EMPIRIC QUERI



U.S. Department of Veterans Affairs Veterans Health Administration Quality Enhancement Research Initiative

Partnered Evaluation Initiative

EHR**M P**artnership Integrating Rapid Cycle Evaluation to Improve Cerner Implementation

The mission of EMPIRIC QUERI is to improve the VA's electronic health record modernization (EHRM) by ensuring that it is informed by frontline clinician and staff experiences. Working in partnership with the **Office of Electronic Health Record Modernization (OEHRM) Change Management**, EMPIRIC is identifying challenges and best practices to support clinicians and inform the nationwide Cerner rollout.

Clinician and Staff Experience Can Inform EHRM

Electronic health record (EHR) transitions are disruptive.

- The VA has contracted with Cerner Corporation to replace its existing EHR in a nationwide rolling wave process that is expected to last ten years and cost \$16 billion.
- Non-VA data have shown that EHR transitions may lead to <u>lower productivity</u>, <u>more medical errors</u>, and <u>higher clinician</u> <u>burnout and turnover</u>.
- All VA clinicians will use the new EHR, although they will differ in how quickly they adopt the new system, how well they overcome challenges, and how proficient they become.
- Engaging VA clinicians in an evaluation can help overcome challenges and improve EHRM change management.

"It's hard to describe how [Cerner implementation] impacts your work so profoundly and makes you so inefficient and feel really limited... it makes you feel like you cut your hand off, and you can't do the job in a safe, effective, productive way."

- Non-VA clinician interview

While EHRM offers an opportunity to improve systems of care, EHR transitions are complex undertakings that disrupt multiple sociotechnical systems and impact clinician and staff performance and well-being. VA must evaluate EHRM change management efforts to identify ways to support clinical teams undergoing EHRM and mitigate potential risks to care quality and safety. Learning from frontline clinicians and staff is an essential condition to make this evaluation a success. **EMPIRIC is a multidisciplinary team partnered with OEHRM Change Management and local VA sites that will address top VA priorities and produce actionable recommendations to improve EHRM change management.**

Partnered Evaluation of the EHRM Process

By identifying and promoting practices that VA clinical teams can use to complement Cerner's change management approach, EMPIRIC will optimize outcomes across successive EHRM waves. This will be done by:

- Conducting formative mixed-methods evaluations at initial EHRM sites to identify lessons that can improve EHRM outcomes.
 - Developing a case series of process changes and practices from initial EHRM experiences.
- Developing consensus on strategies that VA can implement to optimize EHRM outcomes.
 - Generating a playbook of best practices for optimal EHRM.
- Designing and pilot testing a multicomponent strategy to improve EHRM outcomes.
 - Testing a multicomponent strategy to optimize EHRM across consecutive implementation trials.

	Pre-implementation	Implementation	Sustainment
Objectives	 Identify & engage stakeholders Assess EHRM attitudes & beliefs Identify changes in clinical processes with new EHR 	 Assess perspectives on Cerner change management Identify best practices that clinical teams use to support EHRM 	 Re-assess EHRM attitudes & beliefs Re-evaluate changes in clinical processes with new EHR Examine EHR use
Methods	Surveys, interviews, workflow mapping	Periodic reflections, EHR use data	Surveys, interviews, workflow mapping, EHR use data
Timeline	10 to 20 weeks prior to go-live (Cerner initiates regular site contact)	9 weeks prior to 6 weeks after go-live (Intense training & hands-on support)	7 to 24 weeks after go-live (After in person support leaves)

Engaging Initial Cerner Implementation Sites

EMPIRIC is engaged with local leadership and clincians at VA healthcare systems currently implementing Cerner and is conducting:

- Workflow analyses
- Surveys
- Interviews and brief check-ins

Next steps:

- EHR use data analysis
- Consensus recommendations
- Observations

"So this is why I'm glad that you're measuring that, and I feel heard, and I feel that is where the value comes."

- EMPIRIC Participant

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