



PROVEN

Coordinating Hub to Promote Research
Optimizing Veteran-centric EHR Networks

OSIRES™

ORD | Strategic Initiative | for Research & EHR Synergy

TO INVESTIGATORS SUBMITTING PROPOSALS TO HSR&D OR QUERI Guidance on Addressing EHRM in Applications (as of May 12, 2021)

As VA makes progress on Electronic Health Record Modernization (EHRM) through implementation of the Cerner EHR in VA facilities, VA researchers may have to adapt their proposed research to accommodate changes in data availability, comparability, and methodological strategies over time. This memo is designed to provide guidance on how to address EHRM changes for applications to HSR&D or QUERI effective immediately insofar as the research proposed relies on the use of the VA EHR or data from it. We anticipate that this guidance will be updated ahead of each submission cycle as the EHRM rollout progresses and as new information about the resulting Cerner-generated data and tools becomes available.

1. **EHRM Implementation Schedule** The Mann-Grandstaff (Spokane) VAMC has been live with VA's new Cerner EHR, Millennium, since October 24, 2020. At this point the rest of VISN 20 and VISN 10 VAMCs are scheduled to transition to Cerner in FY21-22; see the latest [Research & EHRM Field Update](#), linked from the [VIReC homepage](#), for the provisional rollout schedule proposed by the Office of EHRM (OEHRM) in July 2020.

On March 19th, 2021, the VA Secretary announced plans for a Strategic Review of EHRM, which will likely further postpone some aspects of the rollout. Strategic Review findings are not yet available, so researchers should be cautious in plans for conducting research and aware that the deployment timeline remains uncertain.

2. **Data Availability and Use** Spokane data from Millennium are being sent to the Corporate Data Warehouse (CDW), but they are not yet fully integrated with existing CDW Vista data and it is unclear when they will be integrated. Researchers cannot assume that the same variables collected within CPRS will be available within the Millennium data, or that those variables will have the same properties and meaning. As a result, researchers choosing to use EHR data generated at Spokane and other Cerner-transitioned sites should be prepared for the additional investment required to learn and vet the new data for their use.

The implications of these Cerner data developments may differ depending on whether the proposed study will include Spokane and any other early rollout sites. Applications focused on the conduct of regional or national analyses of VA data from FY21 onward may want to consider excluding Spokane and any other early rollout sites noted in the provisional timeline provided in the monthly field update from OSIRES.

3. **Customized Data Capture** Some VA research relies on CPRS-based data collection through customized data capture during clinical encounters (e.g., templates). We anticipate that studies that rely on such data collection may continue among VAs that are farther down the rollout schedule such that EHRM transitions would not interrupt study procedures. At this point in time, a process has not been finalized for implementing an analogous mechanism within Millennium. Discussions about supporting a Millennium "sandbox" for this type of data collection or local innovation are underway but are too early and broad in scope to be reliably incorporated into applications.
4. **New Functionalities and PowerTrials** Millennium may offer new functionalities that could support research not previously possible (e.g., Millennium will capture sexual orientation and gender identity data not currently available in CPRS, is likely to provide additional

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discrete variables, and more machine-generated data.) In addition, the Millennium EHR introduces a new research solution, PowerTrials, that facilitates research drug ordering and integration of clinical trials into the EHR. Proposed studies involving a clinical intervention or trial should consider the EHRM implementation schedule to account for potential differences in fielding at Cerner-transitioned sites and may want to exclude transitioning sites until PowerTrials has been deployed and further evaluated.

5. **Guidance for Application Preparation** ORD has instructed reviewers not to consider the EHRM transition as a scoring factor for applications. We do recommend however, that applicants include a brief acknowledgement of how the transition may or may not impact their study. Studies may consider incorporating some version of the following template language into their applications:

If funded, we recognize that our project will occur during the VA Cerner Millennium Electronic Health Record implementation. Availability of data from VA sites that have transitioned to Cerner Millennium might be affected. This may result in excluding sites where data are not available or modifying our data collection and analysis plans. We will work closely with the VA Coordinating Hub to Promote Research Optimizing Veteran-centric EHR networks (PROVEN) and the VA Information Resource Center (VIREC) to address issues related to data availability and use, to maximize study progress.

In addition, a contingency plan for addressing EHRM uncertainty (e.g., study design shifts, site modification, or statistical analyses to account for missing or discrepant data) should be included to support feasibility.

6. **For Additional Guidance** If you have specific questions, please reach out to PROVEN, HSR&D's coordinating hub for EHRM research at PROVENHub@va.gov and/or OSIRES, ORD's strategic team for supporting research transition needs, at ResearchEHRM@va.gov.

Additional Resources for Understanding the EHRM and its Impact on Research

General Resources

- The ORD Strategic Initiative for Research & EHR Synergy (OSIRES) maintains general EHRM information and resources for research on the [EHRM & Research](#) SharePoint site.
- The [Promoting Research Optimizing Veteran Centric EHR Networks \(PROVEN\)](#) coordinating hub provides guidance and support for researchers *studying* the EHRM.
- The [Research and EHR Synergy](#) cyberseminars highlight topics ranging from conducting research using the Millennium EHR to accessing and using Millennium-generated and CDW-converged data to VA research studying EHRM implementation and impact.

Data Specific

- VIREC's intranet page, [EHRM & Implications for Data Users](#), includes updated information about EHRM data, VIREC data knowledge products, and other resource links.
- The OEHRM data management team provides information and education on data migration, syndication, and mapping. These are housed on the BISL [DIRA Knowledge Share](#) and the [Data Syndication MS Teams Site](#).