

Key Differences Between CPRS and Oracle: Implications for Training and Preparation



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Issue

The Department of Veterans Affairs (VA) has begun to transition from an internally developed electronic health record (EHR) to a new EHR, an effort that has highlighted important differences between legacy and new systems. These differences include changes to the structure of permissions (what an end-user can access and do within the EHR) and the process whereby sites modify the EHR to address local needs, services and workflows.

Methods

We conducted deductive content analysis of 102 semi-structured interviews with 27 EHR users at Mann-Grandstaff VAMC in Columbus, OH.

Key Findings

Interviews helped clarify foundational differences between CPRS and Oracle that have major implications for training and go-live preparation:

New VA-wide policies: enterprise standardization

Unlike CPRS, Oracle will be a single unified system across VA. Among the implications of this shift to enterprise standardization are that a) the **options users face in the EHR will be much less “curated”** to reflect the services, medications, etc. offered at their facility, b) facilities will have **less authority to make changes** to the EHR, and c) several **changes to clinical practice and policy have been “bundled” with the EHR transition** and are instantiated in the new EHR (e.g., different processes / roles for managing referrals, expanded use of barcode medication administration, different clinical scales and tools, added and removed reminders and alerts).

*"We learned how to order an echocardiogram ... **there were 50 choices and ... it was by trial and error which choice was going to be the one that worked.**"*

*"Now with Cerner, they're saying [the change we requested] **isn't a national thing so they won't implement it.**"*

*"If you want everybody to order an ED visit the same, you [should] **implement that prior to Cerner ... then it wouldn't be such a culture shock** when you went to Cerner."*

*"The frustration in the clinic is that there's **no real-time fixes because we depend on the third party to fix it.**"*

*"If [patients] need a shot ... [the] **doc has to place the order now**, and it has to be attached to a certain encounter, and **everything needs to be scanned** [for barcode medication administration], so its now a longer process"*

Role-based access

Unlike CPRS (which looks similar to providers, nurses, and most other employees), **Oracle looks different and offers different permissions to each of the 400+ EHR roles** that a user can be assigned. This can make it difficult for teammates in different roles to troubleshoot for each other or cover clinical tasks for one another. When a user's permissions in Oracle differ from those in CPRS, users may not know which are intentional changes to their duties and which are unintentional errors in the assignment of their user role.

***I can no longer assist others** as am not able to see what they see. There is no 'role' for my position so I am in Cerner as a nurse (which I am not).*

Other differences

- **Encounter-centric charting:** Most actions in Oracle need to be linked to an encounter ID. For example: nurse phone calls to patients each need to be linked to a "between-visit encounter," created by an MSA. Panel management activities that may have been conducted by a nurse alone will require nurse/MSA coordination.

*With CPRS ... if you need to do a telephone call you can quickly just create an appointment and document, whereas ... [in Cerner] **we can't even start documentation or something without getting an MSA involved.***

- **Messaging differences:** Messaging and communication among team members within Oracle is very different from CPRS. Successful communication within Oracle requires not only knowledge

about the new messaging functionality, but a shared set of expectations for how all team members will use messaging in the new system.

*The same messages are getting sent individually to providers [and] to the message pools. The string of ... addendums on a message [are so overwhelming that] finally you lose the ... train of thought. Somebody will, along the way, start another message cause they give up on it. Now you have two or three or four messages that belong to the same thread but ... one message is missing the part that you really need... it's turned into a nightmare ... I think **stressing a certain message etiquette, with a uniform way in the beginning**, before people developed their own ways, [would've helped].*

Implications for EHR Training and Preparation

- VAMCs should **engage supervisors** (clinic leaders, service line leaders, etc) in communicating **intentional role/practice changes** that will be implemented alongside EHRM.
- VAMCs should develop their own **training resources and practice aids reflecting local practices** (e.g., identifying the orders relevant to your facility, setting clear expectations for how messaging will be used).

*“The training is not specific to my job. It is great that we are learning other things but, it does not help us with our responsibilities. Some **hand outs showing steps of what to do would be very helpful in moving through our portion of the documentation.**”*

- Many clinical teams may need to **revise their team processes and handoffs** after they understand the demands and constraints of the new system. (For example, incorporating between-visit encounters).
- Because the VA's version of Oracle is markedly different from the versions of Oracle used outside VA and from CPRS, VAMCs should **maximize opportunities to incorporate support and guidance from those with experience from prior VA Oracle implementations**. This may include the National EHRM Supplemental Staffing Unit (NESSU), as well as VISN or national communities of practice.

“It would've been nice to have [additional] VA staff come and assist with implementation. They understand the processes and what is necessary.”

For More Information

- Questions about these findings can be directed to VHAEmpiricProject@va.gov.