

 RESEARCH & EHR SYNERGY CYBERSEMINAR SERIES



Session 1:

Health Professions Trainees' Experiences with VA's Electronic Health Record Modernization:

Spotlighting User Voices and Initial Findings from the SCHOLAR QUERI Evaluation

Oct 26, 2022

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Mixed Methods Researcher, VA Bedford CHOIR



RESEARCH & EHR SYNERGY CYBERSEMINAR SERIES

Informational seminars to help VA researchers understand VA's EHRM transition process and its impacts on VA data users.

Seminars cover...

- Using the Cerner tools (e.g., Millennium, PowerTrials)
- Using Millennium-generated and CDW-converged data
- Highlighting VA research contributions to enhancing EHR modernization (EHRM) implementation and impact
- Assessing and mitigating transition risks
- Identifying resources for learning about the new data



Where can I
download a
copy of the
slides?

VA HSR&D

CYBERSEMINARS



SAMPLE EMAIL

**A Practical Approach to Working with VA-Purchased Community
Care Data**

Thursday, October 13, 2022

2:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 1 hr

Please download today's slides

~~Please click here for today's live captions~~

Join webinar

More ways to join:

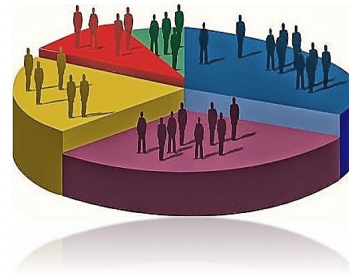
Join from the webinar link

<https://veteransaffairs.webex.com/veteransaffairs/j.php?>

Poll #1:

What is your relationship with VA?

1. I'm a VA clinician
2. I'm a Health Professions Trainee at VA
3. I'm a VA non-clinician
4. I work for VACO, a program office, or VISN office
5. I'm a non-VA clinician
6. None of the above



Poll #2:

What is your experience with EHR transitions?

1. I have been through a paper-to-EHR transition
2. I have been through an EHR-to-EHR transition
3. I have never been through an EHR transition



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SCHOLAR QUERI

- VA QUERI PEC 21-280
- Partnered evaluation with the Office of Academic Affiliations (OAA)
- Project Title:
 - Strengthening Cerner Implementation for Health Professions Trainees to Optimize Learning and Reinforce Veteran Care (SCHOLAR)
- MPIs
 - Seppo Rinne, MD, PhD (VA Bedford)
 - George Sayre, PsyD (VA Seattle)



SCHOLAR QUERI



Acknowledgements

- Team Members
 - Seppo Rinne, MD, PhD (MPI)
 - George Sayre, PsyD (MPI)
 - Julian Brunner, PhD
 - Christian Helfrich, PhD
 - Meg Moldestad, MS, SLP
 - Edwin Wong, PhD



Project Overview

- **Main goal:** Apply a mixed-methods approach to understand and improve trainee experience during VA's electronic health record modernization (EHRM)
- **Purpose of this presentation:** To share early findings from trainees at VA Columbus



SCHOLAR Background

- Health Professions Trainees (HPTs) play a key role in VA's care delivery
- VA educates more trainees than any other US healthcare system (~113,000/year)
- Residents and other health trainees have unique needs and require a focused EHR transition evaluation
 - Short, episodic rotations with limited time to prepare for their VA experience
 - Rotations occur at different stages of the EHR transition, and HPTs will have varying exposure to change management efforts
 - The limited data on best practices to support EHR transitions come from small, single-site studies and few have considered HPT experience



EHR Transition Evaluation Site

VA Central Ohio Healthcare System (VISN 10)

- 3rd VA EHR transition site
- Go-live: April 30th, 2022
- 217 HPTs rotated through Columbus in FY21
- Eye care and dermatology are two prominent training programs at Columbus
- Outpatient services and same day ambulatory surgery



Methods

Interviews

Sample:

- 74 interviews (n=27)
 - HPTs, attendings, and other clinical team members

Dates:

- 12/17/21 – 4/21/22
 - pre-go-live interview
- 5/10/22 – 6/23/22
 - 1-2 check-ins
- 6/24/22 – 7/28/22
 - post-go-live interview

Surveys

Sample:

- 57 eligible trainees
- n=13 (pre-go-live, ~23%)
- n=10 (post-go-live, ~18%)

Dates:

- 3/16/22 – 4/15/22 (pre-go-live)
- 4/29/22 – 5/11/22 (post-go-live)

Areas of Focus: EHR training and support, EHR usability, EHRM impact on HPT clinical training, HPT satisfaction, open text responses



Preliminary Findings



Several found HPTs' EHR training to be inefficient and poorly tailored

“Be prepared and make it relevant to the people in the room and their roles” (Columbus post R3).

“It seems absurd that [HPTs] have [computer trainings] and then additional Cerner training when **[we can do it more effectively ourselves...]** it's a very poor use of trainees' time” (Columbus pre E222).

HPTs who were satisfied with “the overall EHR training experience”:

Pre-go-live: 46%

Post-go-live: 20%

HPTs who reported that “training meets specific needs of work area”:

Pre-go-live: 80%

Post-go-live: 11%



The EHR transition severely disrupted the process of granting EHR access to HPTs

- Onboarding challenges
- Sandbox availability
- Impact on short rotations
- Training burden

HPTs who were satisfied with
“VA trainee onboarding
experience”:

Pre-go-live: 80%

Post-go-live: 44%

“It’s not clear that everybody is on the same page about [onboarding]... the **sandbox was down** last week so [HPTs] couldn’t have practiced anyway... but they have to complete all this training before they’re allowed in it. [For] the ones who just rotate through for like a month... **they’re not going to be able to really do anything**”
(Columbus pre E210).



Commitments to HPTs Suffer

- Delayed EHR access → can't rely on HPT involvement
- EHR functionality/permission issues → lower HPT contribution
- Attendings struggling themselves → less ready to supervise



Delayed EHR access lessens the reliability of HPT contributions

“We're not able to rely on a trainee to see patients for the first week. [Whereas] CPRS, with all of the local controls, even if [something] wasn't set up right, by 48 hours, 95% of trainees are in the computer and ready to go.” (S201, post-imp)

“New [HPTs] were here for a month before getting Cerner access.” (R 214)

HPTs who were satisfied with “the amount of time needed to prepare for EHR use”:

Pre-go-live: 54%

Post-go-live: 30%



EHR functionality issues result in less HPT contribution to clinical care

- Utilization of workarounds to ensure credit
 - Attendings coding for HPTs so that workload credit is correctly attributed
- EHR permission issues

“[When HPTs code], procedure workload credit doesn't seem to go to the attending doctor ... [As a workaround], instead of the resident coding, the attending does all the coding” (S201 Post imp)

HPTs who reported that they have “permission to access appropriate views for their role in the EHR”
Pre-go-live: 70%
Post-go-live: 33%



Attendings face their own learning curve

“I am reluctant to take on the additional work of having a student when I am still determining how to best use the system in my daily workflow especially when with patients” (EMPIRIC R143)

“As a supervisor I do not feel I am trained enough in Cerner to be able to comfortably supervise students and residents while I am still learning to safely implement Cerner application at our VA facility” (EMPIRIC R325)

“Cerner in general takes much longer to document than CPRS so I am also spending less time teaching/educating due to EHR time” (EMPIRIC R44)

EMPIRIC survey

EHR users who reported feeling “confident using the EHR”:

Pre-go-live: 82%

Post-go-live: 18%

EMPIRIC survey

EHR users who indicated that the EHR was “cumbersome to use,”

Pre-go-live: 13%

Post-go-live: 80%



HPT data is harder to obtain and less reliable

“[We’re] missing clinical experience data. It looks like they're not doing procedures when they are.” (S201, post-imp)

- Data needed to fulfill residency requirements (e.g., # of procedures performed) and support accreditation



The transition to Cerner made VA less appealing to some HPTs

“It’s definitely impacted morale. I know for myself and other interns we’re ready to get out of here... **with Cerner it’s like a chore to stay here**” (Columbus post S202).

“Overall, I have enjoyed working in the VA. However, I believe Cerner has negatively impacted my training and I **am excited to be leaving the VA** for my next step in training” (Columbus post R4)

HPTs who felt the Cerner transition positively impacted their likelihood of choosing VA for a future career:

Pre-go-live: 50%

Post-go-live: 30%

HPTs satisfied with their overall VA training experience:

Pre-go-live: 89%

Post-go-live: 78%



SCHOLAR Next Steps

- Revisiting Columbus at ~10-month mark for another round of interviews and survey, longitudinal analysis
- Compare/contrast findings with future sites going live including large, academic VAMCs
- Conduct focus group with OAA leadership to contextualize findings and inform recommendations (in progress)



Our Goal and Metric



- Goal:
 - Every HPT is fully onboarded, trained, provisioned and ready to care for Veterans on **Day One** of their VA experience



Successes

- User Role consolidation and guidance
- Ongoing work on HPT Data Management Organizer
 - Additional module within health record to track HPT contribution to care
 - Ann Arbor to be Pilot Site, New Service Request for production version moving forward
- Improving integration with EHRM-IO and Cerner
 - Academic Affairs Team - EHRM-IO, OAA, EHRM-IO User Role Assignment Director, EHRM-IO Training, Council Solution Experts, Solution Advisors, SCHOLAR Research team
 - Weekly meeting with Cerner Academic Lead
 - OAA sponsored EHRM – HPT Community of Practice
 - Live 4 September - Over 100 members so far



Successes

- EHRM-IO – Cerner Provisioning Summit
 - Reproducible timeline for HPT Onboarding
 - Consider modifying deployment schedules for large academic sites
 - Single Mandatory Training for Trainees style course for Cerner Onboarding
 - Onboarding/Talent Management System (TMS) coordinator position for deploying sites
 - Involvement in taxonomy discussions to ensure proper billing/tracking of HPT contribution to care
 - HPT concerns added to weekly site deployment meetings
- Presentation to Under Secretary for Health – Dr. Elnahal
 - Support for Health Professions Education Council



Ongoing Issues

- Deployment timeline?
- EHRM – VHA 12 Week “EHRM Sprint” review – ensuring our voice is heard
- Training hours remain excessive for HPTs (reported at 12-18 hours)
 - Need to continue to push EHRM Training Team to support curriculum revisions
 - What will onboarding, training, and provisioning look for short-term (2-12 week) HPTs look like?
 - Accenture review – gaining access and sharing concerns



Ongoing Issues

- Ownership of the provisioning process by Cerner continues to be a significant, rate limiting factor, and tracking of individuals in the CERNER provisioning process is entirely opaque
- Sustainment is still unclear
 - Sites are motivated and want to assume responsibility
- Readiness assessment prior to go live to ensure adequate HPT staffing will be available
 - The Day One metric should be added to existing readiness assessments
 - If that metric is not able to be met, deployment should be delayed



Takeaway Message

- We understand there are unique challenges for integration of HPTs into the new Electronic Health Record
- QUERI, through SCHOLAR, is partnering with OAA to ensure the Health Professions Education Mission is prioritized throughout the EHRM project
 - Ensure that HPTs will be able to contribute at the same high level to Veteran care



THANK YOU!
Questions?



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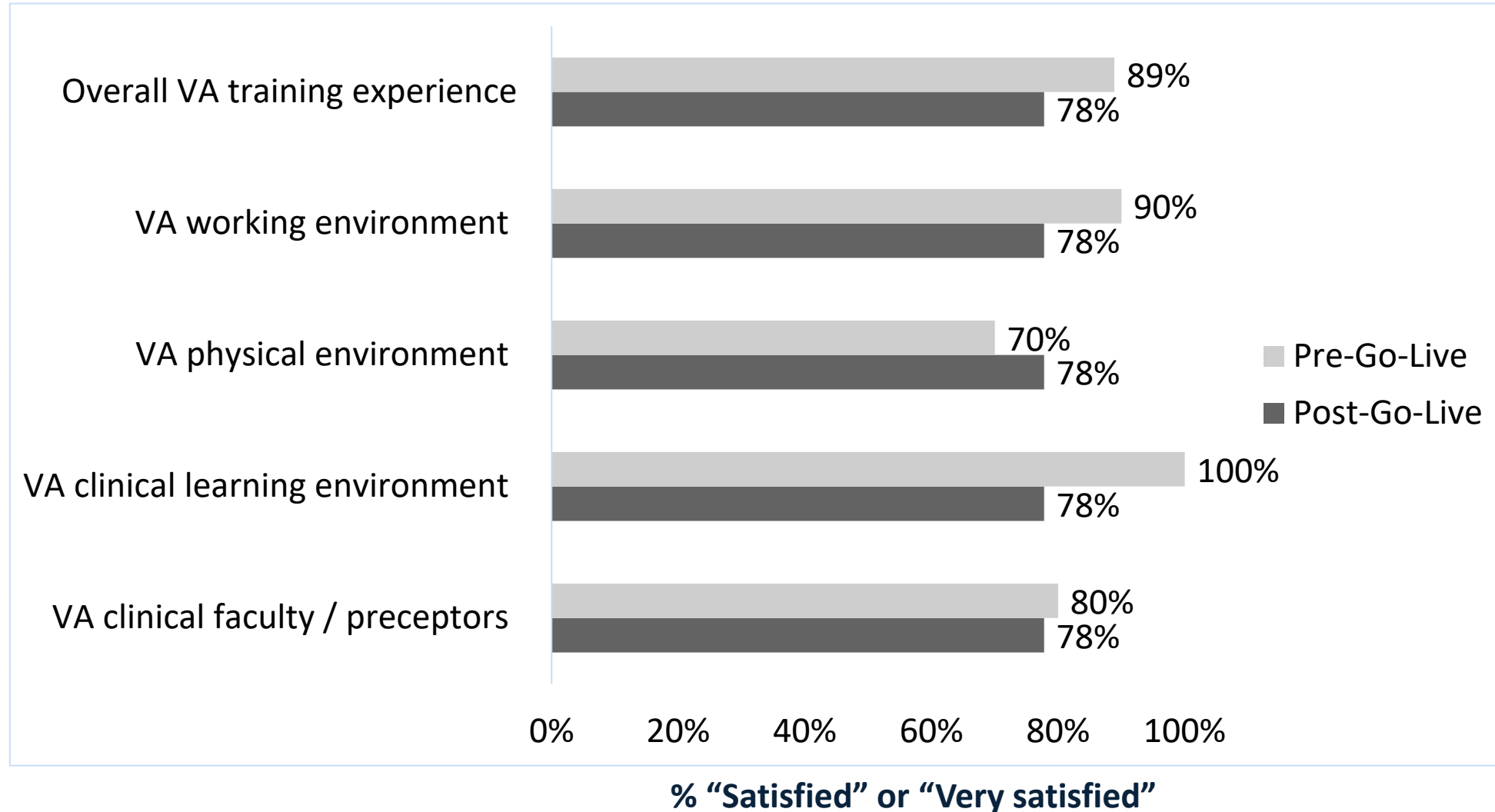




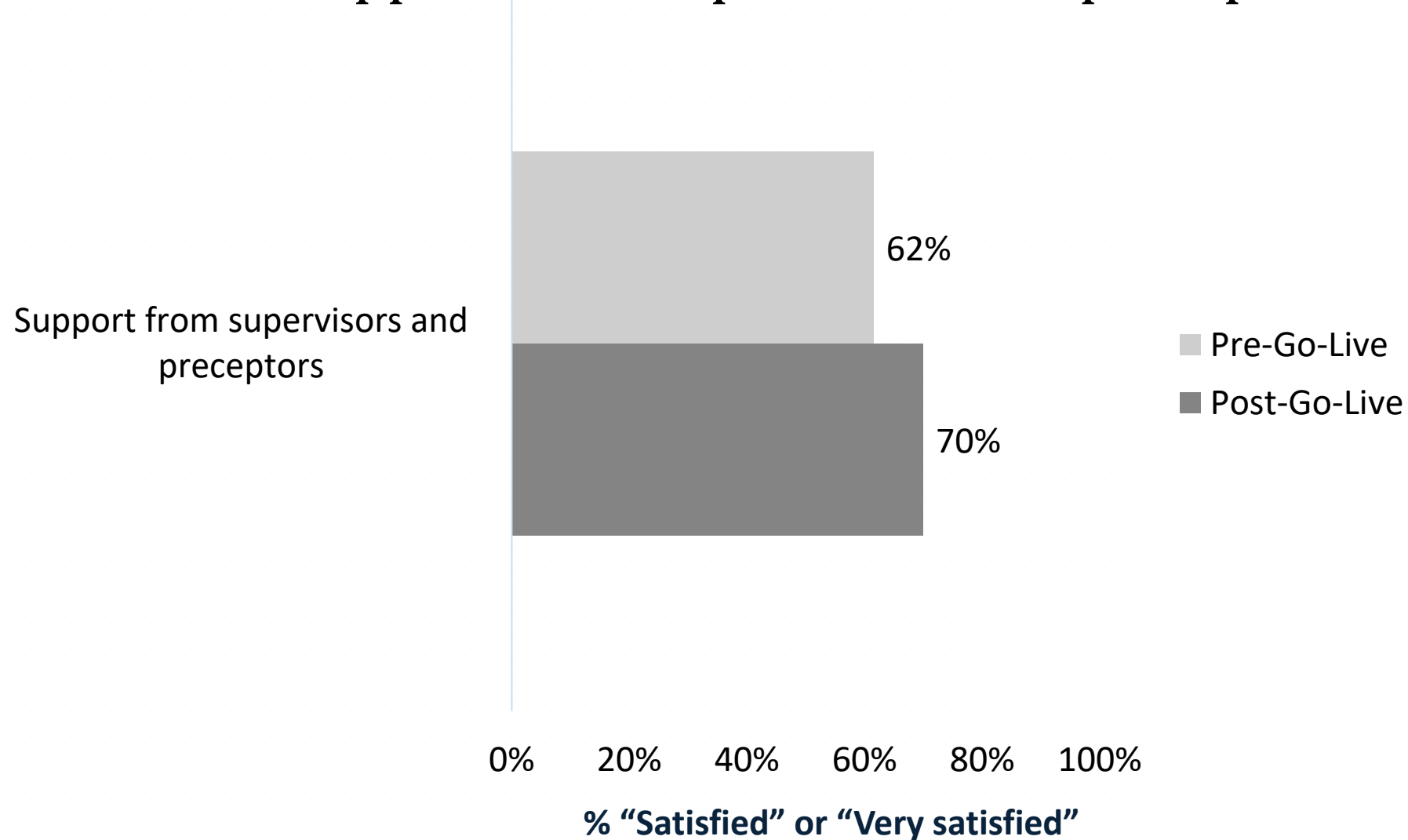
Research & EHR Synergy
BONUS SLIDES



HPT experiences with VA training remained relatively positive



HPTs who reported feeling satisfied with support from supervisors and preceptors



Electronic Health Record Modernization *Resources for VA Data Users*

“EHRM & Research” page on the Research Resource Guide SharePoint

<https://dvagov.sharepoint.com/sites/VHAPugResearch/RRG/Pages/EHRM-Research.aspx>

“EHRM and Implications for Data Users” page on the VIREC website

<https://vaww.virec.research.va.gov/EHRM/Overview-and-Implications.htm>

Data Management and Migration Knowledgebase” on the Data Migration, Management, and Syndication SharePoint

<https://vaww.cdw.va.gov/sites/EHRMDataIntegration/DIRAKnowledgeShare/Pages/DIRAKnowledgeShareHome.aspx>

Syndicated Data Bits - Weekly Webinars

<https://tinyurl.com/y3wgxzu5>

Office of Electronic Health Record Modernization (OEHRM) Intranet site

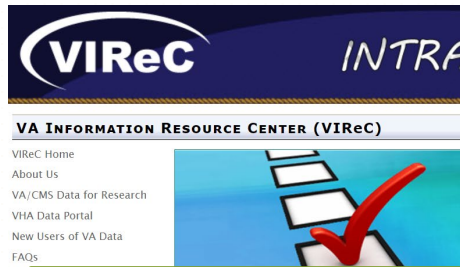
<https://vaww.ehrm.va.gov/>

*All links are accessible via the VA Intranet only

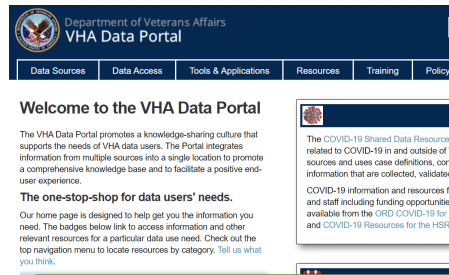


Resources for VA Data Users

Select image to visit page



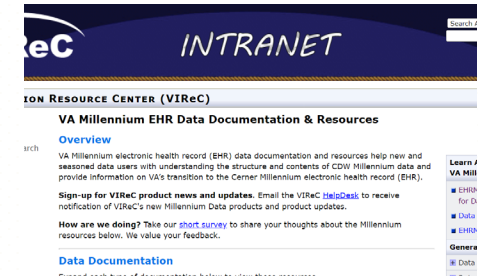
VA Information Resource Center (VIREC) (VA Intranet)



VHA Data Portal (VA Intranet)



VIREC Cyberseminars



VA Millennium EHR Data Documentation (VA Intranet)

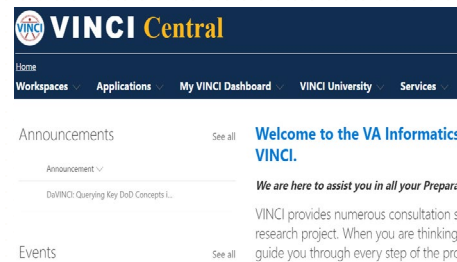


Resource Center (VIREC) is funded by the VA Research & Development Service (HSR&D) to help you use data effectively for research and development programs, and to foster communication between data users and the VA healthcare community.

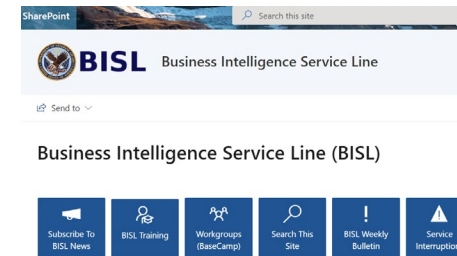
Visit Our Website
www.virec.research.va.gov

Visit the VHA Data Portal

Quick Guide: Resources for Using VA Data (VA Intranet)



VA Informatics and Computing Infrastructure (VINCI) (VA Intranet)



BISL/CDW (VA Intranet)



Health Economics Resource Center (HERC) (VA Intranet)





Questions about using VA Data?

HSRData Listserv

- Community knowledge sharing
- ~1,400 VA data users
- Researchers, operations, data stewards, managers
- Subscribe by visiting
vaww.virec.research.va.gov/Support/HSRData-L.htm (VA Intranet)

VIReC HelpDesk

- Individualized support
- Request Form:
varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK (VA Intranet)

