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Education on My Healthevet to Increase Access to Psychiatric Healthcare for Veterans

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A Review of the Literature

By

Roxann Hackbarth PMHNP

A paper submitted in partial fulfilment of the requirements for the degree

Doctor of Nursing Practice

South Dakota State University

Education on My Healthevet to Increase Access to Psychiatric Healthcare in Veterans

This Doctor of Nursing Practice (DNP) Project is approved as a credible and independent investigation by a candidate for the DNP degree and is acceptable for meeting the project requirements for this degree. Acceptance of this DNP Project does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

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Abstract

Introduction: Access to mental health care can be challenging for many veterans. The Veterans Health Administration (VHA) developed the patient portal My Healthevet (MHV) to increase access to healthcare services. Despite this program, many veterans still do not take advantage of the portal. The goal of this literature review was to gain knowledge on benefits and barriers of using patient portals, identification of patients who use and do not use patient portals, and interventions to increase the use of patient portals. **Evidence Summary:** The use of patient portals, including the VHA portal MHV, helps to increase interactions between clinicians and their patients; however, there are still many veterans that are not utilizing MHV.

Gaps: There are limited studies which specifically look at the current use of MHV. Additionally, there are limited studies which identify current awareness, understanding and barriers which supports the use of MHV.

Recommendations for Practice: Recommendations for practice include staff assessing current use of MHV on admission to an acute care setting, provide education on MHV with enrollment prior to discharge, and post discharge assessment of the veteran's use of MHV.

Keywords: awareness, barriers, education, mental health, patient portal, questionnaire, veteran

Education on My Healthevet to Increase Access to Psychiatric Healthcare for Veterans

My HealtheVet (MHV) is the patient portal the United States Department of Veterans Affairs Health Administration (VHA) started using in 2003. The goal of MHV was to increase knowledge, improve health, and increased interaction (Tsai & Rosenheck, 2012). According to the VHA Secure Messaging Statistics Report (2019) as of October 2019 nationally 51.32% of veterans are currently enrolled in MHV. Veteran awareness of MHV is less than 58% in the implementing VHA hospital, and less than 50% of them are utilizing MHV (Huang, Muz, Kim, & Gasper, 2017). Approximately 41% of all registered veterans through the VHA live in rural areas (Brennan, 2017). Challenges rural veterans face in receiving psychiatric care include long travel time, limited transportation, and limited clinicians. Improving the awareness, use, and identification of barriers to using MHV is needed to improve psychiatric care for veterans.

This project aimed to improve use of MHV to increase access to psychiatric care for veterans. The project question is as follows: In psychiatrically stable adult veterans living in a rural area who are discharged from an inpatient mental health unit (P), how does education on awareness, understanding, and barriers for using MHV and assistance in enrolling in MHV (I) compared to current use of MHV (C) impact the identification of the barriers to and use of MHV for mental healthcare needs and (O) over four weeks (T)?

Literature Review

An extensive literature review directed towards the project question was completed utilizing the following databases: Cochrane Library, Cumulative Index to Nursing and Allied health Literature (CINAHL), Medline, and PubMed. The search strategy utilized included a combination of the following *keywords*: awareness, barriers, education, mental health, patient portal, questionnaire, and veteran. The articles included in this literature review discuss interventions to increase use of a patient portal, the benefits in using patient portals, and barriers to using patient portals. Articles which discussed the use of patient portals in inpatient and outpatient settings were used and included both patients diagnosed with and without a mental health diagnosis. Inclusion criteria for this literature review included articles written in English, peer reviewed, and a publication date of 2016 to present.

Exclusion of articles for this literature review included those implementing a patient portal or articles specifically discussing a specific diagnosis other than a mental health diagnosis. Originally, outpatient settings were excluded from this literature review; however, due to the post discharge status of patients, outpatient settings were included. Articles published prior to 2015 were excluded to ensure the most recent literature for this project.

A total of nine articles were identified which pertained to the clinical question and aligned with the inclusion and exclusion criteria. The Johns Hopkins Nursing Evidence-Based Practice approval tools and evidence rating scales were used to grade each article. Eight Level III articles included structured reviews, systemic review, cross sectional review, and randomized intervention. One Level VI article was included comprising of an observational cohort study and a non-experimental descriptive article. The articles were graded wither A or B with a majority of the articles receiving a grade of B. The grades of A or B categorizes them as either high or good quality respectively (see Appendix A).

The Appraisal of Guidelines for Research and Evaluation (AGREE II) instrument was used to assess the clinical practice guidelines. The AGREE II is comprised of 23 items grouped into six domains including the scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence. Each domain is

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scored on a seven-point scale, one indicates no information or poorly reported, the highest score of seven indicates exceptional reporting and all criteria is met (Brouwers et., 2010).

Synthesis of Evidence

Identification of patients using portals. Identification of patients who use or do not use patient portals is important as the use of patient portals have the potential of increasing positive outcomes in patient care. Although the use of patient portals has been identified as potentially improving patient outcomes, little research has been conducted on which patients are using the portals. Hoogenbosch et al (2018) found 145 of the 439 participants used the portal while 294 either knew about the portal and did not use or had no knowledge of the portal. Patients using the portal were found to have a higher health literacy. Predictors of portal use were younger patients, chronically ill, and retired individuals.

Interventions to increase portal use. Stein et al. (2018) found of the 70 participants of the study participants are more likely to register and use patient portals when they had been provided both a brief educational intervention and written information. Additionally, Stein et al. (2018) found patients who had regular access to email were more apt to actively use patient portals.

Benefits of patient portals. Kipping, Stuckey, Hernandez, Nguyen, & Riahi (2016) followed 461 participants for one year to monitor the use of the patient portal available through the facility where the study was conducted. The use of patient portals increased the interactions between the health care team and patients. Increased use of patient portals has shown an increase in adherence to treatments, a decrease in medical errors including medication errors, increase communication between the health care team and the patients. Han et al. (2019) reviewed 24 articles focused on improved patient outcomes when using a patient portal. Patient portal use

overall improved psychological outcomes, medication adherence and preventative services. Sieck, Hefner, & McAlearney (2018) conducted 29 interviews with patients identified as experienced portal users. Findings included logistical benefits with increased efficiency, improved ability to track health information and improvement in documentation of communication. Psychological benefits including increased collaboration, increased trust in clinicians, and increased engagement including refilling medications.

Barriers. Although patient portals have been available for several years, the rate of adoption by patients has been low. Identification of barriers may serve as a useful tool to increase the use of patient portals. Showell (2017) reviewed 34 articles focused on identification of barriers in using patient portals. Negative attitudes, concerns for privacy and decreased health literacy were all barriers identified in using patient portals. Kumar & Stewart (2018) interviewed 22 clinical staff who identified login issues as a major hinderance to patients using the portal. Login issues included patients not being able to find the portal web page and not having the correct password. Zhao et al. (2018) reviewed 32 articles identifying barriers to using patient portals. The articles identified negative attitudes, limited knowledge, and privacy concerns as barriers., Mishuris et al. (2015) interviewed 14 veterans to identify barriers to using patient portals. Limited knowledge of patient portals, concerns on decreasing personal interactions with clinicians, and decreased access to electronics including computers were identified as barriers.

Gaps in the Literature

The literature review identified several gaps in identification of interventions increasing the use of patient portals. Barriers to patient portal use were identified (Kumar & Stewart, 2018; Mishuris et al., 2015; Showell, 2017; Zhao et al, 2018); although there was limited supporting evidence on how to decrease these barriers. Gaps in the literature include identification of

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barriers, which educational programs support the use of patient portals, and long-term benefits of using patient portals. A significant gap in the literature is about rural veterans using MHV. As most of the literature pertaining to any aspects of the use of patient portals is prior to 2015 this indicates an extensive gap in the literature. Articles prior to 2015 did indicate education was beneficial; however, there was not information on what method of education was used. Additionally, articles prior to 2015 did not take into account the advancements made in development of patient portals, increased health literacy of patients, and increased availability of internet use.

Recommendations for Practice

Kumar & Stewarf (2018), propose healthcare organizations need to invest improving access to patient portals including increasing health literacy, education, and training for both patients and staff. Recommendations for practice change include assessment of current portal use during acute hospitalizations, providing individualized education to patient wanting to enroll, assisting in enrollment prior to discharge, and follow up assessment of use and understanding post discharge (Kipping et al., 2016 & Stein et al., 2018. Additional recommendations include individually focused interventions in vulnerable populations as this has been shown to increase use of patient portals (Grossman et al., 2019).

Conclusion

The goal of this project was to promote use of MHV to increase access to psychiatric care for rural veterans. The literature supports the use of patient portals to increase positive outcomes in the treatment of patients including those with a psychiatric diagnosis. Currently there is limited literature which identifies how rural veterans use MHV, perceived barriers or how education promotes use. This project helped identify current use and barriers to increase use of MHV. As the facility currently has MHV imbedded in the budget, sustainability of MHV is assured; however, the recommendation of developing a "super user" team will need to be done to promote the use of MHV.

References

- Brouwers, M. C., Kho, M. E., Browman, G. P., Burgers, J. S., Cluzeau, F., Feder, G., Fervers, B., Graham, I. D., Grimshaw, J., Hanna, S. E., Littlejohns, P., Makarski, J., Zitzelsberger, L., & AGREE Next Steps Consortium (2010). AGREE II: Advancing guideline development, reporting and evaluation in health care. *Canadian Medical Association 182*(18), 839–842. https://doi.org/10.1503/cmaj.090449
- Grossman, L. V., Creber-Masterson, R. M., Benda, N. C., Wright, D., Vawdrey, D. K., & Ancker, J. S. (2019). Interventions to increase patient portal use in vulnerable populations: A system review. *Journal of the American Medical Informatics Association*, 26(8-9), 855-870. Retrieved from https://academic.oup.com/jamia/article/26/8-9/855/5432090
- Han, H. R., Gleason, K. T., Sun, C. A., Miller, H. N., Kang, S. J., Chow, S., Anderson, R., Nagy,
 P., & Bauer, T. (2019). Using patient portals to improve patient outcomes: Systematic review. *Journal of Medical Internet Research*, 6(4), e15038.
 https://doi.org/10.2196/15038
- Hoogenbosch, B., Postma, J., de Man-van Ginkel, J. M., Tiemessen, N. A., van Delden, J. J., & van Os-Medendorp, H. (2018). Use and the users of a patient portal: Cross-sectional study. *Journal of Medical Internet Research*, 20(9), e262. https://doi.org/10.2196/jmir.9418
- Kipping, S., Stuckey, M. I., Hernandez, A., Nguyen, T., & Riahi, S. (2016). A web-based patient portal for mental health care: Benefits evaluation. *Journal of Medical Internet Research*, 18(11), e294. https://doi.org/10.2196/jmir.6483

- Kumar S., & Stewart R. L. (2018). Barriers that affect the use of patient portals. *Journal of Hospital Health Care Administration* 20(5),183. doi: 10.29011/JHHA-117.000017.
- Mishuris, R. G., Stewart, M., Fix, G. M., Marcello, T., McInnes, D. K., Hogan, T. P., Boardman, J. B., & Simon, S. R. (2015). Barriers to patient portal access among veterans receiving home-based primary care: A qualitative study. *Health expectations: An International Journal of Public Participation in Health Care and Health Policy*, *18*(6), 2296–2305. https://doi.org/10.1111/hex.12199
- Showell C. (2017). Barriers to the use of personal health records by patients: A structured review. *PeerJ*, *5*, e3268. https://doi.org/10.7717/peerj.3268
- Sieck, C. J., Hefner, J. L., & McAlearney, A., S. (2018) Improving the patient experience through patient portals: Insights from experienced portal users, *Patient Experience Journal*, 5(3), 47-54. doi: 10.35680/2372-0247.1269
- Stein, J. N., Klein, J. W., Payne, T. H., Jackson, S. L., Peacock, S., Oster, N. V., Carpenter, T. P., & Elmore, J. G. (2018). Communicating with vulnerable patient populations: A randomized intervention to teach inpatients to use the electronic patient portal. *Applied Clinical Informatics*, 9(4), 875–883. https://doi.org/10.1055/s-0038-1676333
- Zhao, J. Y., Song, B., Anand, E., Schwartz, D., Panesar, M., Jackson, G. P., & Elkin, P. L.
 (2018). Barriers, facilitators, and solutions to optimal patient portal and personal health record use: A systematic review of the literature. *American Medical Informatics Association... Annual Symposium proceedings. American Medical Informatics Association Symposium*, 2017, 1913–1922.

Appendix A

Evidence Table

Article #	Author(s) & Date	Study Design	Participants, Sample Size & Setting	Intervention	Results	Comments (Strengths/Weaknesses	Evidence Level, Quality
1	Han et al., 2019	Systemic Review	24 studies included in review. 21 of the studies were conducted in the United States. Samples in the studies ranged from 50 to 22,703	Studies included in this review evaluated portal interventions, psychobehavioral outcomes, and effects of portal use on clinical outcomes	Use of patient portals improved health knowledge, medication adherence and self-efficacy. Consistency of improved medications adherence regardless of the study design. Portal interventions overall showed little effect on clinical outcomes.	Strength: Patient portals can increase health literacy, improve medication adherence, and autonomy. Weakness: The use of patient portals has insufficient evidence for improvement in clinical outcomes.	Level III Grade B
2	Hoogenbosch et al., 2018	Cross Sectional	439 adult patients were included in the study. The study was conducted in the outpatient department at	Researchers collected data using a structured paper questionnaire on the use of the patient portal.	32.1% of the participants identified as using the portal, 31.2% identified as non-users aware of the	Strength: The study showed patients are not using the portals available to them which indicates increased education can improve use.	Level III Grade B

			4		4	11.0	
			hospital in the		being non-users	When given in person	
			Netherlands.		and not aware	education as opposed	
					of the portal.	to leaflets, there was	
						an increase in portal	
					The best	use.	
					predictor of		
					portal use was	Weakness: Participants	
					chronic illness	not aware of the portal	
					and increased	was not able to answer	
					health literacy.	the questions which	
						led to selective	
						information	
						information.	
						Patients admitted to	
						the hospital were	
						eliminated from the	
						ciminated nem me	
						study, it is unknown if	
						the hospitalized	
						patients use the	
						portals.	
						The different	
						The once on	
						departments were not	
						individually analyzed	
						to determine which	
						subgroup used the	
						portals more.	
3	Kipping et	Observational	461	Web based	461 patients	Strengths: Users self-	Level IV
	al., 2016	cohort study	combination	access to view	registered for	enrolled, the results	Grade A
			inpatient and	records and	the portal, the	reflect actual use.	
			outpatients in	communicate	use of the portal	Research personal did	
			a tertiary level	with clinicians.	over 1 year was	not have any	
			-	Users could	4761. The	involvement in	

			mental health care facility.	attend portal training or support sessions led by the coordinator. Web based surveys at baseline, 6- and 10-months post enrollment were given for use.	Mental Health Recovery Measures (MHRM) scores increased from 70.4 to 81.7. Of the 8 recovery domains 7 increased at follow -up. The System and use Survey Tool reveled users felt a sense of autonomy.	development of the portal to decrease bias. The participants were followed for a year making it have high internal validity. Weakness: The study did not have a control group for the MHRM. Mental health treatment over the time may contribute to improved recovery as opposed to use of the portal. Using web- based surveys prevented analysis using repeated	
4	Kumar & Stewart, 2018	Mixed methods	22 randomly selected employees from a health care facility, trained on the portal, employed more than 30 days, and have helped with portal questions.	Survey questionnaires and interviews assessing what questions patients ask when requesting information on portals, identification of barriers.	The study found a large portion of the patients interviewed had issues with logging into the portal. Navigating the portal was also a barrier along with logging	measures design. Strengths: Using both qualitative and quantitative statistics increased the validity of the study. Identification of the major barrier in using the portal. Weakness: Low number of participants, limited demographics and lack of diagnosis	Level IV Grade B

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					into the wrong site.	of diagnosis of the patient's interviewed.	
5	Mishuris et al., 2015	Qualitative	14 veterans receiving home-based primary care, 3 home-based primary staff care members.	Semi-structured interview focused on reason for services, comfort/general use of computers, prior knowledge/use of My Healthevet, impressions of My Healthevet, and others that may use the portal on their behalf.	Limited knowledge of the portal, limited computer uses and decreased internet use. Increased desire to learn more of the portal and to allow surrogates to use the portal.	Strengths: Identification of specific barriers to using the portal. Education on using the portal has the potential to increase use. Weakness: Low sample size, only five themes were assessed limiting identification of other barriers.	Level III Grade B
6	Sieck, Hefner, & McAlearney, 2018	Qualitative study	29 patients identified as experienced portal users. The study took place in a large medical center.	30-minute semi- structured interviews conducted by trained interviewers. The interview addressed reasons for use of the portal, how they use the portal, and perspectives of the portal.	Logistical benefits, increased clinician communication, increase collaboration, increased trust with their clinician.	Strengths: Actual participant quotes, identifying both logistical and psychological benefits. Weakness: Limited participants, only reviewing on portal system, not differentiating between increased engagement is why the	Level III Grade B

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						participants used the portal.	
7	Showell, 2017	Structured literature review	34 articles were included in the review. The articles included a mix of interviews and questionnaires.	The articles included in this review evaluated what the barriers are to using patient portals.	The articles included in this review identified 21 barriers to using portals.	Strengths: The review looked at over 300 articles before using the 34 for this review. The articles only looked at barriers which helped with the identification of barriers. Weakness: 11 of the articles excluded participants who were less affluent, less capable or marginalized which can skew the results.	Level III Grade B
8	Stein et al., 2018	Randomized Intervention	70 patients from an inpatient medical unit in a county hospital.	In person introduction to the patient portal. Determination on current registration, use, instruction on navigation of portal, and having the patient demonstrate finding	Participants had a positive perception of the portal, education increased use of the portal, and lack of email was a barrier.	Strengths: The study was conducted using vulnerable patients, assessment of current use of the portal and identification of barriers. Found education increases use. Weakness: The control group was not assisted in setting up the portal or provided education.	Level III Grade B

						patients not psychiatric patients.	
9	Zhao et al., 2018	Systemic literature review	32 articles included in the review. The articles were a combination of quantitative, qualitative, and mixed methods.	The articles included in this review evaluated the barriers, facilitators, and solutions in using patient portals.	Several of the articles identified decreased knowledge of the portal, decreased education on portal use, and privacy concerns as barriers. Facilitators included successful registration, the portal is seen as beneficial, and feedback loops.	Strengths: Identification of both barriers and facilitators is helpful in identifying where improvements need to happen to increase use of portals. Weakness: The articles used are five years and older, current articles could identify additional barriers and facilitators.	Level III Grade B

Running head: EDUCATION ON MY HEALTHEVET

Education on My Healthevet to Increase Access to Psychiatric Healthcare for Veterans Methodology

> By Roxann Hackbarth PMHNP

A paper submitted in partial fulfillment of the requirements for the degree Doctor of Nursing practice South Dakota State University Education on My Healthevet to Increase Access to Psychiatric Healthcare in Veterans

This Doctor of Nursing practice (DNP) Project is approved as a credible and independent investigation by a candidate for the DNP degree and is acceptable for meeting the project requirements for this degree. Acceptance of this DNP Project does not imply that the conclusions reached by the candidate are necessarily the conclusion of the major department.

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First and foremost, my sincere gratitude to Dr. Gibson and Dr. Foland for their invaluable advice, support, and extreme patience during my DNP study. Their immense knowledge and experience have guided me in my academics and will continue long into the future in my practice. I have tremendous gratitude to Dr. Burdette and Dr. Krishnan for their assistance in my DNP study, it was an honor to have them be a part of my committee. Additionally, I am grateful to the facility where I conducted my project, without their support this would not have been possible. To my children who have lived with this project for an exceedingly long time and were most forgiving for the time it took from them, thank you. I want to acknowledge and thank my dad for although he is no longer with me, he was always supportive and would be so enormously proud. And finally, my husband, there are no words to express the level of love and support he has given to me; therefore, I will just tell him always.

Abstract

Introduction: Patient portals have shown several benefits in improving psychiatric care. Improvements include increased patient satisfactions with care, engagement in treatment, and adherence to the treatment plan. Currently, a large proportion of Veterans are not utilizing the patient portal, My Healthevet (MHV) with little research into barriers for use.

Objective: This project aimed to assess awareness, understanding, and identification of barriers for using MHV and how after a brief educational intervention if there was an increase in awareness, understanding, and use.

Methods: A process improvement design was used for this project. A total of 10 participants completed the pre-intervention questionnaire and engaged in the educational session. The 10 participants were emailed one week post discharge. Of the 10 participants eight required the follow up phone call. Two weeks post discharge the post intervention questionnaire was sent via electronic mail (email); two of the 10 participants returned the post intervention questionnaire. The project coordinator was able to contact two of the 10 participants for post intervention closure and to answer any questions. **Results:** A total of 18 inpatient psychiatrically stable patients were invited to participate in the project. Of the 18, 10 agreed to participate and engaged in the intervention. Two of the 10 participants completed the post intervention questionnaire. The other eight initial

participants did not maintain contact with the project coordinator.

Conclusions: Veterans with a mental health diagnosis in the inpatient setting were interested in education on MHV while remaining in the hospital. Post discharge resulted in a decrease in communication and engagement with using MHV. Although the

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educational intervention showed limited improvement, a more intensive education may improve post hospitalization use. Support from the outpatient psychiatric team has the potential of increasing the use of MHV due to increased contact with the patient. Continuation and advancement of this project has the potential of increasing the use of MHV and increasing positive patient outcomes.

Keywords: awareness, barriers, education, mental health, patient portal, questionnaire, veteran

Education on My Healthevet to Increase Access to Psychiatric Healthcare for Veterans Introduction

Patient portals offer a secure method for patient to access their records, schedule appointments, refill medications and send messages to their clinicians. My Healthevet (MHV) is the patient portal the United States Department of Veterans Affairs Health Administration (VHA) started using in 2003. The goal of MHV was to increase knowledge, improve health, and increase interaction (Tsai & Rosenheck, 2012). According to the VHA Secure Messaging Statistics Report (2019) as of October 2019 nationally 51.32% of veterans are currently enrolled in MHV. Veteran awareness of MHV is less than 58% in the implementing VHA hospital, and less than 50% of them are utilizing MHV (Huang, Muz, Kim, & Gasper, 2017). Little research has been conducted to determine barriers which may impede veterans using MHV.

Approximately 41% of all VHA registered veterans live in rural areas (Brennan, 2017). The determination of rurality was based on the Health Professional Shortage Area (HRSA) designating the county the veteran lives in as rural. Challenges rural veterans face in receiving psychiatric care include long travel time, limited transportation, and fewer clinicians. In 2016, the VHA interviewed rural veterans to gather information on their attitudes on psychiatric care. The veterans identified maintaining independence and stigma associated with psychiatric care as their greatest concerns (U.S. Department of Veterans Affairs, n.d.).

The project aimed to improve awareness, understanding and identify barriers in rural veterans using My Healthevet. The clinical question guiding this project is: In psychiatrically stable adult veterans living in a rural area who are discharged from an inpatient mental health unit (P), how does education on awareness, understanding, and barriers for using MHV and

1

assistance in enrolling in MHV (I) compared to current use of MHV (C) impact the identification of the barriers to and use of MHV for mental healthcare needs (O) over four weeks (T).

Materials and Methods

Evidence Findings

Several benefits of patient portals have been identified and support increased interaction between patients and their clinicians. The use of patient portals has been shown to increase adherence to treatment, increase communication between the patient's health care team including the clinician, and greater autonomy (Kipping, Stuckey, Hernandez, Nguyen, & Riahi (2016). Additionally, increased psychological trust has been identified including between patients and their clinicians (Han et al., 2019; Sieck, Hefner, & McAlearney, 2018).

Gaps in the Evidence and Recommendations for Practice

The most significant gap in the literature is the lack of studies on how educational methods increase knowledge and use of patient portals and which types of educational methods are most useful. Additional gaps in the literature include limited studies focusing on portal use in psychiatric patients, identification of rational for not using the portal, and how nursing can increase the use of portals. The gaps in the literature may be due to literature not reviewed prior to 2015. Articles published prior to 2015 did focus on initial educational methods were used to educate patients on the use of portals; however, the methods have not been retested with the advancements in the portals now being used.

Recommendations for practice support changes in assessment. Included in the recommendations were an assessment of current portal use during acute hospitalizations, providing individualized education to the patient wanting to enroll, assisting in enrollment prior to discharge, and follow up assessment of use and understanding post discharge. The

development of a super user team would ensure patients would have the assessment and education on MHV.

The super user team would meet with patients during hospitalization when medically stable for an assessment of current knowledge and use of MHV. The team member known as the mentor, would provide individualized education on MHV, assist in registering if they do not have an account, and assist in navigating the portal. Post discharge the super user team member who worked with the patient while still hospitalized would be responsible for the post hospitalization follow up. The MHV mentor would assist the patient to schedule follow up appointments, request refills on medications, and send secured messages to the patients' clinician. The mentorship would continue for a minimum of six months or until the patient did not need further assistance.

Setting

This project took place on an inpatient psychiatric unit in a VHA hospital in the Midwest. The psychiatric unit consists of 10 beds, two of the rooms are double occupancy. The length of stay varies at the facility with the average length of stay being seven days.

Sample

The sample for this project were inpatient psychiatrically stable veterans with a mental health diagnosis who live in a rural area. Additional inclusion criteria were being 18 years of age and older and able to read and write English. All ethnicities were included. Exclusion criteria were non-English speaking patients and those who had fixed baseline delusions of electronics. The participants were also psychiatrically stable and within 48 hours of discharge. Psychiatric stability is defined as euthymic mood with congruent affect, intact concentration, insight, and judgement, with coherent, logical, organized and goal directed thoughts.

Development of Intervention Tool

This project used two Likert scale questionnaires. The first questionnaire (see Appendix D) was given pre-intervention for assessment of current knowledge, use and perceived barriers to using MHV. The second questionnaire (see Appendix G) was given two weeks after discharge for assessment of knowledge, use, and perceived barriers to using MHV. The questionnaires were developed by the project coordinator. The questionnaires were reviewed by the medical director of the psychiatric unit, the nurse manager of the psychiatric unit, and psychiatrist working on the psychiatric unit. The reviewers did not make any recommendations to change the questionnaires. In developing the questionnaires, consideration was taken into the clinical question guiding this project, use of a Likert scale, item generation, and ability to demonstrate reliability (Rattray & Jones, 2007). The educational intervention for this project was based on the current information being used from the facility. The facility developed all education material at the time MVH was developed. The educational intervention consisted of explaining what MHV is, the different types of accounts, available resources, and the terms and conditions of using MHV (see Appendix E). Review of preexisting MHV handouts was provided to all participants. The handouts were obtained from the education department.

Project Procedure

Pre intervention. The project coordinator met with the psychiatric clinicians treating patients on the mental health unit to discuss the purpose of the project and intervention. The staff on the mental health unit were provided information about the project. Prior to approaching potential participants, the project coordinator discussed with the patient's primary psychiatric clinician if the patient was psychiatrically stable to participate in the project. When the clinician

determined the patient was psychiatrically stable, the patient was invited to discuss the project and participation.

Intervention. The patient met fact-to-face with the project coordinator for a minimum of 30 minutes to discuss the project, the discussion was conducted in the visitor's room to assure privacy. The visitor's room is in the secured hallway adjacent to the psychiatric unit. The room has an independent door which was kept closed during the intervention. The project coordinator provided information on MHV utilizing oral and written information. The patient was provided time for discussing questions or concerns regarding their participation in the project. If the patient agreed to participate in the project the consent form was reviewed and signed. The patient was then considered a participant and was given the pre intervention questionnaire (see Appendix D). After completion of the questionnaire, the project coordinator assisted the participant in registering for MHV if they did not already have an account or did not have the premium account. The participant was escorted to the MHV station where they were either enrolled or their account was updated to premium. The project coordinator met with the participant on the day of discharge to address follow-up questions or concerns the participant may have had.

Post intervention. The project coordinator emailed the participants using secure messenger feature of MHV one week after discharged. The email was entitled *test* reminding the participant of the follow-up phone call the following week with a return email request for assessment of use. Of the 10 participants, two answered the e-mail. The project coordinator attempted to make contact via a phone call to the eight participants who did not answer the email after 48 hours. None of the eight responded to the phone call and were not contacted further.

The second week post discharge, the project coordinator sent the two remaining participants a second email with the post intervention questionnaire and requested it be filled out and returned to the project coordinator via email. Both participants returned the post intervention questionnaire. The project coordinator called to review the post intervention questionnaire and discuss any questions or concerns the two participants had. During the final post-intervention phone call, the project coordinator provided the participant with the name and phone number of the MHV coordinator from the facility if they needed further assistance with using MHV (see Appendix H).

Clinical Outcomes

Clinical outcomes for this project focused on increasing awareness, understanding, and identification of barriers for using MHV. Each of the 10 participants who initially agreed to take part in the project had knowledge of MHV before the educational intervention was given. All 10 participants completed the pre-intervention questionnaire. Two participants completed the post-intervention questionnaire, and they had an increase in knowledge of MHV. The increase in knowledge included learning how to use secured messaging, requesting medications, and requesting appointments. The two participants who responded post-intervention indicated they had used MHV for sending secured messages after getting the educational intervention. One participant used MHV to request a refill of medications, one scheduled an appointment with their out-patient psychiatric clinician using MHV. Neither of the two post-intervention participants identified any barriers to using MHV.

Ethical Considerations

Confidentiality of the participants was maintained by the project coordinator throughout the project. The participants' questionnaires were coded using the last four digits of their social security followed by the first letter of their first and middle name. The identification of the participant is located on the top right of both questionnaires (see Appendix D and G). Once the project was concluded, participant information was destroyed by the security officer of the facility per VHA protocol.

Approval for the project was granted from the project coordinator's university human subject committee prior to implementation (see Appendix A). The project facility does not have an Institutional Review Board; however, approval to carry out this project was obtained from the education department (see Appendix B). The project coordinator developed a consent form with answers to possible questions the participants may have (see Appendix C).

Stakeholders

The primary key stakeholder for this project is the nursing training coordinator. Additional stakeholders include the psychiatric team including nursing staff and clinicians as use of patient portals increases treatment adherence and communication.

Theory

The Iowa Model of Evidence Based Practice (IMEBP) (Iowa Model Collaborative, 2017) was used to guide the project as it aligns with the evidence-based practice model utilized by the implementing facility. Dorothea Orem's Self Care Deficit Theory (Gonzalo, 2021) and Kurt Lewin's Three-Step Change Theory (Raza, 2019) are the theories which were used to support the project.

Results

The project coordinator collected data from the pre and post intervention questionnaires. Other data were collected from the demographic data form. Descriptive statistics were calculated which included means (standard deviations) and medians (interquartile range) for quantitative data and frequencies and percentages (relative frequencies) for categorical data.

Demographics

This project had a total of 10 participants. The participants ages ranged from 18 to over 65 years of age. One participant was in each of the following ranges: 18-24, 35-44, and over 65. Three participants were aged 25 to 34, and two participants each were between 45 to 54 and 55 to 64 (see Appendix I).

Of the participants, nine identified as male. One participant identified as female. All participants described themselves as white. Half of the of Veterans described themselves as living in urban and half rural environments (see Appendix I).

Half of participants reported owning their own home, three reported renting a home or apartment, and two described their living situations as other. Half of the participants classified themselves as being divorced, two described themselves as married, of the remaining participants, one described themself as separated, one described themself as never married, and on described themselves as widow or widowed. Of the participants, two participants reported having a bachelor's degree, one reported having an associate degree, four reported attending college for a period of time, one reported attending a trade school, and two identified having a high school education. All participants reported having access to the internet (see Appendix I).

Internet usage

Of the participants, six of veterans reported using email daily, two reported using email less than once per month, and one veteran each reported using the email weekly and monthly. Internet usage showed four participants used the internet to order items daily, three reported using the internet to order items monthly, two reported using the internet to order items less than

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once a month, and the remaining participants reported never using the internet to order items. Half of the participants' reported using the internet daily for research, three described themselves as using the internet weekly for research, while two, one each, reported using the internet weekly and less than once a month for research. Internet use for gaming showed seven participants using the internet daily. Additionally, one participant each reported using the internet monthly, weekly, and never for gaming. Participants most used the internet for social media with eight participants reporting daily use. One participant reported using the internet for social media purposes weekly. Only one participant reported never using social media (see Appendix J). Of the two participants who completed the project, both identified as using the internet daily for emails, games, and social media (see Appendix L).

My Healthevet usage

Of the ten participants, seven noted using MHV and all had premium accounts, three of the participants did not use MHV. Of the seven participants who were currently using MHV, four participants described their use of MHV as less than once a month, one reported using MHV monthly, and two participants reported never using MHV. One participant reported using MHV to enter health information, one described their use as accessing the Veterans Health Library, four of participants used MHV to refill prescriptions, two described their MHV use accessing care notes, one accessed lab results. An equal number of participants used MHV to schedule appointments. Four of participants used MHV for secure messages (see Appendix K).

Of the seven participants who were using MHV, four reported MHV somewhat easy to navigate while one participant strongly agreed MHV was easy to navigate. The ability to find information easily on MHV two participants somewhat agreed and two participants strongly agreed. Similarly, an equal number of participants strongly agreed, and somewhat agreed information could be understood. Of the participants, three strongly agreed information was valuable on MHV while one participant somewhat agreed information on MHV was valuable. Of the participants, four strongly agreed MHV increased interactions and one somewhat agreed MHV increased interactions. One participant strongly agreed MHV helped them follow their treatment plan while four participants somewhat agreed MHV helped them follow their treatment plan. Overall, participants used MHV to facilitate their care and strongly agreed MHV enhanced their interactions with their healthcare providers (see Appendix K).

Post intervention, both participants used MHV to communicate with the project coordinator. One participant used MHV to request refills of two medications, and one participant used MHV to request an appointment with their psychiatric clinician (see Appendix L).

Barriers to using MHV

Of the participants, six reported lack of knowledge of MHV including how to log on and available elements of the portal as barriers. The participants with lack of knowledge did not know where to find additional information on MHV to assist with increasing knowledge. Two participants reported MHV to be confusing to use leading to frustration which caused the participants not to use MHV. These two participants stated due to the frustration they did not want to try logging on again and only tried the once. These two participants did present with a negative attitude when discussing MHV. Two participants did not identify any barriers to using MHV (see Appendix K). Post intervention both participants did not identify any barriers to using MHV (see Appendix L).

Discussion

The aim of this project was to assess awareness, understanding, and identification of barriers of using MHV. The project evaluated if a brief educational intervention increased

awareness, understanding, and use. The results of the project indicated most veterans are aware of MHV and have an account; however, they do not actively use the account due to various reasons. Of the ten participants, eight identified lack of knowledge on how to use MHV as the primary reason for not using the portal. Two participants identified the portal as confusing leading to frustration in attempting to use the portal. Similar to previous studies, lack of knowledge and negative attitudes influenced the use of patient portals (Mishuris et al., 2015; Zhao et al., 2018).

The pre-intervention questionnaire indicated a significant number of veterans in the sample were aware of MHV and had an account. Due to only two participants completing the project, it is difficult to determine what improvements are needed to increase the use of MHV. One possible improvement is additional education provided in different formats. Included in this education the functions and navigation of MHV.

Limitations

One limitation of this project was the small number of participants. The mental health unit during the time frame of the study had an average daily census ranging between three to six patients. During the time frame for the project there were 32 admissions, three of the admissions were patients with a neurocognitive disorder diagnosis which excluded them from participation. Patients who had been civilly committed by the project coordinator were not invited to participate in the project due to concerns the patient may feel undo pressure to participate. Of the 29 patients admitted 19 declined to participate. Several of the patients who declined to participate voiced concerns of being tracked by the facility. Other reasons given for not participating included anger at being admitted, not wanting to have to partake in the education and not having interest in MHV.

Barriers

The most significant barrier of this project was recruitment of participants and their continued participation in the project. Decreased census hampered the ability to have a large pool of potential participants. During the timeframe of the project, the average daily census on the unit ranged between three and six patients. Factors contributing to the decrease in census may be related to the time frame of the project due to being over the holidays as the project was conducted prior to Thanksgiving and ended prior to Christmas. The project was conducted during the pandemic which may have contributed to a decrease in patients seeking treatment due to isolating. The project was extended twice to enroll more participants in the project.

Implication for Practice

This quality project promoted an increase in knowledge and usage of MHV. Promoting the use of patient portals has the potential of increasing positive outcomes of treatment goals, improvement of patient satisfaction with treating clinicians, and improvement of documentation of communications between patients and clinicians (Han et al, 2019; Kipping et al., 2016; Sieck, Hefner, & McAlearney, 2018). The results of this project, although limited to two participants supported the educational intervention on MHV. Post intervention, both participants sent the project coordinator a secure message, neither had sent a secure message prior to the education. Developing a team dedicated to education of MHV with intensive follow up has the potential of increasing the use of MHV.

Several studies have shown positive outcomes from the use of MHV and the need for increased use among patients. More studies are needed for assessment of barriers to use, efficient educational programs, and how intensive interventions increase the use of not only MHV but patient portals in general.

Conclusion

This project identified most participants currently have a MHV account; however, despite having the account only a few of the participants actively used MHV. Due to decreased post intervention participation, it is difficult to determine the effectiveness of the brief educational intervention. Further research will need to be conducted to determine if a brief educational intervention will increase the use of patient portals. The use of the super user team will assist in increasing the knowledge of what interventions are most useful to increase use of patient portals. Continuation and advancement of an educational intervention has the potential of increasing the use while identifying barriers to using MHV.

References

Brennan, M. B., (2017). Identifying challenges effecting veteran mental healthcare. Why are they struggling? *Psychology Today*. Retrieved from https://www.psychologytoday.com/us/blog/the-war-within/201707/identifying-challenges-effecting-veteran-mental-healthcare.

- Gonzalo, A. (2021). Dorothea Orem self-care deficit nursing theory explained. *Nurseslabs*. https://nurseslabs.com/dorothea-orems-self-care-theory/
- Han, H. R., Gleason, K. T., Sun, C. A., Miller, H. N., Kang, S. J., Chow, S., Anderson, R., Nagy,
 P., & Bauer, T. (2019). Using patient portals to improve patient outcomes: Systematic review. *Journal of Medical Internet Research, Human Factors*, 6(4), e15038.
 https://doi.org/10.2196/15038
- Hung, G., Muz, B., Kim, S., & Gasper, J. (2017). 2017 Survey of veteran enrollees' health and use of health care. https://www.va.gov/HEALTHPOLICYPLANNING/SOE2017/VA_Enrollees_Report_Da

ta_Findings_Report2.pdf

- Iowa Model Collaborative. (2017). Iowa model of evidence-based practice: Revisions and validation. Worldviews on Evidence-Based Nursing, 14(3), 175-182. doi:10.1111/wvn.12223
- Kipping, S., Stuckey, M. I., Hernandez, A., Nguyen, T., & Riahi, S. (2016). A web-based patient portal for mental health care: Benefits evaluation. *Journal of Medical Internet Research*, 18(11), e294. https://doi.org/10.2196/jmir.6483

- Kumar S, & Stewart RL. (2018) Barriers that affect the use of patient portals. *Journal of Hospital Health Care Administrators*, 20(5), 183. doi: 10.29011/JHHA-117.000017.
- Mishuris, R. G., Stewart, M., Fix, G. M., Marcello, T., McInnes, D. K., Hogan, T. P., Boardman, J. B., & Simon, S. R. (2015). Barriers to patient portal access among veterans receiving home-based primary care: A qualitative study. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*, *18*(6), 2296–2305. https://doi.org/10.1111/hex.12199
- Rattray, J. & Jones, M. C. (2007). Essential elements of questionnaire design and development. Journal of Clinical Nursing, 16(2), 234-243.

https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1365-2702.2006.01573.x

- Raza, M. (2019). Lewin's 3 stage model of change explained. *BMC Blogs*. https://www.bmc.com/blogs/lewin-three-stage-model-change/
- Sieck, C. J., Hefner, J. L., & McAlearney, A., S. (2018). Improving the patient experience through patient portals: Insights from experienced portal users. *Patient Experience Journal*, 5(3), 47-54. doi: 10.35680/2347.1269
- Tsai, J., & Rosenheck, R. A. (2012). Use of the internet and an online personal health record system by US veterans: Comparison of Veterans Affairs mental health service users and other veterans nationally. *Journal of the American Medical Informatics Association: JAMIA*, 19(6), 1089–1094. doi:10.1136/amiajnl-2012-000971
- US Department of Veterans Affairs Health Administration. (n.d.). *Rural Health*. https://www.research.va.gov/topics/rural_health.cfm#research2
- Zhao, J. Y., Song, B., Anand, E., Schwartz, D., Panesar, M., Jackson, G. P., & Elkin, P. L.(2018). Barriers, facilitators, and solutions to optimal patient portal and personal health

record use: A systematic review of the literature. *American Medical Informatics Association... Annual Symposium proceedings. American Medical Informatics Association Symposium, 2017*, 1913–1922.

Appendix A

University IRB Approval

Hello Roxann Hackbarth, Your application Education on My Healthevet to Increase Access to Psychiatric Healthcare in Veterans has been approved by the Institutional Review Board (IRB) for the protection of human subjects through expedited review. The proposed activity was deemed to be no greater than minimal risk and congruent with expedited category number 7 outlined in 45 CFR 46, section 110. Note: Any changes to the protocol or related documents must be approved by the IRB before implementation. Unanticipated problems or adverse events must be promptly reported to the IRB. SDBOR regulations require that research data be retained for seven years following completion of a study, and research materials for three years. You will be asked to report on the status of your study within one year of this approval. Your approval number is: IRB-2010010-EXP. I wish you the best in your study. Sincerely, Dianne Nagy Research Integrity and Compliance Officer

Appendix B

Facility Approval



DEPARTMENT OF VETERANS AFFAIRS CENTRAL IOWA HEALTH CARE SYSTEM 3600 30th Street Des Moines, IA 50310

July 13, 2020

VA Clinic-Mason City 520 S. Pierce, Suite 150 Mason City, IA 50401

VA Clinic-Ft. Dodge 2419 Second Ave N Ft. Dodge, IA 50501

VA Clinic-Knowlite 1515 West Pleasant St Knowlite, IA 50138

VA Clinic-Marshalltown 101 Iowa Ave W Marshalltown, IA 50158

VA Clinic-Carroll 311 S Clark St, Suite 275 Carroll, IA 51401

To Whom It May Concern,

This letter is written to document support for the DNP Project, "Education on My HealtheVet to Increase Access to Psychiatric Healthcare in Veterans" by Roxann Hackbarth.

VA Central lowa Health Care System (VACIHCS) does not currently have an Internal Review Board or Panel. However, student academic projects are reviewed and approved by key stakeholders, depending on the student's project proposal. Such members would include selected subject matter experts, Privacy Officer, Compliance Officer, Chief Health Informatics Officer, representative from Quality Management and Associate Chief of Staff-Education.

Such key stakeholders reviewed Rosann' [s Performance Improvement Project and support her in the completion of her project, with the oversite of South Dakota State University. She is planning to provide a report of her project outcomes to be shared with the appropriate leadership.

Please let me know of any questions you might have or the need of further information.

Sincerely,

Deboch mg

Deborah De Jang, RN, MSN, MBA, MSEd Nursing Trainee Coordinator VA Central Iowa Health Care System 3600 30th Street Building 3, RM 2954 Des Moines, Iowa 50310 <u>Deborah.dejona@va.qov</u> Office Phone (515) 699-5660 Work Cell (515) 723-1543 Fax No. (515) 699-5862

Appendix C

Consent for Participating in the Project: Education on My HealtheVet to Increase Access to Psychiatric Healthcare in Veterans

The following COVID-19 precautions will be followed during all face to face contact between the project coordinator and participants:

- 1. No physical contact of any kind.
- 2. The participants will be asked to wear a mask, the project coordinator will be wearing a mask and face shield.
- 3. Prior to meeting in the interview, the project coordinator will disinfect the table, chairs, computer and writing utensil.
- 4. All attempts will be made to maintain 6 feet distance between participant and project coordinator during all face to face meetings.

What is the minimum age to participate in the project?

The minimum age to participate in the project is 18.

What is the purpose of this project?

The purpose of this project if to examine the knowledge, use, and barriers to using My HealtheVet.

What will I have to do?

You will be asked to complete a survey with questions pertaining to your knowledge, current use, and what barriers you believe keep you from using My HealtheVet. In addition, you will be asked demographic questions. You will be asked to attend a brief educational session with the project coordinator on My HealtheVet. Two weeks after discharge the project coordinator will send you an email on My Healthevet for assessment of use. Additionally, the project coordinator will contact you for a brief interview on your experience using My HealtheVet.

Do I have to participate in this project?

Participating in this project is completely up to you. There are no penalties or consequences of any kind if you decide that you do not want to participate.

What are the benefits to me?

Using My HealtheVet has the potential of improving your healthcare.

Are there any risks in participating in the project?

There are minimal risks associated with this research project; however, a risk of breach of confidentiality always exists. If a breach of confidentiality occurs, you will be notified as soon as the breach has been identified.

What if I change your mind?

You may withdraw your participation at any time without any negative consequences.

How will my privacy be protected?

You will be given a random number by the project coordinator; no identifiable information will be used in the project written paper discussing the findings. Once the project is over all identifiable information will be destroyed with the privacy officer at the VA.

Are there any costs to me?

There are no costs to you.

What if I have concerns?

You may contact the project coordinator via email (rjhackbarth@jacks.sdstate.edu), the project coordinator's committee chair, Dr. Gibson (nicole.gibson@sdstate.edu), or the VA representative Ms. Dejong (debra.dejong@va.gov) via email.

If you have any questions concerning your rights as a research subject, you may contact SDSU's Research Integrity and Compliance Officer at 605-688-5051 or sdsu.irb@sdstate.edu.

Participant Name

Date:_____

Project Coordinator: Roxann Hackbarth PMHNP Project Coordinator Committee Chair: Dr. Gibson VA Representative: Ms. Dejong

Appendix D

Pre- Intervention Questionnaire

Identification Number:

Diagnosis: _____

Thank you for taking part in this process improvement project. As part of the project the project

coordinator will be gathering information on knowledge, use, and barriers in using My

Healthevet. In addition, demographic information is also being gathered. If you have any

questions or concerns, please feel free to discuss these with the project coordinator.

DEMOGRAPICS

1. What is your age range?

18-24	
25-34	
35-44	
45-54	
55-64	
Above 65	

2. What is your gender?

Male	
Female	
Trans-gender	
Prefer not to answer	
Other	

3. What is your ethnicity?

Alaskan	
Native/American	
Indian	
Asian	
Black/African	
American	
Hispanic/Latino	

Native	
Hawaiian/Other	
Pacific Islander	
White	
Other	
Prefer not to answer	

4. What town are you currently living in?

5. What are your living arrangements?

Own home	
Rent home	
Homeless	
Prefer not to answer	
Other	
Prefer not to answer	

6. What is your marital status?

Single never married	
Divorced	
Separated	
Married or cohabitating	
Widow or widower	
Other	

7. What is the highest level of education you have completed?

High school	
Some college	
Associates degree	
Trade school	
Bachelor's degree	
Master's degree or higher	
Prefer not to say	
Other	

8. Do you have access to the internet?

Yes	
No	

	Never	Less than	Monthly	Weekly	Daily
		once a month			
Email					
Order items					
Research					
Games					
Social Media					

9. How often do you use a computer/phone for the following tasks?

10. Do you currently use My Healthevet?

Yes	
No	

If you are not currently using My Healthevet please skip to question 15.

11. What account of My Healthevet do you currently have?

Basic	
Advance	
Premium	

12. How often do you utilize My Healthevet?

Never	
Less than once a month	
Monthly	
Weekly	
Daily	
More than once a day	

13. What services have you utilized on My Healthevet?

Self-entered health information	
Veterans' health library	
VA prescription refill	
Access VA health care notes	
Access VA lab results	
Schedule VA appointments	
Receive email appointment reminders	
Secure messaging with your health care team	

14. Satisfaction of Using My Healthevet

EDUCATION ON MY HEALTHEVET

	Strongly	Somewhat	Somewhat	Strongly	Doesn't
	disagree	disagree	agree	agree	apply
Му					
Healthevet is					
easy to					
navigate?					
Able to find					
information					
easily?					
I understand					
the					
information					
contained on					
My					
Healthevet?					
Information					
from My					
Healthevet is					
valuable to					
me?					
My					
Healthevet					
increases my					
interactions					
with my					
health care					
team?					
Му					
Healthevet					
helps me					
follow my					
treatment					
plan?					

15. Barriers to using My Healthevet. Please write your answers.

Appendix E

Educational Tool

My Healthevet also known as MHV is an online patient portal giving health care information through different web-based tools. The information is accessible 24/7 for veterans and other designated care givers. MHV gives the veteran the ability to receive information regarding their health care including upcoming appointments, healthcare records including laboratory/radiology reports, medication refills, and secure messaging to the treatment team including the clinician.

Account Types

Basic:

All registered users start with the basic account which provides limited access. Once registered you will be able to use journals and track health measures. You are not able to view personal information or send messages located in the Veterans administration (VA) or Department of Defense (DoD) systems.

- Add information about over the counter medications, new or pre-existing allergies, military health history.
- Add contact information, health insurance, community health care information
- Record personal health measurements (blood sugars, blood pressure, heart rate, temperature, weight, and pain).
- Print health insurance ID card
- Set personal goals and monitor progress

Advance:

• All the access of the basic account plus the ability to refill your VA prescriptions

Premium:

This account provides the most access to the features. To get register for the this account an identity verification needs to be completed. To have your identity verification completed, you will need to have your entire profile information full name, Social Security Number, date of birth, and gender) linked to your VA/DoD records.

- Admission/discharge summaries
- VA appointments future and past two years
- Demographics
- VA immunizations
- VA laboratory results and radiology reports
- VA medication history
- VA pathology repots
- VA problem list
- VA notes

- VA vital signs
- VA wellness reminders
- DoD military service information
- Use VA Blue Button save/download/print information
- Use secure messaging to communicate with your health care team

Available Resources

Health Care

- Refill/track your prescriptions
- Send/receive secured messages
- Schedule appointments
- View records
- Apply for VA health care

Disability

- Review clan or appeal status
- Review payment history
- Add supportive documentation
- File for VA disability increase
- File a claim for compensation

Education

- Update education benefits
- Compare GI Bill benefits by schools
- Apply for education benefits

Records

- Get a VA identification card
- Obtain medical records
- Download benefits records
- Change address
- Request military records (DD214)

Appendix F

Navigation of MHV



Anywhere, Anytime Access to Your Health Information! My HealtheVet is VA's online tool for managing your healthcare. It's secure, trusted and convenient. And it's for you!

REGISTER

Health Information Card

Ky Links

LOG IN

Online My Health, My Care: 24/7^VAccess to VA

REGISTER NOW FOR YOUR OWN My HealtheVet ACCOUNT.

Go to: www.myhealth.va.gov.

- On the right: click the *Register*.
- Fill in all items with an asterisk.
- VA patients Enter your full name and select both -VA Patient and Veteran.
- Carefully follow the User ID and Password instructions.
- Scroll to the bottom, check the *My HealtheVet Accept Terms & Conditions.*
- Click the blue Create Your Account button..
- Be sure to complete your In Person Authentication at your nearest VA facility for access to all the ***Premium** features.

QUICK LINKS - There are Quick Links for all the most used features in My HealtheVet.

Pharmacy Refill VA Prescriptions	前 <u>Appointments</u> <u>View My VA Appointments</u>	輝 <u>Messages</u> Inbox	Health Records Blue Button Medical Reports			
Track Delivery	Schedule a VA Appointment	Compose Message	Labs and Tests			
Medications Lists	VA Facility Locator	Manage Folders	Track Health			
Each Section at the top gives you access to additional features.						
Personal Information 🗸 Pharmacy 🗸 Research Health 🗸 Get Care 🗠 Track Health 🗸 MHV Community 🗸 Secure Messaging 🗸						
PERSONAL INFORMATION -						

 My Profile: Make changes to your personal information.
 Fersonal information.

 Sign up for appointment reminders by email.
 Personal information.

 *Download My Data: Download/ View/ Print your health
 My Profile

 information for yourself or to share with those you trust.
 Download My Data

 Change Password: Update your password
 Download My Data

 In Case of Emergency: Enter your Emergency Contact
 Change Password

 Information.
 In Case of Emergency: Enter your Emergency Contact

 My Account: check account activity, block DS Logon access to
 My Account

your account. Health Information Care: Create a wallet card with medical

information

My Links: self-enter links to your favorite sites.

PHARMACY -

Refill Prescriptions: Request VA prescription refills. **Prescriptions History:** List of current and past medications **Prescription Tracking:** See the date your refills were mailed, the shipper, and link to the shipper's website to track the delivery process. **My VA Medication List:** View & Print a list of your VA medications to carry with you.

My Medications List: Enter & track outside medications, herbals & supplements you take. Print and share with your VA provider

RESEARCH HEALTH -

Healthy Living Centers: Information on Healthy Eating,
Tobacco Cessation, Caregiver Assistance, and more.
Mental Health: Information about conditions and symptoms. Screening
Tools available for alcohol, depression, PTSD and substance abuse.
Medical Library: See the Veterans Health Library for information and
videos about common diseases and procedures.

GET CARE

Care Givers: Self Enter your VA and outside providers.

Treatment Facilities: Self Enter all the locations where you receive care. **My Coverage:** Self Enter insurance info in one convenient record to access anywhere.

Health Calendar: See your appointments, what's happening at your facility or schedule your own to-do's.

*Appointments: View your appointment list online.

TRACK HEALTH

Vitals + Readings: Self Enter home readings: (blood pressure, heart rate, body weight, body temperature, pain, blood sugar, cholesterol (Lipids Profile), pulse ox, INR *Labs + Tests: See VA Chemistry & Hematology results online. Self enter allergies, immunizations, medical events. Health History: Logs to help you track health records - Family Health History, Military Health History, Medical Events and more. Journals for Food intake, Physical activity.

Tables and Graphs are available for many of these logs.

SECURE MESSAGING lets you contact your HealthCare

Teams by secure email for non-urgent questions and concerns. If requesting an appointment, please specify the date and time you prefer, and if you will take the first available appointment.

Send a Secure Message—Open Secure Messaging. Check your Inbox or click on COMPOSE to send a message. Click on the down arrow to see the teams that are available to you.



There are MyHealtheVet Computers available in the Des Moines Primary Care Check In area. Or contact the My HealtheVet Staff for personal assistance.

Expanding Veteran Access to Care Through Virtual Technologies connectedcare.va.gov

For *My HealtheVet* questions, send a Secure Message or call 515-699-5999 (OR 1-800-294-8387) ext. 3938.





My HealtheVet Navigation

Note: Features with an asterisk (*) require a premium account.

Secure Messaging*

1 Messages

Inbox

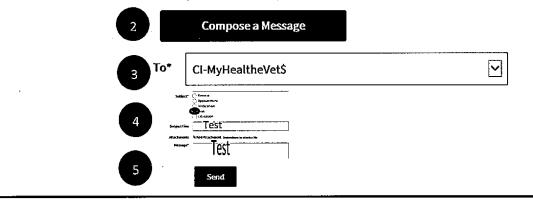
Compose Message

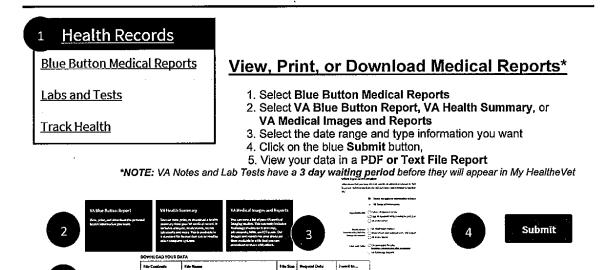
Manage Folders

1. Select Inbox

- 2. Select the green Compose Message button, then
 - Click the dropdown menu next to the To field to select your provider or a health care team
 - 4. Select your Subject and Type your Message
- 5. Send

Note: Messages should be nonurgent. Providers respond within 3 business days.





33 NB

268

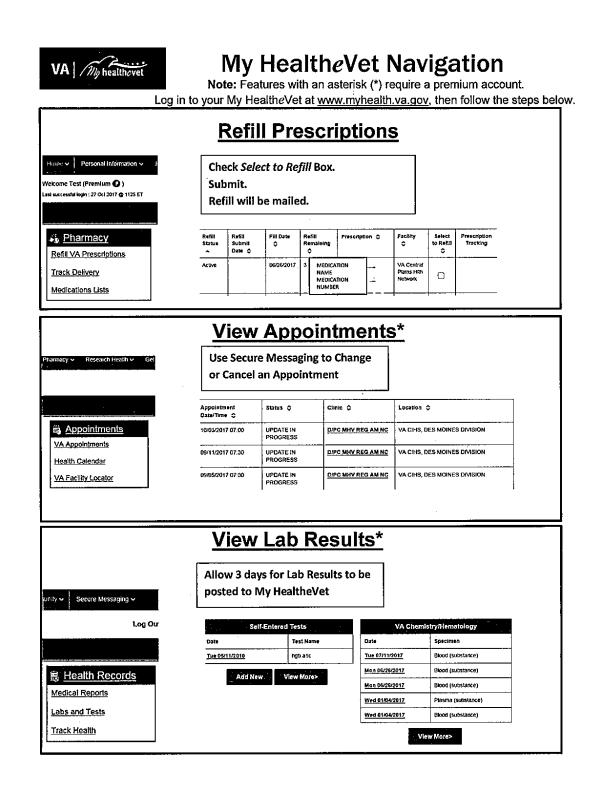
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Your Descriptional (*D)

d DOT

My health evet www.myhealth.va.gov My Health, My Care: 24/7 Access to VA I forgot my User ID and/or I forgot my Password. What should I do?	ogin Register
Go to <u>www.myhealth.va.gov</u>	
Click Login.	
You can reset your password or retrieve your user name by going to <u>Forgot User ID?</u> or <u>Forgot Password?</u>	Login to My HealtheVet
Then simply follow the online instructions. All you need to know is:	My HealtheVet User ID
Step 1: Fill in the following information	Hy HealtheVet Password
 First and Last Name Date of Birth Gender Answer the two Hint Questions. 	By dicking on the Login button below, you are agreeing with the System Use Warning Notice.
Step 2: Retrieve your User ID - My HealtheVet will provide it on the screen	Login Forgot User ID?
Step 3: Next go back to the Login page, select the link Forgot Password?	Forgot Password?
 You will be asked for your User ID (which you just receive Follow all the previous steps 	ed)
Step 4: Reset your password (enter a new password with at leas character (such as I, ?, &, etc.) Passwords are case sensitive.	st 1 letter, 1 number, and a special
Note: Once you have logged on to your account, you may want answers. These are found by selecting the Personal Information down to the bottom of the page. Make sure your hint answers an remember.	tab. then selecting My Profile. Scroll
If you need assistance with the Forgot Password feature, please Desk at 1-877-327-0022, 7am – 7pm, Monday – Friday. Or you can send the Help Desk details using the <u>Contact Us</u> forr	





My HealtheVet is a free website for Veterans, designed to help you manage your healthcare.

With My HealtheVet, you can:

- Refill your VA prescriptions or request renewals online
- Use Secure Messaging to communicate with your Health Care Providers **
- See VA Appointments, and get Appointment Reminders by email **
- Use the Blue Button Report to see or download VA Notes, Xrays and Reports and more**
- Track your own health information blood pressure, blood sugar , weight and pain, etc.
- Research health information in the Veterans' Health Library. And much more!

Register now at <u>www.myhealth.va.gov</u> Click on the *Register* button and follow the instructions. Be sure to enter your name as it appears on your DD214, and check both VA Patient and Veteran.



Get a **Premium Account** and all the upgrade features: Visit your VA Medical Center or Clinic

Request your upgrade and show your government issued picture ID. Or call 515-699-5999, ext. 23938, to schedule your upgrade by VA Video Connect.

As part of your first appointment in Des Moines, you'll be scheduled at the My HealtheVet Station (D/PC MHV New Pt NC) in the Primary Care Check In Area to get Registered or Review your account status with our staff.

Go to <u>www.myhealth.va.gov</u> now to get started!

For *My HealtheVet* questions, contact Susan Solinger, Central Iowa Connected Health Coordinator, 515-699-5999 (OR 1-800-294-8387) dial 9 and the ext. 23938.

Already have an account but forgot your User Id or Password? See Reverse.

**Premium Account Feature



Appendix G

Post- Intervention Questionnaire

Identification Number: _____

Diagnosis:

1. What account of My Healthevet do you currently have?

Basic	
Advance	
Premium	

2. How often do you utilize My Healthevet?

Never	
Less than once a month	
Monthly	
Weekly	
Daily	
More than once a day	

3. What services have you utilized on My Healthevet?

Self-entered health information	
Veterans' health library	
VA prescription refill	
Access VA health care notes	
Access VA lab results	
Schedule VA appointments	
Receive email appointment reminders	
Secure messaging with your health care team	

4. Satisfaction of Using My Healthevet

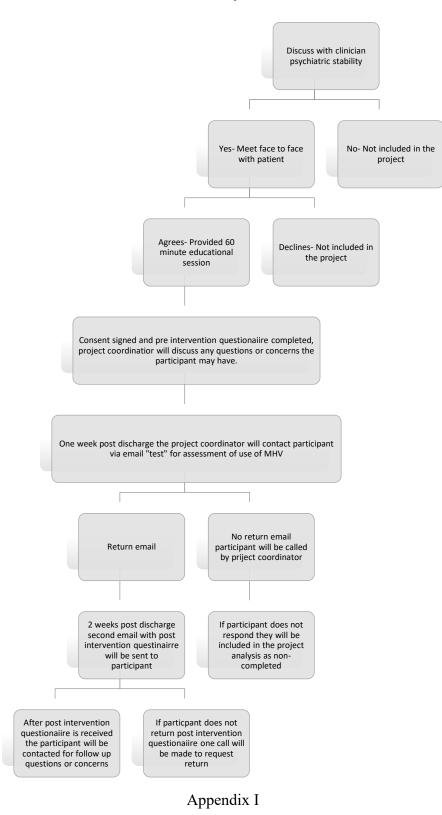
	Strongly	Somewhat	Somewhat	Strongly	Doesn't
	disagree	disagree	agree	agree	apply
My					
Healthevet is					
easy to					
navigate?					
Able to find					
information					
easily?					
I understand					
the					
information					
contained on					

Му			
Healthevet?			
Information			
from My			
Healthevet is			
valuable to			
me?			
My			
Healthevet			
increases my			
interactions			
with my			
health care			
team?			
My			
Healthevet			
helps me			
follow my			
treatment			
plan?			

5. Barriers to using My Healthevet. Please write your answers.

Appendix H

Flow Chart of Project Procedure



Demographic Data

Age	Range	Ν
	18-24	1
	25-34	3
	35-44	1
	45-54	2
	55-64	2
	Above 65	1
Total		<u>N=10</u>
Gender		N
	Male	9
	Female	1
Total		<u>N=10</u>
Ethnicity		N
	White	10
Total		<u>N=10</u>
Living Arrangements		N
	Own home	5
	Rent home	3
	Other	2
Total		<u>N=10</u>
Marital status		N
	Single never married	1
	Divorced	5
	Separated	1
	Married or cohabitating	2
	Widow or widower	1
Total		<u>N=10</u>
Highest level of education		N
	High school	2
	Some college	4
	Associates degree	1
	Trade school	1
	Bachelor's degree	2
Total		<u>N=10</u>
	1	
Internet access		N

EDUCATION ON MY HEALTHEVET

Total		<u>N=10</u>
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Appendix J

Internet usage times

N=10

EDUCATION ON MY HEALTHEVET

	Never	Less than	Monthly	Weekly	Daily
		once a month			
Email	0	2	1	1	6
Order items	1	2	3	0	4
Research	0	1	1	3	5
Games	1	0	1	1	7
Social Media	1	0	0	1	8

Appendix K

My Healthevet usage

Currently have MHV		Ν
	Yes	7

Total MHV account No account	3 <u>N=10</u> N
MHV account	N
	3
Premium	7
Total	N=10
Use of MHV	N
Never	5
Less than once	
Monthly	1
Total	<u>N=10</u>
	<u>IN-10</u>
Utilized services	N
Self-entered he	
information	
Veterans' heal	th library 1
Veterans near VA prescriptio	
Access VA he	
Access VA lab	
Schedule VA a	
Secure messag	
Total	<u>N=17</u>
Satisfaction of Using MHV	N
MHV is easy t	
somewhat agree	
MHV is easy t	
strongly agree	
Able to find in	
easily somewh	
Able to find in	
easily strongly	
Understand in	
MHV somewh	
Understand in	
MHV strongly	
Information or	n MHV is 1
valuable some	
Information or	n MHV is 3
valuable strong	gly agree
MHV increase	
with health can	re team
somewhat agree	ee

	MHV increases interactions with health care team	4
	strongly agree	
	MHV helps follow treatment	4
	plan somewhat agree	
	MHV help follow treatment	1
	plan strongly agree	
Total		<u>N=27</u>
Barriers to using MHV		Ν
	No barriers	2
	Lack of knowledge	6
	Confusing	2
Total		<u>N=10</u>

Appendix L

Post Intervention

N=2

Internet use		Ν
	Email daily	2
	Play games daily	2
	Social media	2

EDUCATION ON MY HEALTHEVET

Total		<u>N=6</u>
Utilized services		Ν
	VA prescription refill request	1
	Schedule VA appointment	1
	Secure message sent	2
Total		<u>N=4</u>
Barriers to using MHV		Ν
	No barriers	2
Total		<u>N=2</u>