode (or up in chair) or is primarily in the bed (or immobile)
- Up to bathroom with assistance of another person
- Documentation of Contact Guard Assist (CGA) or “Touch Assist”
- OOB with Assistance

If no documentation in the ER/Admission/Rehab notes regarding patient ability to ambulate prior to admission, the abstractor may refer to PCP notes during the year prior.

If patient lives alone, and no other documentation available regarding ambulatory status prior to stroke, code as ambulatory.

For **Nashville** Patients that transferred from Murfreesboro: Abstractor may pull this information from Murfreesboro notes for the episode of care being reviewed.

Possible Location in Chart: Admission H&P, ER Notes, Progress Notes, Rehab Notes, RN Admission Note (Braden Scale), PCP notes during year prior

Definitions

“What ifs”

Site-specific info

Where to look

# Example of “live” chart review manual:

## Item “Was the patient screened for dysphagia before PO intake?”

### Dated so updates are tracked

- Keep most current manual in working folder, all other versions in outdated folder

### Date changes for specific sites

- Over time, documentation templates change

If a dysphagia screen completed, but the medical record does not provide a specific date/time of completion, **the date/time of signature** of the first note documenting the dysphagia screen should be used.

Do not consider the delivery of food, fluid, or medication via a nasogastric tube, orogastric tube, or percutaneous gastrostomy tube as intake by mouth (oral intake). Medications administered sublingually also count as intake by mouth.

46

07/24/13

### INSPIRE Chart Abstraction Coding Manual

For Nashville Patients that transferred from Murfreesboro: Abtractor may pull this information from Murfreesboro notes for the episode of care being reviewed.

For Nashville Patients (2011-2012): Abstractors should check both the Notes and the Orders to determine if a dysphagia screen was completed. Please see Appendix G for an example of the Nashville dysphagia template.

#### For Birmingham Patients:

Nursing Admission Note Templates in Birmingham include a standardized dysphagia screen template. Standard text for *Part 1-Dysphagia Risk Factors*, *Part 2-Swallow Testing Procedure*, and *Part 3-When the Procedure is Completed* appear in **all** notes that use this template. Do not assume that either part was completed unless the nurse has entered specific text for that question. Please note: Part II (Bedside Swallow) will not be completed unless a risk factor is identified in Part I.

If Part I is left blank, the screen was not completed.

If Part I is marked “None,” the screen was completed and #61 (dyscrmtv) should be coded “1.”

**Inclusions:** Documentation by a VA provider of a dysphagia screen completed in an OSH “NPO-Place Dobhoff” except when PO meds were given prior to documentation

# Topics

- Using chart review for research
- Planning and conducting chart review studies
- VA EHR tools for chart review
  - Data access
  - CAPRI
  - VistAWeb- retirement planned for end of FY17
  - CDW TIU notes
    - eHOST—refer to VINCI seminar
    - Joint Legacy Viewer (JLV)- VistAWeb replacement
- Lessons learned
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# EHR Access Tools

- CAPRI (Compensation and Pension Record Interchange)
- VistAWeb
- Joint Legacy Viewer (JLV)

**Request to use these tools to access VHA electronic medical record systems is obtained via the**

**DART process**

(Data Access Request Tracker)

Request for access to your local CPRS system  
is done locally

# First step to access VA EHR tools: Complete a DART request

The screenshot shows the VHA Data Portal interface. At the top, the Department of Veterans Affairs logo and 'VHA Data Portal' are visible. A navigation bar contains 'Data Sources', 'Data Access', 'Tools & Applications' (circled in orange), 'Resources', and 'Training'. Below the navigation bar, the breadcrumb 'Data Access > DART Request Process' is shown. The main content area features a 'Did You Know?' box, a 'DART' sidebar with links for Overview, Operations, Research, and Resources, and a 'Data Access Request Tracker (DART)' section. An orange arrow points from the 'Tools & Applications' menu to the 'Launch DART Application' link in the DART section.

## Information about tools for national EHR access on the VHA Data Portal

- Includes **DART** overview and forms
- Access to tools for national EHR review can be for specific sites or for full national access
- Separate request for research or operational activities

Download and submit a Special User Access form:

[http://vaww.vhadataportal.med.va.gov/Portals/0/Forms/ResearchUser\\_AccessRequestForm.pdf](http://vaww.vhadataportal.med.va.gov/Portals/0/Forms/ResearchUser_AccessRequestForm.pdf)

## Important tip: Research protocols and operational projects must have site-specific information

- **Research projects:** Mention “national electronic health record” in your IRB protocol submission (if you need access to all sites nationwide) or name the specific sites for which you require access.
  - The IRB approved protocol and HIPAA Waiver documents for requests for CAPRI or VistAWeb data are reviewed for explicit mention of use of “national electronic health records.”
  - To reduce data access review delays, include the terms “VistAWeb,” “CAPRI,” or “national electronic health record” in your initial protocol or a later amendment.
- **Operational projects:** Mention the operational partner of your project in the project description, request either national or site specific access as above.

# CAPRI(Compensation and Pension Record Interchange)

- Developed to facilitate coordination between the Veterans Benefit Administration (VBA) and the Veterans Health Administration (VHA) in the determination of Veteran benefits
- Read-only access to EHR data for individual patients at **one specific site at a time**
- Requires special software

The screenshot shows the VIREC INTRANET website. The header includes the VIREC logo and the word 'INTRANET'. Below the header, there is a search bar and a navigation menu. The main content area is titled 'VA INFORMATION RESOURCE CENTER (VIREC)' and features a section for 'Compensation & Pension Record Interchange (CAPRI)'. The 'Overview' section states that the CAPRI application provides read-only access to individual patient electronic health records (EHR) from all VA sites. The 'Features' section lists several capabilities, including viewing one patient at a time, read-only access to EHR, and real SSNs for patient records. A table below the features section provides a detailed description of each feature.

Feature	Description
View	Limited to viewing one patient at a time
Access	Read only access to the EHR
Patient Identification	Real SSNs are required to access patient records
Login	Single access/verify code pair connects to all 130+ VistA systems

**Intranet:** <http://vaww.virec.research.va.gov/CAPRI-VistAWeb/CAPRI.htm>



- 12:19 MH SUICIDE PREVENTI
- 15:26, PHARM-ANTICOAGULA
- 10:29, Addendum to MH SUICID
- 09:14, MH SUICIDE PREVENTI
- 08:13, PHARM-PHARMACY PH
- 08:41, MH SUICIDE PREVENTI
- 15:49, Addendum to PHARM-AI
- 15:07, PHARM-ANTICOAGULA
- 13:38, PHARM-PHARMACY PH
- 13:21, SLEEP MED TELEPHON
- 09:56, NURSING NOTE OUTP,
- 14:05, PSYCHIATRY TELEPHC
- 09:33, MH SUICIDE PREVENTI
- 14:12, NURSING OUTPATIENT
- 11:28, PHARM-ANTICOAGULA
- 2:50, MH SUICIDE PREVENTIC
- 9:09, PC-HISTORICAL NOTE, S
- 8:50, Addendum to GENERAL M
- 15:39, GENERAL MEDICINE - 1
- 16:27, Addendum to GENERAL
- 4:01, Addendum to PHARM-AN
- 11:32, PHARM-ANTICOAGULA
- 15:46, Addendum to PHARM-AI
- 16:30, TEL TRIAGE AFTER HC

LOCAL TITLE: MH SUICIDE PREVENTION NOTE  
 STANDARD TITLE: MENTAL HEALTH NOTE  
 DATE OF NOTE: FEB 26, 2014@12:19 ENTRY DATE: FEB 26, 2014@12:19:28

INSTITUTION: INDIANAPOLIS VAMC  
 DIVISION: WEST TENTH STREET  
 URGENCY: STATUS: COMPLETED

As part of ongoing suicide prevention case management this writer reviewed veterans chart and treatment activity. Writer will remain available throughout the duration of the Category I PRF and address any needs that may arise and as requested by veterans treatment providers.

## Example of notes in CAPRI

- In the “**Clinical Documents**” view, click on the “**Notes**” tab
- All notes from one facility are shown in chronological order

Other tabs at the bottom have specific data categories similar to CPRS

CAPRI Connected To ECP.INDIANAPOLIS.MED.VA.GOV (Server:583A01 Volume:ROU UCI:IND Port:NLA0::540037419)

File Edit Tools Help

Other Facilities Visited

C&P Exams 7131 Request Reports Admin Health Summaries Clinical Documents VistAWeb

Report Builder

Current View: Searched Documents

0. MENTAL HEALTH CONSULT NO  
 :27. CONSULT RESULT COMMUNIT  
 12. BLOOMINGTON-CBOC NP NOTE  
 16. PV RESIDENT CLINIC NOTE, GE  
 19. PV LAB-CAROTID, RUTH M MYE  
 09. SPEECH PATHOLOGY NOTE, JI  
 08. BLOOMINGTON-CBOC NP NOTI  
 36. RECREATION THERAPY-DISCH  
 38. RITS/POLYTRAUMA DISCHARG  
 53. SPEECH CONSULT RESULT, JE  
 16. RECREATION THERAPY CONSI  
 22. PHYSICAL THERAPY CONSULT  
 52. SICU INTERDISCIPLINARY PRC  
 38. SPEECH PATHOLOGY/MODIFIE  
 16. SPEECH PATHOLOGY NOTE, JEI  
 13. SICU INTERDISCIPLINARY PROG  
 14. PHYSICAL THERAPY-PROGRES

## Notes are searchable for text

### Example: looking for documentation of carotid artery stenosis:

- The search term “carotid” (bottom right corner) returns notes containing this word only.
- The word is highlighted within the note.

use or of misuse of prescription medications. He denies history of tobacco use.

PERTINENT FAMILY HISTORY

- mother died at age 89 due to "mostly old age"
- Alzheimer's disease (brother)
- dementia (?) - sister
- much of family history is unknown, as Vet reports he has no contact with his father's side of the family.

BEHAVIORAL OBSERVATIONS

Vet was cooperative, pleasant, and appropriate throughout the interview, which was completed first. He then completed the RBANS with apparent reasonable effort and engagement, though he had difficulty following or remembering instructions at times. Upon finishing that test, he immediately asked if he was finished and expressed a desire to go home. He agreed to complete additional tests before leaving; he was initially presented with the Shipley-2 Vocabulary test and was asked if he could see and read it. He stated he could, but when

Divisions

Find: carotid Search

1) Notes 2) Discharge Summaries 3) Consults 4) Vitals 5) Meds 6) Labs 7) Imaging 8) Diet 9) Nutritional Assessment 10) Order Summary 11) Procedures 12) Problem List

Ready. Division: INDIANAPOLIS VAMC News 7/10/2016

# VistAWeb

- Developed to facilitate sharing of individual patient data among patient's providers at other VAMCs
- A VA Intranet web portal
- Read-only access to EHR data for individual patient **at all VA sites** where they received care, shown **chronologically**

The screenshot shows the VIREC Intranet website. The header features the VIREC logo and the word 'INTRANET'. Below the header, the main content area is titled 'VA INFORMATION RESOURCE CENTER (VIREC)' and 'VistAWeb Overview'. A table of features is visible, detailing the capabilities of VistAWeb. A search bar is located in the top right corner.

Feature	Description
View	Limited to viewing one patient at a time. Includes all sites where the patient received care in a single consolidated view
Access	Read only access to the EHR
Patient Identification	Real SSNs are required to access patient records
Login	User's local Vista access/verify code pair
Vista Imaging	VistA Imaging is available to view images and scanned reports

**Intranet:** <http://vaww.virec.research.va.gov/CAPRI-VistAWeb/VistAWeb.htm>

Vis

The screenshot shows the CAPRI software interface. At the top, the title bar reads "CAPRI Connected To". Below it is a menu bar with "File", "Edit", "Tools", and "Help". A search bar contains "Other Facilities Visited". The main window has several tabs: "C&P Exams", "7131 Request", "Reports", "Admin", "Health Summaries", "Clinical Documents", "C&P Worksheets", and "VistAWeb", which is circled in red. A red arrow points from this tab to a blue callout box.

The callout box contains the text: "You can access VistAWeb from within CAPRI. Useful when you need to assess transfers or chronology of care across different facilities."

The main content area displays a patient record with a list of events on the left and a detailed view on the right. The events list includes:

- 2000@14:17, NURSING ER ASS
- 2000@11:41, EMERGENCY ROT
- 2000@09:54, SwS ER/TRIAGE
- 2000@02:00, NURSING ER ASS
- 2000@10:29, DISCHARGE NO
- 1999@14:27, PRIMARY CARE L
- 1999@13:48, HOMELESS VETE
- 1999@11:50, DISCHARGE NOT
- 1999@0:35, INTERDISCIPLIN
- 1999@14:54, HOMELESS VET
- 1999@14:14, SwS ER/TRIAGE

The detailed view on the right shows the following information:

due to another pt. waiting to see her. Pt. still sleeping.  
 1330 Pt. awakened. Took a shower.  
 1400 De'd amb. with all belongings to homeless program SU. ( [REDACTED] ).  
 to pay, got answering machine and let he would be coming upstairs.  
 VITAL SIGNS:  
 Time Temp Pulse Resp BP  
 NSW: , complete  
 DISPOSITION:  
 Level of Care: 2  
 MODE of EXIT:  
 Walked.  
 Condition: Improved.  
 Follow-up to Mental Health Provider?  
 Discharged to 4C ( Homeless program )  
 /es/ [REDACTED]  
 RN, CEN, CCRN  
 Signed: [REDACTED]

At the bottom, there is a "Divisions" section with a search bar containing "mental health" and a "Search" button. Below that is a row of tabs for various medical data: "1) Notes", "2) Discharge Summaries", "3) Consults", "4) Vitals", "5) Meds", "6) Labs", "7) Imaging", "8) Diet", "9) Nutritional Assessment", "10) Order Summary", "11) Procedures", and "12) Problem List".

# EHR Data Portals – Compensation & Pension Data Interchange (CAPRI) & VistAWeb

## CAPRI

Requires special software and access/verify codes

Data viewed from one healthcare site at

Direct access to VistAWeb

## Both

Read-only access to EHR one patient at a time

Require real SSN

Submit requests to DART

## VistAWeb

VA Intranet web portal accessed through local VistA

Data consolidated

available

**Recommendation:** Get both for maximum flexibility; no additional DART application required

# Just when you thought you knew what to do...

## Transition of EHR Tools

VA will **retire VistAWeb by the end of FY17** and replace it with **Joint Legacy Viewer (JLV)**

The screenshot shows the top portion of the VHA Data Portal website. At the top right, there are navigation links: Home, About Us, Contact Us, FAQ, and Report Broken Link. On the left, there is the Department of Veterans Affairs logo and the text "Department of Veterans Affairs VHA Data Portal". A search bar is located to the right of the logo. Below the header is a horizontal navigation menu with the following items: Data Sources, Data Access, Tools & Applications, Resources, Training, Policy & Admin, and Support.

<http://vaww.vhadataportal.med.va.gov/ToolsApplications/JLV.aspx>

The screenshot shows the main content area of the JLV page. On the left, there is a "Quick View" section with a brief description of JLV. Below it is a "JLV" section with a list of links: VistAWeb Transition to JLV, About JLV, Features, Accessing JLV, and Resources. The main content area has a heading "Joint Legacy Viewer (JLV)" followed by a sub-heading "VistAWeb Transition to JLV". The text below explains that VA plans to retire VistAWeb and replace it with JLV, with a transition schedule starting in 2017. It also provides a link to the OIG website for more information. Below this is an "About JLV" section with a paragraph describing the application's purpose and a link to the JLV SharePoint Site. Finally, there is a "Features" section with the text "JLV offers several benefits".

JLV access will be requested the same way VistAWeb access is requested (request both CAPRI and JLV when you do the DART application)

- **If you have VistAWeb access already, you will not need to separately request JLV access**

# The ~~Big~~ Difference

## Joint Legacy Viewer vs VistaWeb

In a System Usability Survey, participants preferred Joint Legacy Viewer (JLV) over VistaWeb for the following reasons:

[http://vaww.ehealth.va.gov/EHEALTH/campaign/JLV/VE\\_JLVvsVW\\_TheBigDifference\\_FINAL.pdf](http://vaww.ehealth.va.gov/EHEALTH/campaign/JLV/VE_JLVvsVW_TheBigDifference_FINAL.pdf)



Easy to learn and user friendly



Faster loading data



Customizable: sort, filter, and save views



Better organized and integrated information

# Topics

- Using chart review for research
- Planning and conducting chart review studies
- VA EHR tools for chart review
- **Lessons learned**
- Additional Resources



## Lessons learned about using EHR tools for research:

1. Designate one person from your study to submit and stay in communication via the DART process
2. Increase estimated time per chart review from local CPRS by a small factor (10-15%) to take into account view switching and page loading issues
3. A detailed chart review manual is the foundation to accurate and reliable data collection
  - Regular team meetings to discuss questions, resolve differences, update chart review manual
4. Keep your chart reviewers happy!
  - Breaks for other types of work
  - Shared positions if possible
  - Prizes for “Best Story of the Week”

# Topics

- Using chart review for research
- Planning and conducting chart review studies
- VA EHR tools for chart review
- Lessons learned
- **Additional Resources**

# Joint Legacy Viewer

powered by Janus

Look for training resources on the VHA Data Portal.

# Additional Resources

Site Actions | Browse | Page | Publish | Cohen, Cheryl

**JLV** Home  
Joint Legacy Viewer

Vista Evolution | Planning/Scheduling | Risk | Meeting Calendar | Program Resources | Projects | All Sites

Communications

Libraries  
Site Pages  
Featured Content  
JLV Videos  
JLV Training  
JLV Technical  
JLV Usage Data & Reports  
JLV Presentations  
JLV Resources  
JLV Documents

Lists  
Calendar  
Tasks  
Discussion  
JLV Q&A

**Joint Legacy Viewer (JLV)**  
JLV provides an integrated read-on... Department of Defense... community partner sites where a Veteran or Service member has received care

[http://vaww.oed.portal.va.gov/pm/iehr/vista\\_evolution/JLV/SitePages/Home.aspx](http://vaww.oed.portal.va.gov/pm/iehr/vista_evolution/JLV/SitePages/Home.aspx)

VAPULSE | U.S. Department of Veterans Affairs

HOME | EXPLORE | CREATE | Search

Cheryl Cohen | Loading points... | Help Desk

**JLV Network** | Follow | Join this group

Overview | Content | People | Calendar

**NEWS FROM THE JLV TEAM**

- Healthcare IT News story highlights JLV support for Interoperability in JLV Network
- RESOLVED: DoD data currently down for all VA applications in JLV Network
- VHA JLV Town Halls now Open Access and Twice Weekly! in JLV Network
- Making the Switch from VistAWeb to the Joint Legacy Viewer (JLV) in JLV Network
- New JLV version Live!!! Check out the Update Training on Pulse! in JLV Network

More >

**WATCH A TAG - JLV IN PACT**  
Items tagged with jlv\_pact  
ADV - get Pneumovax

**HELP**  
Items tagged with jlv\_help  
VistaWeb to JLV Data Mapping Tool  
JLV v2.5.1 to v2.5.2 Update Training.pptx  
JLV v2.5.2 Introductory Training Complete.pptx  
JLV Quick Reference Guide.pdf  
VistaWeb to JLV Data Mapping Tool

<https://www.vapulse.net/groups/jlv-network>

# VIReC

Intranet: <http://vaww.virec.research.va.gov/>

The screenshot displays the VIReC Intranet homepage. At the top, there is a navigation bar with the VIReC logo and the word "INTRANET" in a stylized font. A search bar is located in the top right corner, with a dropdown menu for "Search All VA Web Pages" and a "Search" button. Below the search bar are links for "Open Advanced Search" and "Report Broken Link".

The main content area is titled "VA INFORMATION RESOURCE CENTER (VIReC)". On the left side, there is a vertical navigation menu with the following items: "VIReC Home", "VA/CMS Home", "About Us", "New Users of VA Data", "FAQs", "Acronyms", "HelpDesk", and "Report Broken Link". Three red arrows point to the "About Us", "HSRData Listserv", and "VHA Data Portal" items.

The central content area features a large graphic with a red checkmark on a checklist, accompanied by the text: "Quick tips on popular topics related to using VA data for research. [Learn more...](#)". To the right of this graphic is a list of featured items: "Data Issues Brief, May 2017", "Upcoming Cyberseminars", "Real SSN Data Request Process", "VA REDCap Project", and "Data Tip of the Month".

Below the central graphic, there are two main sections: "New from VIReC" and "VIReC Resources". The "New from VIReC" section includes links to "CDW Health Factor Factbook", "Geocoded Data", "ICD-10 Implementation", and "What's in the Literature?". The "VIReC Resources" section includes a link to "Learn about VA data:" which is circled in red, and a list of sub-links: "Data Sources", "Data Topics", and "Data Tools". Other resources listed include "VA/CMS Data for Research Project", "Factbooks", "Research User Guides", and "The Researcher's Notebook".

At the bottom left, there is a "GATEWAY TO DATA RESOURCES" section with a link to "VHA Data Portal".

# VIReC Options for Specific Questions

## HSRData Listserv

- Community knowledge sharing
- ~1,200 VA data users
- Researchers, operations, data stewards, managers
- Subscribe by visiting <http://vaww.virec.research.va.gov/Support/HSRData-L.htm> (VA Intranet)



## HelpDesk

- Individualized support



[virec@va.gov](mailto:virec@va.gov)

(708) 202-2413

# Contact information

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**Next session:**  
**August 7, 2017**  
**1 PM ET**



## Database & Methods Cyberseminar Series

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# Applying Comorbidity Measures Using VA and CMS (Medicare/Medicaid) Data

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