

A FORMAL LITERATURE REVIEW OF THE VIRTUAL LIFETIME ELECTRONIC RECORD EXCHANGE

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Abstract

The Virtual Lifetime Electronic Record (VLER) exchange of military and veteran health information is a topic that needs to be understood in order to meet the needs of a new generation of veterans returning from Afghanistan and Iraq. The need for the Department of Defense (DOD) and the Department of Veterans Affairs (VA) to be able to exchange health data with trusted non-governmental partners will be paramount in the treatment of these airmen, coast guards, marines, sailors, and soldiers. This literature review examined existing research on the Virtual Lifetime Electronic Record. It found that there is extremely limited information available on the topic and that additional research should be encouraged to broaden the perspectives available. It concludes that while progressing slowly, the program is set to make great forward strides toward implementing a health information exchange across the VA that will now include information from non-governmental providers. This technology will be critical for assisting the Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF) and Operation New Dawn (OND) veteran cohort, as well as, established veteran cohorts with their ongoing medical needs.

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When veterans return from military service, one important avenue of transition to civilian life and career is through treatment and care at the United States Department of Veterans Affairs (VA) – however, little is known about one of the newest ways to best address their health care needs. The Virtual Lifetime Electronic Record (VLER) is not a “new” concept. However, it has relatively recently received the additional support needed to become more widely available. That support came in the form of a joint public declaration on 9 April 2009 by the President of the United States, the Departments of Veterans Affairs, and the Department of Defense to work toward integration of a system of health information exchange (National Guard, 2009). This was later modified allowing DOD and VA to maintain separate systems that instead would interact (The American Legion, 2013). The “exchange” allows, VA clinicians to access veteran health information not only from the DOD and the Social Security Administrations (SSA) but, also from non-governmental trusted partners, whose information systems have been “tested” and approved, to join the national eHealth Exchange by the governing body of that exchange, HealtheWay (Bennett, personal communication, August 26, 2014). By providing this enhanced service to not only returning veterans but, to those veterans already established within the VA system, improved services and outcomes can be expected. Veterans may no longer need to repeat labs for example while VA physicians and staff will have access to enhanced records which will provide a more in-depth spectrum of information.

Introduction

For some time it has been apparent that medical information systems had fallen behind in their ability to use technology to enhance health care services. According to one medical researcher, to call medical information

technology “twentieth century is as wrong as calling it “twenty-first century” its nineteenth century (Liang, 2010 p. xiii). Doctors, order merchandise on-line but, chart information with a pen and paper. Nurses, have to fax documentation between medical providers and cannot securely e-mail information. This same theme was noted within the DOD and the VA. These two departments, charged with the care of service personnel and veterans, could not productively communicate electronically between each other, and at times, could not even communicate effectively electronically within their own organizations. This then led to discussion regarding the implementation of an enhanced electronic exchange system that would allow for better communication and service. This effort has been supported by such veteran’s advocates as The American Legion whose national executive committee voted on 18 October 2012 to pass Resolution No. 42 in support of the VLER project (The American Legion, 2012). Initial trials have proven successful enough to move the project past the pilot phases and toward a full national implementation of the program.

Review of the Literature

The current literature on the VLER project is extremely limited. Of the twenty-two hits that were returned in the data base search, only one item was a peer-reviewed journal article. The other items that were located were simple press release statements from various media outlets, non-VA sources, or, in one instance, a presentation based upon the one peer-reviewed journal article that was located. It was therefore necessary to supplement the initial data base search with additional materials. These were chosen on the basis of relevance to the VLER topic and on the varied perspective that they offered. Both articles were taken from The American Legion. This was done to provide the perspective of the largest Veterans Service Organization on the topic. Since The American Legion represents more veterans than any other organization outside VA, the opinions that they present can have significant influence on the outcome of programs and the acceptance of those programs by their members and even other VSOs.

The primary source for information on the VLER project is presented in an article that was published in the International Journal of Medical Informatics. The researchers provide not only academic but also conceptual information on the VLER program. VLER is presented in thorough detail with particular attention given to its importance to the enhancement of VA services. This point is made clear by the inclusion of direct quotes from those impacted by the program itself. This article is the “go-to” source for VLER information. However, there is a clear need for additional research and publication on the topic. With the importance of this subject matter it is necessary to enhance both the quantity and the perspective of the materials available to researchers.

The Current Project

On 21 July 2014 Creative Computing Solutions (CCSi) of Rockville, Maryland announced that it had received the contract to support the VA in the implementation of the VLER program (Romero, 2014). The VA Office of Rural Health will work with CCSi representatives to optimize the use of available and emerging technologies, establish new access points to care, and increase health care options for all rural veterans. In support of this goal, the VLER Health Program has built an infrastructure for veterans to participate in health information exchange (Romero, 2014). That exchange however is strictly voluntary. Veterans are considered “opted-out” until providing consent to be “opted-in” to the exchange system. Therefore, the success of the program implementation is very much dependent upon the individual choice of the veteran to participate, and then, to continue participating, in the VLER program. This veteran choice is combined with the need for both VA physicians and trusted non-governmental partners to participate as well by accessing and actually conducting the information exchanges of meaningful use information. Currently VA doctors view veteran data through the Computerized Patient Record System (CPRS). However, it will be incumbent upon the VA to impress upon veterans and medical staff alike that it is both necessary and

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beneficial to proceed still further to the enhanced information provided by the exchange. CCSi is now tasked with training personnel to then train veterans and VA staff about the benefits of VLER.

Methodology

This literature review utilized a keyword search to identify published material related to the Virtual Lifetime Electronic Record program. The review included; one generalist data base, *Academic Search Premier*, the Military and International Security, *Military and Government Collection*, the History and Government, *Academic OneFile*, to source government information, and *Medline*, from the Nursing and Medicine data base to review medical journals. This was supplemented by the inclusion of two VLER articles published by, The American Legion. The keywords Virtual Lifetime Electronic Record were selected to generate relevant literature. Raw hits were 22. Inclusion criteria used to limit the search responses were: English language sources and VA-specific.

Table 1. Data-base and criteria results for Virtual Lifetime Electronic Record.

Data-base	Raw Hit type	Secondary Sources	Met Search Criteria
Academic Search Premier	Peer-Reviewed Article	Yes	Yes
Academic Search Premier	Press Release	No	Yes
Academic Search Premier	Press Release	No	Yes
Academic Search Premier	Press Release	No	Yes
Academic Search Premier	Press Release	No	Yes
Academic Search Premier	Press Release	No	Yes
Medline	Presentation	Yes	Yes
Medline	Peer-Reviewed (repeat)	Yes	Yes
Military & Gov't Collection	Peer-Reviewed (repeat)	Yes	Yes
Military & Gov't Collection	Press Release (repeat)	No	Yes
Military & Gov't Collection	Press Release	No	Yes
Military & Gov't Collection	Press Release	No	Yes
Military & Gov't Collection	Press Release	No	Yes
Academic OneFile	Peer-Reviewed (repeat)	Yes	Yes
Academic OneFile	Press Release	No	Yes
Academic OneFile	Press Release	No	Yes
Academic OneFile	Press Release	No	Yes
Academic OneFile	Press Release	Yes	Yes

Note. Results do not include the articles published by The American Legion.

Results

Eighteen sources met the criteria for inclusion in this review (see Table 1). Four sources were excluded because they did not meet the VA-specific limitation criteria. Three of the remaining sources were duplicates of the peer-reviewed article. Two additional sources, The American Legion (2012) and (2013), were not matches with the screening criteria. The information that they provided was supplemental to a thorough understanding of the topic of the Virtual Lifetime Electronic Record. They are included in the over-all analysis of the review. It is clear that identified sources were limited not only in quantity but by publication format type. Press release articles (n=16, 88.88%), presentation article (n=1, 5.56%) and one peer-reviewed journal article (n=1, 5.56%). One of the press release sources appeared in two databases (n=2, 11.11%) and the peer-reviewed article appeared in all four databases (n=4, 22.22%). Table 1 provides a summary of the sources included by database and resource type.

The press release articles date to the announcement of VLER or, within two years thereafter. The presentation article is from 2012 and the peer-reviewed article is current, from 2014. The lack of current relevant research supports the conclusion that there is a gap in the literature. This is significant since system wide implementation of VLER is set to begin at the VA and there is relatively little documented research into the program. While all of the sources presented in this review met the search criteria the vast majority of the results, represent only cursory press releases, and therefore present an incomplete picture of, VLER.

Analysis - Caring for Veterans

VLER is about caring for veterans. By providing basic verified information on a VA form 10-0485 the veteran is opted-in to the program (See Appendix A). However, the veteran also has the option of consenting through the MyHealthVet portal at the VA website as long as they have the “Premium Account” (Department of Veterans Affairs, 2014). This means that their identity has previously been verified through the Release of Information Office (ROI) at the Veterans Affairs Medical Center (VAMC). This is necessary to ensure that information under Title 38 U.S. code 7332-protected conditions is handled properly (These conditions are: Drug and Alcohol abuse, HIV testing or infection, and Sickle cell anemia.), (Department of Veterans Affairs, 2014). The benefits of participation in the program are many (See Appendix B). If veterans receive care from a trusted non-governmental provider, certain parts of their health records may be exchanged. This will provide clinicians with a more complete picture of the veteran’s health once they are “announced” on the exchange and opted-in. It is important to reiterate that this is a voluntary program and that consent can be “revoked” at any time by the veteran simply by completing a VA form 10-0484. However, only certain information is actually exchanged and even that information is only exchanged with trusted non-governmental partners that have established a match, or “correlation”, with a veteran. Additionally, VLER may also cut back on cost and redundant labs for the veteran. It may also warn health care providers of potential medicinal interactions or undocumented allergies as well as other continuity of care information. Finally, VLER will limit the requisitions needed to retrieve and hand-carry records to appointments.

Analysis - Caring for Care-Givers

In keeping with other VA initiatives, VLER is a vet-centric program. However, medical staff may benefit from this opportunity as well. While initial data-entry may be challenging for the Health Information Management System staff (HIMS) and the ROI office, these issues will subside as new work-flow processes of managing electronic data replace the handling of paper documentation. As mentioned previously, clinicians will have a more, well-rounded picture of veteran health. This will allow VA doctors, as well as, their non-governmental trusted counter-parts, to make better informed decisions about veteran health care.

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This may have the effect of improving morale throughout the medical staff as system efficiencies are recognized and embraced. VLER will provide VA staff with yet another opportunity to demonstrate that their focus on vet-centric systems is what allows them to provide the best quality care to their veterans.

Analysis - Challenges

As with any change, there will be challenges with the implementation of VLER. Technology can be difficult to “sell” to some individuals. However, it is worth noting that even the initial opting-in by the veteran can be done with a simple form. The technology itself may have delays and down-time. Yet, these would be temporary and correctible issues. Personnel changes in the midst of a start-up may frustrate expansion of the program. Those tasked with implementing VLER have considered this possibility by building in redundancies in the personnel system. A lack of exchange partners may hinder the acceptance of the program for specific VAMC sites. However, with the increased use of electronic records by the private sector and the ongoing use of private sector services by veterans, exchange partners will inevitably present themselves. Lack of clinical, veteran, or staff, “champions”, or personnel excited about the program that can help it progress, could hinder develop of VLER. This issue is why the RHCC personnel were trained and hired. Data breaches of the exchange may have veterans opting-out of the program, even though there are safeguards. Again, RHCC personnel will be available for personal consultations with individual veteran users that may have concerns. What will be important will be to focus on successes, and how the opportunity provided by VLER to assist veterans with their health-care has also provided them and their families with potentially better transitions and outcomes.

Analysis - Rural Health Community Coordinator

The Rural Health Community Coordinator (RHCC) is an advocate for veterans. The RHCC works with the VA to optimize the use of available and emerging technologies, establish new access points to care, and employ strategies to increase health care options for all rural Veterans. CCSi has received a task order under the Transformation Twenty-One Total Technology (T4) contract vehicle to support the VA Office of Informatics and Analytics, Health Informatics Office, and the Office of Rural Health (Romero, 2014). There are also two levels of community coordinators. Virtual coordinators are responsible for various VAMC sites that are located in urban settings. The RHCC is a boots-on-the-ground advocate that can directly interact with veterans and VAMC personnel. The RHCC is located in designated non-urban areas with a focus toward not only the medical center itself but the out-lying community based out-patient clinics in the hopes of interacting with those veterans that might most benefit from the VLER program.

Analysis - Veterans Affairs Medical Center / Community Based Out-Patient Clinic

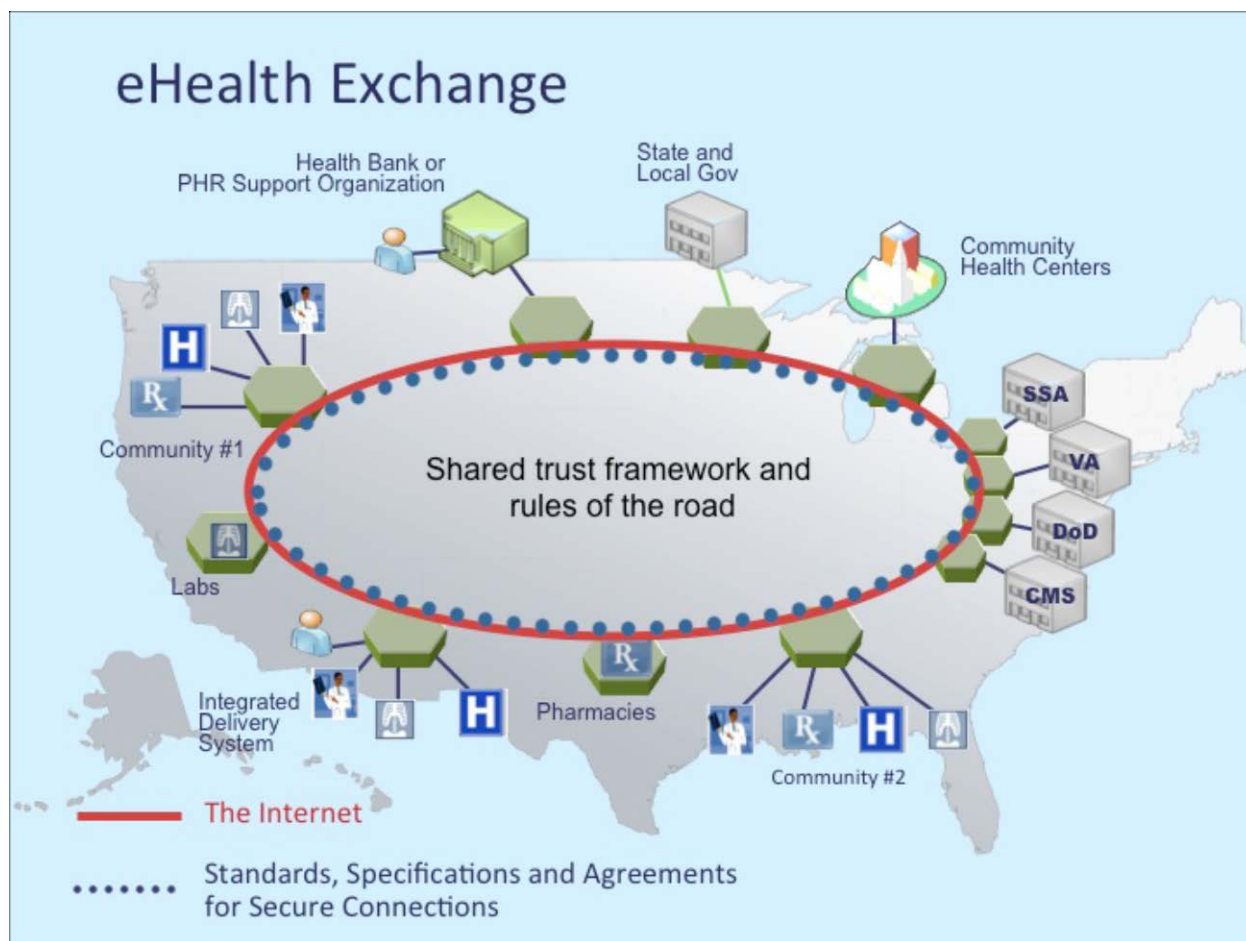
The Veterans Affairs Medical Centers (VAMC) and the Community Based Out-Patient Clinics (CBOC) are the actual physical settings for the primary interaction between the RHCC and the veterans. There are currently 55 designated RHCC representatives at various VAMC locations across the nation. These RHCC personnel are also responsible for veteran out-reach at the various CBOC sites which fall under the designated VAMC. The fact that these clinics exist at all speaks to the fact that there is a need for a rural health community coordinator and that the VA has recognized that importance as well. These veterans perhaps more than others will benefit from the service that the VLER program provides because of their geographic remoteness. Perhaps this group of veterans will be the most responsive to VLER recognizing that this program is focused primarily toward a technological solution that minimizes the impact of distance on their health care needs.

Hypothetical Case Study – Veteran

Former Army Sergeant Joe Smith served during World War II as a tank commander. He has suffered from limited mobility for a number of years. Sgt. Smith finds comfort in getting to the CBOC, one town away from his home, to meet up with his buddies and tell war stories while having some follow up to his other appointments at the VAMC. However, during the winter or other bad weather he finds it difficult to even get there. He doesn't want to impose on anyone with his appointment schedule and he doesn't want to have to wait on a shuttle that could be used by a veteran that has more severe issues than his own. When Sgt. Smith was approached about the VLER program, he didn't really understand it. At his age technology is something that he is not comfortable with. ("I don't understand those gadgets.") However, during a recent visit to the CBOC he overheard some of the other veterans talking about it and decided he would inquire further. When the nurse told him that the RHCC was there talking with some other veterans he said he would wait to have a moment to learn about it as well. The RHCC explained to the veteran that he wouldn't need to worry about the technology aspect. He could be signed up with a simple form and his retired military ID card. The RHCC explained that Sgt. Smith could remind his personal doctors in his hometown, who he verified were trusted VA partners in the exchange that portions of his VA health records, would be available to them. The RHCC explained that when Sgt. Smith made the trip to the VAMC that the health information that his personal doctors share with the exchange would be available to his VA "doc" as well. Finally, the RHCC left the veteran with his contact information and let him know that if he had any questions he could contact him or the Health Resource Center (HRC) call center in Kansas. He also explained that if for some reason that the VLER program was not working out that he could opt-out and then even opt-in again if he wanted to give it a trial run. Sgt. Smith seemed happy to give VLER a try but he still wasn't sure he understood how it all worked. He might have to talk to the RHCC at his next visit to the CBOC once he had talked it over with his buddies (Roling, personal communication, August 28, 2014).

Hypothetical Case Study – VA Clinician

Doctor Jones is a relatively new physician at the VAMC. She is also a Major in the Army National Guard and has recently returned from Afghanistan. While there she saw numerous battle-field injuries and is looking forward to helping those same veterans with her VA practice. Some of the other personnel from her unit are at Catholic Medical Center and she knows that a lot of her veterans are patients there. She is using CPRS already. The VAMC has trusted non-governmental partners and she is already reviewing DOD information. However, she wasn't aware of a veteran that had been taking medication under one name and taking the same meds under a generic name because of the lack of communication with the patient's private medical provider. Now with the exchange Major Jones can view info through VistaWeb in a few simple steps. The doctor has noticed that her information is more up-to-date and thorough, than, what her friends are providing from CMC. However, she has plans to discuss this with them at the next Guard drill. Also, the RHCC explained that if she wrote down the time, date, and patient information accessed that he could forward that information to the program director to provide feedback at the national level to generate improvements for meaningful use. All of these systems improvements that have helped the Major better care for her veterans helped make her, a clinical champion for VLER, at her VAMC, and at her Guard unit as well (Roling, personal communication, August 28, 2014).



Source: <http://www.healthhit.gov/providers-professionals/faqs/what-ehealth-exchange>

Figure 1. What is eHealth Exchange?

Hypothetical Case Study – VA Staff

The ROI staff is now spending less time retrieving records for veterans to take to appointments. They are simply opting-in veterans through the Veterans Authorization and Preferences (VAP) system. By scrubbing the Master Veterans Index (MVI) they can keep information accurate and can readily re-announce veterans to new trusted partners as they enter the exchange. Doing this provides information for veterans that are seen by doctors and even VA pharmacists across the country as they visit family, vacation, or spend time at their seasonal residence. However, the ROI staff was not sure of how to explain the program to some of the veterans that came in to the office that were still requesting medical records. The RHCC left a copy of (Figure 1) with them, as well as, some literature on VLER, and a DA form 10-0485 for any veterans that wanted to opt-in to the program. Since the ROI staff was familiar with the signature verification process they were able to assist veterans and the RHCC with expanding the program for their VAMC. The Public Affairs Officer (PAO) and the Health Information Management Systems (HIMS) Chief also reminded the staff that the VAMC website had a new addition that explained VLER for veterans with internet access (Roling, personal communication, August 28, 2014).

Discussion

VLER has the potential to make significant changes to the VA health care system and its responsiveness to veteran's needs. The hypothetical case studies have presented various scenarios in which the benefits of VLER should have become clear. This was done to provide a more well-rounded understanding of the program, albeit, from a still limited perspective, which cannot be obtained due to the current lack of research literature. While these may be viewed as "best case" scenarios, they also present a goal to be reached or strived for even when the system may not be working up to its full potential. While they may not have covered every possible circumstance, they at least mention key players that could assist in the event that issues develop. For example, the RHCC is the VLER champion and should be up-to-speed on all things VLER. This representative also has additional contacts that they can draw upon in the event that, an issue arises for which even the RHCC may not have been trained. (This will inevitably happen.) What is clear is that VLER will have a system wide impact. It will be up to the individual actors in each of their particular roles at the VAMC to ensure success.

It has been noted that researchers, speaking only to other researchers, that are not cognizant of the wider audience, may be doing a dis-service not only to themselves but, potentially to their research focus (Crandall, personal communication, August 26, 2014). It is imperative that additional research be brought to bear on the advancement process of VLER at the VA. This all-but-unknown program has the potential to literally re-shape health care in many ways. By providing veterans with enhanced services, and clinicians, both inside and outside of the VA, a better platform from which to draw information, the possibilities for improved health outcomes seems nearly limitless. Additional research may provide still further enhancements and previously un-thought potentials for what may be a crucial program to assist returning veterans.

While it may seem counter-intuitive to promote a program prior to its establishment, system wide, the thoughtful reflection provided by stakeholders from across the veteran services community could provide useful insights for the successful implementation of such a well-planned initiative. By encouraging participation from a wider spectrum of the public, in the implementation process, researchers and program managers would no longer be left in a vacuum attempting to consider all of the possible scenarios that may impact upon VLER at each different VAMC. It is the successful exchange of ideas that will strengthen this program, or any other, and ultimately lead to a positive impact for veterans, staff, physicians, family members, researchers, and all stakeholders within the community.

Perhaps, consideration may be given to an updated press release about VLER. Updating the releases that were previously completed might re-ignite interest in the program and thus research, as well. This renewed focus on the program could be welcomed as a way to include input from the varied supporters of VLER. This re-introduction of the program with the enhanced visibility that it would provide may have the added benefit of informing the return surge of home-coming veterans about the importance of accessing their VA care. This, when coupled with the inclusion of already established veteran cohorts, could provide VLER with a dramatic and immediate increase in participation just as the RHCC representatives are taking up their posts at VAMCs around the nation.

The gap in the VLER literature presented by this literature review should be a call to the veteran community to insist upon further research and information about the introduction of the eHealth exchange. Veterans need to have research-based information upon which to base their health care decisions. For a veteran to sign the 10-0485 to participate in the eHealth exchange without the necessary background to make informed decisions would be like signing an enlistment document with no prior knowledge of what military service entails. The exchange of personal health information can have a dramatic impact upon the health care that a veteran receives, however, like with military service, each veteran may experience that exchange of information in a different manner. Providing information to veterans is the key to allowing them to address this opportunity in the fashion that best suits their individual needs.

Limitations

While this study was able to determine that there are limited sources of information regarding the VLER topic, there are a number of limitations to consider. Only four electronic library databases were used to research this topic. No secondary search was completed. Only The American Legion was considered to represent numerous Veterans Service Organizations. No formal peer-review was completed. A subject matter expert was not consulted prior to the submission of this report.

Conclusion

Based upon this review of the scope of the literature available on the topic of the Virtual Lifetime Electronic Record, it is clear that there is an immediate need for additional research on this program. One suggested method of enhancing this research may be to provide a press release update on the current status of the program. Thus informed, various stakeholders may then take up the challenge of re-invigorating the inquiry into the process of eHealth exchange and the VLER program at the VA. This could have a significant impact upon the reception that the program receives at the VAMCs, participation by veterans, support by veterans' service organizations, and ultimately the very success of the program. Initiating a change as significant and complex as the roll-out of VLER nationally is going to require the support and persistence of as many stakeholders as possible within the veteran community. Every attempt should be made to ensure that information is free-flowing, in both directions, in order to maximize the positive impact that this program will have while addressing any potential issues as quickly as possible.

There have been concerns with VA care in the past. VLER could help to earn back some of the trust of veterans by doing what the VA does best, providing an empathetic vet-centric response to a need. This is an education process. It will take time to implement and perfect. Veterans have earned access to the best care that can be provided for them. Every attempt should be made to continue to upgrade services. VLER is a step in the right direction. VLER is a program that can have an almost immediate and a very dramatic impact upon the delivery of health care. There is a clear need for enhanced capabilities to streamline existing processes. VLER promises to begin that process with the possibility of continued expansion as the exchange continues to grow and develop. What is needed now is the will to move it forward.

Conflict of Interest

I was hired 28 July 2014 by Creative Computing Solutions Incorporated as a Rural Health Community Coordinator for the Veterans Affairs Medical Center in Manchester, New Hampshire. To date, I have attended various training sessions but, I have yet to formally begin my assignment on the ground at the VAMC.

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Appendix A

OMB Number: 2900-0260
Estimated Burden: 3 minutes

 Department of Veterans Affairs	
REQUEST FOR AND AUTHORIZATION TO RELEASE PROTECTED HEALTH INFORMATION TO eHEALTH EXCHANGE	
<p>Privacy Act Information: The execution of this form does not authorize the release of information other than that specifically described below. The information requested on this form is solicited under Title 38, U.S.C. The form authorizes release of information in accordance with The Health Insurance Portability and Accountability Act, (HIPAA) 45 CFR Parts 160 and 164, 5 U.S.C. 552a, and 38 U.S.C. 5701 and 7332 that you specify. Your disclosure of the information requested on this form is voluntary. However if the information containing the Social Security Number (SSN) (the SSN will be used to locate records for release) is not furnished completely and accurately, eHealth Exchange will be unable to comply with the request. The Veterans Health Administration may not condition treatment, payment, enrollment or eligibility on signing the authorization. VA may disclose the information that you put on the form as permitted by law. VA may make a "routine use" disclosure of the information as outlined in the Privacy Act systems of records notices identified as 24VA10P2 "Patient Medical Record -VA", and 168VA10P2 "Virtual Lifetime Electronic Record (VLER), and in accordance with the VHA Notice of Privacy Practices. You do not have to provide the information to VA, but if you do not, the eHealth Exchange will be unable to process your request and serve your medical needs. Failure to furnish the information will not have any affect on any other benefits to which you may be entitled. VA may also use this information on this form to identify Veterans and persons claiming or receiving VA benefits and their records, and for other purposes authorized or required by law.</p>	
Patient Full Name Last: (print) _____	First: _____ Middle: _____
Birth Date (mm/dd/yyyy): _____	SSN: _____ Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female
Requestor Name: _____ VA Approved eHealth Exchange Participants	
Information Requested: Pertinent health information from electronic health record.	
<p>I request and authorize my VA health care facility to release my protected health information (PHI) for treatment purposes only to the communities that are participating in the eHealth Exchange. This information may consist of the diagnosis of Sickle Cell Anemia, the treatment of or referral for Drug Abuse, treatment of or referral for Alcohol Abuse or the treatment of or testing for infection with Human Immunodeficiency Virus. This authorization covers the diagnoses that I may have upon signing of the authorization and the diagnoses that I may acquire in the future including those protected by 38 U.S.C. 7332.</p>	
<p>This authorization will remain in effect for the period of five years. I may revoke this authorization, in writing, at any time except to the extent that action has already been taken to comply with it. Written revocation is effective upon receipt by the Release of Information Unit at my VA health care facility. Redisclosure of my electronic health records by those receiving the above authorized information may be accomplished without my further written authorization and may no longer be protected.</p>	
<p>AUTHORIZATION: I certify that this request has been made freely, voluntarily and without coercion and that the information given above is accurate and complete to the best of my knowledge.</p>	
_____ Signature of Patient	_____ Date

VA FORM 10-0485
JUN 2013

Appendix B

How will I benefit from **VLER Health?**

You may receive a portion of your care from non-VA health care providers. Sharing certain parts of your electronic health record will reduce the amount of paper records you must carry to appointments. It will also allow your VA and non-VA providers to make informed decisions about your care. This is possible because the shared information provides a more complete record of your health.



Tired of hauling your
health record?

**Sign-up for
VLER Health**

For more information or to sign-up for **VLER Health**

Visit <https://www.ebenefits.va.gov>
and

1. Click on **Access My Documents** at the top of the page
2. Scroll to the "Health" section and select **Manage My Authorizations and Preferences (VLER)**
3. Click on **Share Your Electronic Health Information With Non-VA Health Care Providers**
4. Print and complete the "**VLER Authorization Form**" and submit to your VA Medical Center by mail or in person

OR

Call the toll-free VLER Health Information
line **1-877-771-VLER (8537)**

OR

Visit your local VA Medical Center's
Release of Information Office

Empowering You.
Working to Improve Your Health Outcomes.

www.va.gov/vler/vlerhealth.asp

April 2014



*Do You See Non-VA
Health Care Providers?*

Virtual Lifetime
Electronic Record
(VLER) Health
May Help You.

Empowering You.
Working to Improve Your Health Outcomes.

www.va.gov/vler/vlerhealth.asp

Annotated Bibliography

- * Source not part of the literature review used only for topic information knowledge.
- ** Sources added to the literature review for supplemental information.
- *** Sources used in the literature review to provide additional contextual information.

Banty, L., Bennett, J., Botts, N., Bouhaddou, O., Cromwell, T., Hunolt, E., Mercincavage, L., Olinger, L., and Pan, E. (2014). The Department of Veterans Affairs' (VA) implementation of the Virtual Lifetime Electronic Record (VLER): Findings and lessons learned from Health Information Exchange at 12 sites. *International Journal of Medical Informatics*. No. 83.

This source is, by far, the most current and substantive report on the VLER project. It has detailed information about the VLER program status at the VA and how that status has progressed to the point of being adopted system wide. The article was completed by subject matter experts for an audience familiar with electronic health records however it still has useful information that is accessible for electronic records novices. This is the "go-to" source for information on VLER at this time. Nothing else comes close or can be compared at this point. Insights that were most useful were the figure depicting the VLER system, as well as, the direct quotes from participants in the program which demonstrated its value to end users. This is also the only peer-reviewed journal source that was located on this topic.

Bultman, R. (2009). Creation of a Joint Virtual Lifetime Electronic Record. *Officer Review Magazine*. Vol. 49, Issue 3.

The Retired General reporting for magazine in an article for mass media consumption. The General references the press release on VLER by the President, VA, and DOD. The article then goes on to discuss the budgets of the VA and DOD. VLER is not a stand-out within that part of the discussion. Very limited information.

***Liang, L. (2010). *Connected For Health: Using Electronic Health Records to Transform Care Delivery*. San Francisco, California: Jossey-Bass.

Liang (2010) discusses electronic health records in detail. This is a book and it is general in its presentation on health records meaning that it is not VLER specific. There is no mention of the VLER project in this book. It provides an over-arching understanding of electronic records that is accessible for not familiar with these systems.

National Guard Association. (2009). President Unveils Virtual Lifetime Electronic Record. *National Guard*. Vol. 63, Issue 5.

Seven paragraph article released for general public. This article discusses press release by the President, VA, and DOD. There are a few quotes from the President about the need for and importance of VLER but nothing in detail.

*Nationwide Health Information Network Exchange. What is the eHealth Exchange? Retrieved, September 10, 2014, from

http://healthit.hhs.gov/portal/server.pt?open=512&objID=1407&parentname=CommunityPage&parentid=8&mode=2&in_hi_userid=11113&cached=true

Figure 1 used to give a depiction of the information contained in the report.

National Journal Group, Inc. (2009). Defense, VA Departments to Create Common Health Records. *Congress Daily*. 19366132.

This press release references the announcement by the President, VA, and DOD on VLER. Further points include how the record is part of an attempt to create a record that starts with induction and ends with reintegration. Article briefly mentions VLER as an attempt to stream-line and speed-up VA processing of claims. Reference is made to VLER as a model for other electronic health record systems.

*Rickard, D. (2013). Virtual Lifetime Electronic Record (VLER). United States Department of Veterans Affairs.

This source is a power point presentation from the Program Manager VLER Benefits IT Program Management Office. Program and product overview, implementations, applications, technology platform sections in only 10 pages seem directed for insider update. This power point is heavily laden with acronyms

and data without reference. Not useful as an information source for outsiders without the additional support provided by a presenter.

***Romero, C. (2014). CCSi Awarded VA Contract to Enable Rural-Area Veterans Access to Benefit Systems. *Business Wire*.

This press release from CCSi on the award of the VLER project contract provides good information. Article discusses VLER and how it is going to be implemented by CCSi with the use of RHCC personnel located at VAMC sites across the United States. Accessible information about the VLER program but without additional details it is limited in research value.

**The American Legion. (2012). Resolution No. 42: Virtual Lifetime Electronic Record. National Executive Committee.

A copy of the resolution passed by The American Legion supporting VLER. Reference is made to the inability of VA and DOD to communicate effectively electronically regarding health records. Additionally, notes that over 2 million OEF/OIF/OND veterans will be in need of care. Another point of importance notes that The American Legion has over 2,000 accredited VSOs that access the Veterans Benefits Administration data-base.

**The American Legion. (2013). The dilemma of electronic health records. *Veterans Health Center*.

Article completed by VSO for veteran readers. This publication discusses VLER in an introductory manner. References made to the announcement of VLER by the President, VA, and DOD, as well as Resolution 42 by The Legion supporting the program. References also include brief points about adjustments to the program and the difficulties and delays in its implementation. Discussion is brief on eBenefits and Blue Button as well. The Legion was not included in the electronic records discussion. Over-all tone seems “inpatient” and this focus will be relayed to that membership audience.

Worldwide Videotex. (2011). MEDfx Demos Potential of Connected Healthcare. *GUI Program News*. Vol. 23, No. 11.

Press release completed on a company that helped to develop the concept, hardware, and software behind electronic health records. This company developed connect which is the tool used to access the national health exchange that passes through the VA firewall. The article mentions the VA and the military but does not specify the VLER project.

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