



TESIS O PROYECTO DE CREACIÓN

APROBADO COMO REQUISITO PARCIAL DEL
PROGRAMA DE ESTUDIOS DE HONOR

COMITÉ DE TESIS O
PROYECTO DE CREACIÓN

NOMBRE

FIRMA

Mentor

Irma L. Molina Vicenty, MD

Director de Estudios

Ivelisse Rubio Canabal, PhD

Lector

Isabel Borras Fernandez, MD

Lector

Gerardo Jovet Toledo, MS

Lector

Visto Bueno

Elaine Alfonso Cabiya, Ed.D.

Director PREH o su Representante

11 de mayo de 2021

Fecha

University of Puerto Rico
Río Piedras Campus
Honor Studies Program



Programa de
Estudios de

Enhancing Access: A Pilot Study to Evaluate Feasibility of Traumatic Brain Injury (TBI) Assessment Using Telehealth Interventions: Case Series

Committee: Irma L. Molina-Vicenty, MD (Mentor)

Isabel Borras-Fernandez, MD (Reader)

Gerardo Jovet-Toledo, MS (Reader)

Ivelisse Rubio Canabal, PhD (Study Director)

Gabriela S. Betances Arroyo

801-17-6458

Version: May 3, 2021

Table of content:

Abstract	1	
I.	Introduction	2
	Background	2
	Problem	3
	Justification	4
	Purpose	4
	Objectives	5
	Questions	6
	Limitations	6
	Operational definitions	6
II.	Literature review	8
III.	Methods	12
	Methodology	12
	Design	12
	Study population	13
	Techniques for the collection of information	14
	Data analysis	14
IV.	Results	16
	Discussion	29
	Conclusion	32
	Acknowledgements	35

Disclaimer	35
V. Bibliography	36
Appendices	41
Appendix A: Clinical Video Telehealth (CVT) Satisfaction Survey (English Version)	42
Appendix B: Clinical Video Telehealth (CVT) Satisfaction Survey (Spanish Version)	64
Appendix C: Measurement of the viability to implement the preliminary diagnosis and comprehensive evaluation of TBI through telehealth (used in primary study)	80
Appendix D: Medición de la viabilidad de implementar el diagnóstico preliminar y evaluación comprensiva de TBI a través de telehealth (usado en estudio primario)	81
Appendix E: TBI Demographic and Language Preference Data Collection Tool: Enhancing Language Access: A Pilot Study to develop linguistically and culturally appropriate Spanish adaptations of Traumatic Brain Injury (TBI) assessment instruments for Face-to-Face & Telehealth interventions (used in primary study)	82
Appendix F: Herramienta de Colección de datos para Demografía de “TBI” y Preferencia de Idioma: “Enhancing Language Access: A Pilot Study to develop linguistically and culturally appropriate Spanish adaptations of Traumatic Brain Injury (TBI) assessment instruments for Face-to-Face & Telehealth interventions” (usado en estudio primario)	85
Appendix G: General Tasks that can be assigned to the mentee	88
Appendix H: Timeline: Enhancing Access: A Pilot Study to evaluate feasibility of Traumatic Brain Injury (TBI) assessment using Telehealth interventions	90

Abstract:

Recent studies have explored the potential impact of the language used for provision of care in the recovery trajectory of patients with impaired cognitive functions such as Traumatic Brain Injury (TBI) Veterans. In addition, other studies evidence the benefits of using Telehealth in patient care. Telehealth is the utilization of communications and information technology to provide healthcare between two separate locations. This feasibility study intended to evaluate the use of Telehealth/VA Video Connect (VVC) for TBI screening and diagnosis using the new Spanish validated TBI screening and evaluation tools. Therefore, the results of this study may enhance access to the Hispanic TBI Veteran population, thus improving Health Equity. In addition, the research study focused on completing a secondary analysis of the results of the linguistically and culturally appropriate Spanish adaptations of the Department of Veterans Affairs – Clinical Video Telehealth (CVT) Satisfaction Survey. This study's results suggest that providing TBI care by Telehealth/VVC, in the preferred language of the patient, is not only feasible but well accepted by Veterans and clinical providers. Overall, patients and providers feel satisfied when using these programs for medical interventions. This pilot study will provide feasibility answers for a larger study in a near future.

I. Introduction

Background:

Traumatic Brain Injury (TBI) recovery is an important phenomenon to both patients and families, yet the mechanisms of brain injury and recovery remain poorly characterized. Recent studies have explored the potential impact of the language used for provision of care in the recovery trajectory of patients with impaired cognitive functions such as TBI Veterans. Before the study of Dr. Molina-Vicenty et al., instruments used for screening and diagnosis of TBI in the Veterans Health Administration (VHA) were only available in English. Access to linguistically and culturally appropriate instruments could potentially improve care and therefore patients recovery.

Recently, Molina-Vicenty et al.⁴³ produced linguistically and culturally appropriate TBI screening and evaluation tools for Puerto Rican Hispanic Veterans, suitable for future use in Telehealth outreach, and with potential adaptation to other Hispanic VA populations. These new tools extended access, accuracy, and acceptability of TBI screening for Hispanic Veterans whose primary language is Spanish.

Research studies evidence the benefits of using Telehealth in patient care. Telehealth is utilization of communications and information technology to provide healthcare between two separate locations. Martinez et al.⁴² found that technologies like clinical video Telehealth offer potential means to overcome travel distance and other barriers that can impact Veteran receipt of a comprehensive TBI evaluation after a positive screening. Wennergren et al.⁵³ discovered that the implementation was cost effective and well received by the Veterans because it decreased time and costs related to travel while continuing to offer high quality health care. This research study intended to evaluate the use of Telehealth/VA Video Connect (VVC) for TBI screening and

diagnosis using the new Spanish validated TBI screening and evaluation tools. Therefore, the results of this study may enhance access to the Hispanic TBI Veteran population, thus improving Health Equity. This pilot study will provide feasibility answers for a larger study in a near future.

Problem:

There are some significant racial and ethnic disparities among patients with mild TBI⁷. Hispanic ethnicity has been positively associated with a higher mortality risk among these patients²⁴. In addition to the language barriers, studies have evidenced the existence of health disparity related to geographic barriers. Mortality rates have been higher in those who reside in the U.S. territories relative to those residing on the U.S. mainland.²¹ In fact, the highest overall multimorbidity risk of any race group or location exists for Hispanics in insular islands.²⁷

A recent publication examined the perspective of health care providers on implementing Telehealth for assessing and treating mild TBI.⁴² Providers reported scheduling Telehealth appointments, setting up the clinic and conducting physical exams over a virtual modality, as inhibiting factors to implementing Telehealth. Assuring effective communication between sites was the single most important factor to ensuring the availability of all parties and equipment at the time of the appointment. To enhance Telehealth implementation, participants suggested establishing solid communication and relationship with staff, building rapport with patients and recognizing the unique needs of patients with TBI.

The specific geographic barriers that result in health disparities for the Hispanic Veteran population still remain unknown. This research study intended to explore such barriers in order to improve health care. To accomplish this goal, the researchers conducted a feasibility study to

evaluate the assessment of Traumatic Brain Injury (TBI) using Telehealth interventions, therefore enhancing access.

Justification:

Current review of literature indicates a definite disparity between Hispanic and Non-Hispanic Veterans patients, even after adjusting for potential confounding variables. Linguistically and culturally adapted screening and evaluation tools in Spanish by Dr. Molina-Vicenty et al.⁴³, extended access, accuracy, and acceptability of TBI screening for Puerto Rican Veterans with TBI. The use of Telehealth for TBI screening using linguistically and culturally validated tools will enhance access to the rural Hispanic TBI Veteran population, thus improving Health Equity. This research study can lead to research focused to explore the impact of providing TBI health care, within a framework of linguistically and culturally adapted interventions, using Telehealth/VVC.

Also, there isn't enough data involving the evaluation of the feasibility of using Telehealth/VVC for provision of care in Veterans with TBI. This study intends to bring forth new preliminary knowledge regarding the topic.

Purpose:

This research study intended to evaluate the feasibility of using Telehealth/VVC for provision of care in Veterans with TBI using a secondary analysis approach. In addition, the research study focused on completing a secondary analysis of the results of the linguistically and culturally appropriate Spanish adaptations of the Department of Veterans Affairs – Clinical Video Telehealth (CVT) Satisfaction Survey (Appendix A and B).

Using a secondary analysis of data already collected, the research team completed a feasibility assessment by analyzing the results of the use of Telehealth/VVC for TBI screening and evaluation

using Spanish instruments. The primary study is “Enhancing Language Access: A Pilot Study to develop linguistically and culturally appropriate Spanish adaptations of Traumatic Brain Injury (TBI) assessment instruments for Face-to-Face & Telehealth interventions” with Molina-Vicenty as Principal Investigator. The primary study collected data from 2017 to 2020, however the data related to Telehealth/VVC was collected between 2019 and 2020. A focus group conducted by Dr. Molina-Vicenty’s research team on May 29, 2020 was also used for the secondary analysis as part of the current study.

Objectives:

1. Complete secondary analysis to evaluate the feasibility of the use of Telehealth/VVC for TBI screening and evaluation using Spanish instruments Feasibility was evaluated by analyzing:
 - a. Veteran's preference for Telehealth/VVC explored with a one question survey. The target population that can benefit from telehealth/VVC was also measured.
 - b. Barriers and facilitators of TBI care implementation using Telehealth/VVC by analyzing a focus group with Telehealth providers and staff.
 - c. Veteran's responses of the CVT Satisfaction Survey after the administration of the Spanish versions of the Initial Traumatic Brain Injury (TBI) Screening, Neurobehavioral Symptoms Inventory (NSI), and Comprehensive TBI Evaluation (CTBIE) to Veterans with suspected TBI who prefer Spanish as the language of provision of care.

Question:

Is Traumatic Brain Injury screening and diagnosis using Telehealth/VVC delivery feasible in the Hispanic Veteran population?

Limitations:

There were certain expected limitations during the study. The research participants might prefer to see their physicians face to face instead of using Telehealth, a situation that might affect the recruitment for the primary research study. In addition, it has been commonly seen that ethnicity and preferred language is typically not well reported. The situation may be relevant as it may be easy to assume that most Veterans seeking for TBI care in the VA Caribbean Healthcare System (VACHS) at San Juan, PR are Hispanic and prefer Spanish as the language for provision of care. As part of the inclusion criteria of the study, participants must be Hispanic and prefer the Spanish language, therefore, it was important to confirm that the information was correct.

In addition to the expected limitations, there were other factors that affected the recruitment portion of the primary study and limited the sample size. Initially, the primary study was expected to recruit a minimum of 10 subjects that would participate of the Telehealth/VVC interventions. Due to the COVID-19 pandemic, the VACHS put a hold on all research related activities, including recruitment, which was lifted on December 2020. At this point the Principal Investigator (PI) of the primary study decided to close enrollment at 3 subjects, which affected the secondary analysis of this thesis.

Operational definitions:

For better understanding we include some operational definitions:

1. Traumatic Brain Injury – In the Department of Veterans Affairs (VA) and The Department of Defense (DoD) 2009 guidelines TBI is defined as “a traumatically induced structural injury and/or physiological disruption of brain function as a result of an external force that is indicated by new onset or worsening of at least one of the following clinical signs, immediately following the event: any period of loss of or a decreased level of consciousness (LOC); any loss of memory for events immediately before or after the injury (post-traumatic amnesia [PTA]); any alteration in mental state at the time of the injury (confusion, disorientation, slowed thinking) (Alteration of consciousness/mental state [AOC]); neurological deficits (weakness, loss of balance, change in vision, praxis, paresis/plegia, sensory loss, aphasia, etc.) that may or may not be transient; or intracranial lesion.”⁴⁹
2. Telehealth - utilization of communications and information technology to provide healthcare between two separate locations. It allows for the provision of care by delivering health care and related services across distance utilizing a platform of medical information (CPRS) and telecommunications technology. It encompasses diagnosis, treatment, follow-up, and education of our Veterans enrolled in our various clinics while meeting the same standards of care that they would receive in a local/face to face setting. It includes VA Video Connect (VVC) where the Veteran receives the virtual care at the comfort of his home.

II. Literature review

Telehealth delivery:

Some studies have found that the Telehealth system improves patient care. For example, the one conducted by Hernández, Moore and Scholten in 2015³² where they concluded that the implementation of home clinical video Telehealth can assist with the ongoing management and treatment of patients in their home setting. They reported enhanced education and care coordination by using clinical video Telehealth with a Veterans Affairs-eligible beneficiary receiving treatment for TBI. Another study from Martinez et al.⁴² said that technologies like clinical video Telehealth offer potential means to overcome travel distance and other barriers that can impact Veteran receipt of a comprehensive TBI evaluation after a positive screening. Finally, Wennergren et al.⁵³ found that the implementation of Telehealth was cost effective and well received by the Veterans because it decreased time and costs related to travel while continuing to offer high quality health care.

Ethnic/race and geographical disparities:

Evans et al. reported in 2014²⁵, that TBI screening rates are high in VA and that concomitant mental health diagnoses are highly prevalent in individuals with positive TBI screens. DePalma and Hoffman¹⁸, authors from the Office of Research and Development, screened for TBI one million combat Veterans that were deployed during Operations Enduring Freedom, Iraqi Freedom and New Dawn (OEF/OIF/OND) and found that 8.4% of these Veterans received a diagnosis of TBI (the majority mTBI/Concussion and in great proportion related to blast exposures). However, a review article from Arriola and Rozelle⁴ (Tulane University in New Orleans) explains that there isn't enough research on OEF/OIF Hispanic Veterans and Hispanic subgroups. Therefore, they

express the necessity of conducting future studies considering minority groups while analyzing data involving TBI.

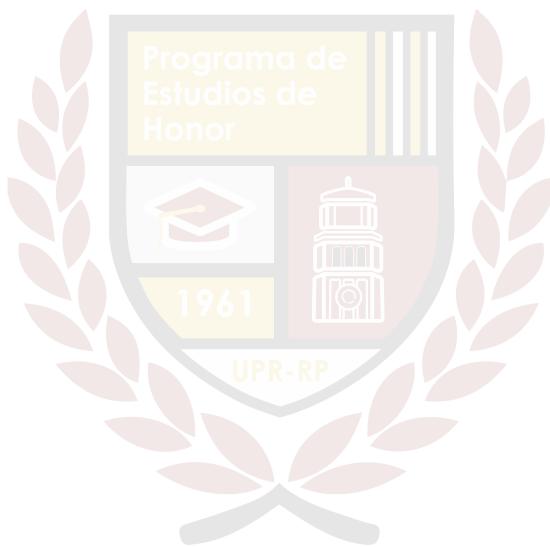
An early study from Bazarian et al. from the University of Rochester Medical Center in New York suggested that there are significant racial and ethnic disparities among patients with mild traumatic brain injuries⁷. Continuing this line of research, in 2011 Egede, Dismuke and Echols, researchers from the Ralph H. Johnson Veterans Affairs Medical Center in Charleston²⁴ found that Hispanic ethnicity had a positive association with a higher mortality risk among these patients after comparing the overall mortality of Hispanics with non-Hispanic Whites and non-Hispanic Black Veterans and adjusting the models for sociodemographic characteristics and comorbidities. Furthermore, Dismuke, Egede, Gebregziabher and Yeager²⁰ studied how the racial/ethnic differences in combat and non-combat associated with the severity of the TBI diagnosis. Hispanics and non-Hispanic Black resulted to have higher odds of being affected by moderate to severe TBI. By these results, we would expect Hispanics to have higher utilization services and more visits in order to be properly treated. Nevertheless, a study conducted by the same authors in 2015²² surprisingly revealed the opposite: Hispanic Veterans in comparison with non-Hispanic Whites were found to have significantly lower utilization of all services examined, except imaging. They also found that Hispanics relative to non-Hispanic Whites had fewer total visits except for mental health visits which were higher. These authors continued their research on the topic and, in 2018²¹, they found that among Veterans with TBI, mortality rates were higher in those who reside in the U.S. territories relative to those residing on the U.S. mainland. Therefore, previous documented higher mortality among Hispanic Veterans seems to be explained by residing in the U.S. territories. This suggests that we can't take into consideration just the ethnic/race but also need to consider

the geographic disparities. They also found²⁷ that the highest overall multimorbidity risk of any race group or location exists for Hispanics in insular islands.

Bilinguals brains:

Evidence regarding differences in the brain activation and processing of bilinguals and monolinguals has been found. This is extremely relevant to our research study since every instrument used to screen and diagnose TBI Hispanic patients is in English. An early study of Hernández, Dapretta and Bookheimer³¹, authors from the Department of Psychology of the University of California, discovered that there was an increased intensity of activation in a specific area of the brain for switching between languages. They concluded that switching between languages involves increased general executive processing and that different languages are represented in overlapping areas of the brain in early bilinguals. Also, Rodriguez-Fornells et al. from the Otto-von-Guericke University in Germany⁴⁶ proved that there is interference of phonological information from the non-target language in bilinguals (monolinguals didn't show this interference in their performance). Interestingly, some authors from Dartmouth College (Kovelman, Baker and Petitto)³⁶ found that both brains (monolinguals and bilinguals) had the same responses for English but different when it came to Spanish. They proved this by investigating the similarities and differences in the behavioral and neural responses between bilinguals and monolinguals, and between bilingual's two languages. Similar to this study, Wang et al.⁵² found that bilinguals have a shared neural system for word processing in both the first and second language, which is highly similar to monolinguals but with stronger right hemisphere involvement. They concluded that bilinguals may process the same as monolinguals the native language but with higher intensity. Zhang et al.⁵⁹ compared the free language selection versus the forced language selection and how these affected different parts of the brain. Free language switching

resulted in reduced switching costs as compared to forced language switching. Therefore, they suggest that there are differences between the mechanisms underlying free and forced language switching and that there is interactivity between control of volition and control of the language switching in free language selection. This article is particularly important because it explains that Veterans need instruments translated and validated in their native language because, otherwise, they may encounter difficulties in the midst of translation. All of this evidence justifies the necessity for the creation of instruments properly translated and validated, suitable for the screening and diagnosis of these Hispanic Veterans.



III. Methods

Methodology:

This is a secondary analysis study involving results of focus groups and surveys. Johnson describes the secondary analysis as the “analysis of data that was collected by someone else for another primary purpose”.³⁴ In this case, the primary study is Dr. Molina-Vicenty’s protocol titled: “Enhancing Language Access: A Pilot Study to develop linguistically and culturally appropriate Spanish adaptations of Traumatic Brain Injury (TBI) assessment instruments for Face-to-Face & Telehealth interventions” which took place at the VA Caribbean Healthcare System in San Juan, Puerto Rico (2019-2020). Dr. Molina-Vicenty research team also conducted the focus group in May 2020.

Design:

For Objective 1a, the research study completed a secondary analysis of the results of the one question survey to measure Veterans preference of virtual care using Telehealth/VVC. For the survey, every patient that received primary care in Ponce and/or Mayaguez Outpatient Clinics, in the Guayama, Arecibo, Ceiba, St. Thomas and/or St. Croix CBOC, and in the Vieques, Comerío and/or Utuado Rural Health Clinics and that was referred to the VACHS Polytrauma Clinic Level II at VACHS Polytrauma Site Network (PSN) using the *Traumatic Brain Injury Screening + Oef Oif Output* consult were asked the following question: “Would you like the TBI evaluation done through Telehealth?”. The target population in the catchment area in which Telehealth/VVC was available was also measured and reported.

For objective 1b, the results of the focus group that included the participation of the Telehealth Program Manager, a provider and the Telehealth clinic coordinators and technicians was used to

identify possible barriers and difficulties, as well as advantages of Telehealth TBI care. The focus group was conducted on May 2020 by virtual modality by Dr. Molina-Vicenty and her research team and included a total of 5 participants. The questions are included in the Appendices C and D.

For objective 1c, the results of the CVT Satisfaction Survey were analyzed using the results of the Telehealth/VVC interviews by the study team of Dr. Molina-Vicenty at the VA Caribbean Healthcare System. All patients agreeing to the Telehealth approach received the TBI care with the new Spanish versions of the initial TBI screening, CTBIE and NSI, which were obtained from a previous phase of the primary study of Dr. Molina-Vicenty.⁴³ The CVT Satisfaction Survey which is composed of three sub-surveys was then administered: Clinical Video Telehealth (CVT) Appointment Scheduling (5 questions), Clinical Video Telehealth (CVT) VAMC or CBOC Appointment (10 questions), Clinical Video Telehealth (CVT) Home or Off-Site Appointment (11 questions). In the primary study, the CVT Satisfaction Survey was administered twice. It was initially administered as a PRE-test. Following this administration, the questions of the surveys were discussed with the subjects in a debriefing phase. After the debriefing, the CVT Satisfaction Survey was re-administered (POST-test) to enable comparison in the responses of the two administration. A total of 3 subjects participated of the Telehealth/VVC interviews. A secondary analysis of the patients' interviews regarding the CVT Satisfaction Survey was done.

Participant's demographic data was collected using the "Demographic and Language Preference Data Collection Tool" (Appendix E and F).

Study population:

The study population included subjects recruited for the study of Dr. Molina-Vicenty ("Enhancing Language Access: A Pilot Study to develop linguistically and culturally appropriate Spanish

adaptations of Traumatic Brain Injury (TBI) assessment instruments for Face-to-Face & Telehealth interventions”) which were Hispanic Veterans, males and females, OIF/OEF/OND returning soldiers, adult (21 years of age or older), from all age groups, whose preferred language is Spanish (as documented in CPRS or verbally indicated by subject in person), and of different socioeconomic groups, that have a positive TBI screening with possible TBI diagnosis referred to the VACHS Polytrauma Clinic Level II. The participating patients received primary care in Ponce and/or Mayaguez Outpatient Clinics, in the Guayama, Arecibo, Ceiba, St. Thomas and/or St. Croix CBOC, and in the Vieques, Comerío and/or Utuado Rural Health Clinics and needed to be able to provide informed consent. Participants were recruited from the patients that visit the VACHS Polytrauma Clinic Level II at VACHS Polytrauma Site Network (PSN).

Also, participants of the focus group conducted by Dr. Molina-Vicenty and her research team on facilitators and barriers of Telehealth were included in the analysis. These were the Telehealth Program Manager, a provider and Telehealth Clinic Coordinators and Technicians.

Techniques for the collection of information:

To conduct the secondary analysis, an “Authorization to transport and utilize VA sensitive information” form signed by Dr. Molina-Vicenty (the authorizing Principal Investigator of the primary study) was submitted to the VA Caribbean Healthcare System’s IRB. The data was retrieved from the primary study’s electronic research folder of Dr. Molina-Vicenty.

Data analysis:

Data was organized using a Microsoft Excel sheet and, Stata version 15 statistical software was used to perform all analyses. With the assistance of a VA Caribbean Healthcare System (VACHS) statistician and the Charleston VA Qualitative Researcher the following data was analyzed:

Objective 1a: Data regarding the number of patients who were invited to receive their TBI evaluation through Telehealth/VVC, and the number of patients who accepted to do so was retrieved and used to calculate the acceptance rate. This rate was reported as a percent. The target population in the catchment area in which Telehealth/VVC was available was measured and reported as an absolute number at each locality.

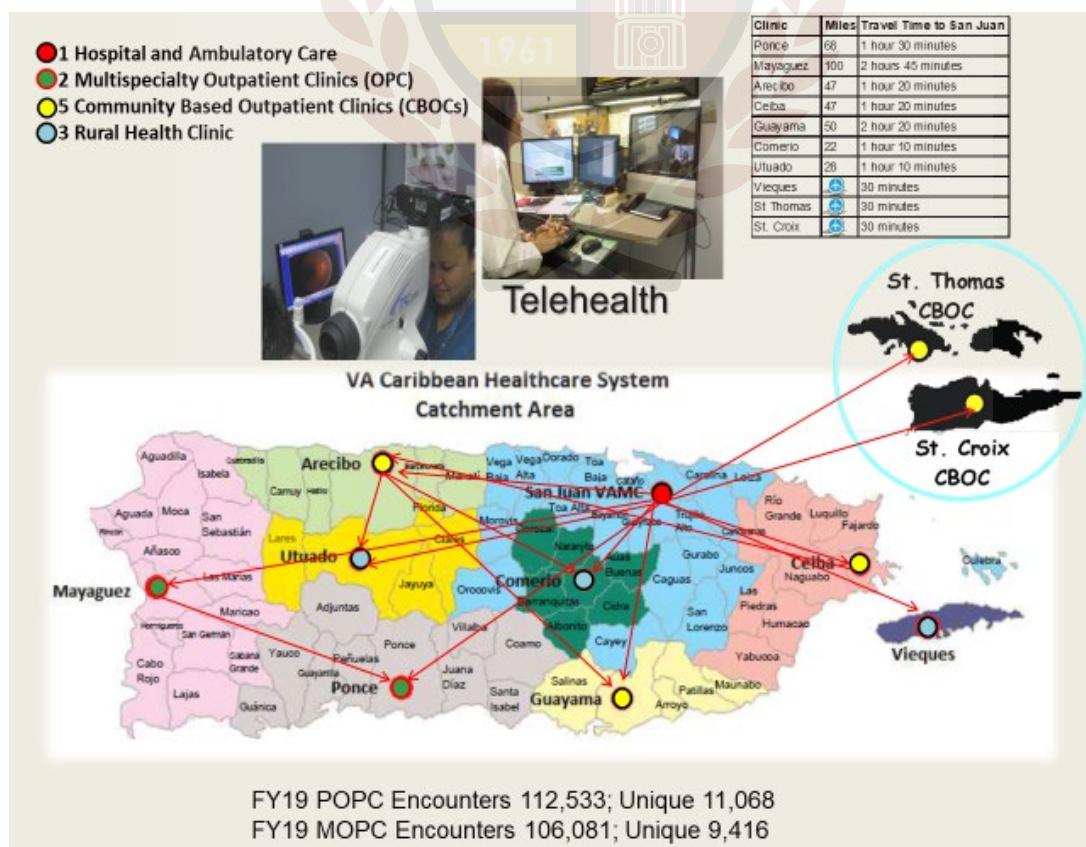
Objective 1b: Data from the SWOT (strength, weaknesses, opportunities, and threats) analysis using the focus group was analyzed. The data was analyzed using transcripts of the recorded discussions and a summary of the conclusions, supplemented with additional observational data, obtained during the discussion, such as notes that the interviewer or observers of the primary study made during the interview, the systematic recording of specific events and behaviors by trained observers, or the content analysis of videotapes of the discussion.

Objective 1c: For the CVT Satisfaction Survey and demographic data, data was summarized using descriptive statistics. The continuous variables were summarized with the mean and standard deviation, the median and quartiles. The categorical variables were summarized in proportions.

VI. Results

For objective 1a, 4 subjects participated of the one question survey. The acceptance rate using the one question survey yield 100% acceptance of Telehealth/VVC . The target population size was measured in those locations where TBI care was available via Telehealth, Ponce and Mayaguez. Figure 1 shows the number of visits (Encounters) and Veterans (Unique) in each of the catchment areas of the VA Outpatient Clinics (OPC) in Ponce and Mayaguez. Figure 1 also indicates catchment areas for the VA Community Based Outpatient Clinics (CBOC) of Arecibo, Ceiba, Guayama, St. Thomas, St. Cruz, and the VA Rural Clinics of Comerío, Utuado, and Vieques. Travel time from OPC, CBOC and Rural Clinics is shown.

Figure 1: Catchment Areas for VA Caribbean Healthcare Clinics.

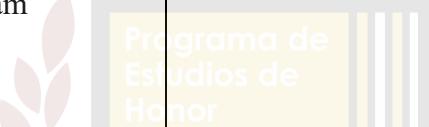
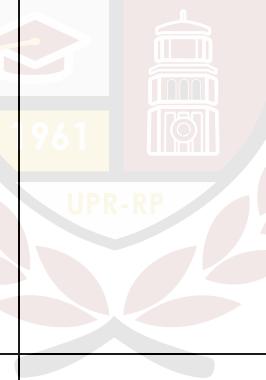


For objective 1b, a total of 5 subjects participated of the focus group. The participants were the Telehealth Program Manager, a provider and the Telehealth clinical coordinators or technicians.

Table 1 summarizes the strength, weaknesses, opportunities and threats (SWOT) analysis.

Table 1: SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats	Feasible?
increases the patient's accessibility to the service by overcoming long distances.	each discipline must adapt to the technology they want to use and according to this there will be different degrees to which patients can be reached	Amplify telehealth's outreach to other clinics in Guayama, Arecibo, Ceiba...	Connectivity – not all places have the same type of connectivity, the velocity could be either faster or slower which could cause pixilation and loss of audio or video during a call	It helps us adapt to our new reality, and help our Veteran population
Patients can receive medical treatment where they live	Research intervention takes too much time which could cause the patient to feel tired and exhausted	For VVC, emulate other areas of the country that have been successful and include in the functions of the clericals all coordination with the patients that will receive medical care through this platform	Patient's age and capacity	By using these technologies, we can minimize the patients risk of getting a disease and transmitting it to other Veterans or family members
Helps to have a more equitable	Patients who don't have a family member to	Education and orientation	Patients who don't have a family	Every medical institution should consider using

population to reach	assist them may encounter more difficulties		member to assist them may encounter more difficulties	these technologies because if the patient can be treated from their homes, we can also take care of the patient's health simply by reducing his/her chances of being exposed to other diseases
Patient's environment (VVC)	Having to call the patient to explain how to use the program		Physical exams may be harder to do through VVC	Providers that are at a distance could help minimize the waiting time for patients
Store and forward – image study done in the moment, but the specialist doesn't interpret it until later	Major workload when comparing with telephone calls			Using the patient's language of preference is easier for the patient and accelerates the intervention process
Many good resources (e.g. trained personnel, up-to-date equipment, space (for MOPC))				
For research purposes there's more control in Video Clinical Telehealth than in VVC because of the materials, resources, assistance, less noise...				

Factors like infrastructure and technology already exist and are therefore facilitators				
Patient is the one who benefits the most because of all the options he can choose from to receive medical care				



For objective 1c, three subjects data were analyzed.

The results of the Clinical Video Telehealth (CVT) Satisfaction Survey are summarized in Table 2. To further assess the adequacy of the Spanish version of the surveys, subjects' answers were analyzed PRE and POST debriefing of the questions by the original research team in the primary study. The surveys are shown in Spanish as used in the primary study by Molina-Vicent et al.

Table 2: Results of the PRE and POST administration of the Clinical Video Telehealth (CVT) Satisfaction Survey

	Pre		Post	
	n	%	n	%
Me dieron la opción de ir a una cita presencial en algún centro del VA o mediante el sistema de Telesalud.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Conseguí mi cita para una fecha y hora convenientes para mí.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Cuando programé mi cita, me trataron con respeto.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Sabía qué esperar antes de ir a mi cita.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	1	33.3
De acuerdo	1	33.3	1	33.3
Totalmente de acuerdo	1	33.3	1	33.3

	Pre		Post	
	n	%	n	%
Confio en el sistema de Telesalud como parte de mi atención médica general en el VA.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	2	66.7	3	100.0
Después de haberme registrado para la cita, el personal de la clínica me explicó de forma sencilla cómo funciona la tecnología videográfica de Telesalud.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	0	0.0
De acuerdo	1	33.3	0	0.0
Totalmente de acuerdo	1	33.3	3	100.0
El profesional de la salud me explicó todo de manera sencilla.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
El profesional de la salud me escuchó amablemente durante la cita.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Pude ver al profesional de la salud en el video claramente.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	1	33.3
Totalmente de acuerdo	3	100.0	2	66.7
Pude escuchar al profesional de la salud en el video claramente.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0

	Pre		Post	
	n	%	n	%
Totalmente de acuerdo	3	100.0	3	100.0
El profesional de la salud me hizo sentir a gusto explicándome cada paso realizado durante la cita.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
En general, estoy satisfecho con la consulta de Telesalud por video.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Después de la cita, no me quedaron dudas sobre cuáles eran los próximos pasos que tenía que seguir.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	1	33.3
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	2	66.7	2	66.7
El sistema de Telesalud reduce la necesidad de viajar largas distancias para poder consultar con mi profesional de la salud.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	1	33.3	0	0.0
Totalmente de acuerdo	2	66.7	3	100.0
Confío en el sistema de Telesalud como parte de mi atención médica general en el VA.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	2	66.7	3	100.0
Fue fácil hacer la conexión por video a mi cita del VA.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	1	33.3

	Pre		Post	
	n	%	n	%
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	2	66.7	2	66.7
El personal del VA me brindó información sobre cómo hacer la conexión a mi cita de Telesalud por video.				
Totalmente en desacuerdo	0	0.0	1	33.3
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	2	66.7	2	66.7
El profesional de la salud me escuchó amablemente durante la cita.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
El profesional de la salud me explicó todo de manera sencilla.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Después de la cita, no me quedaron dudas sobre cuáles eran los próximos pasos de atención médica que tenía que seguir.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	1	33.3
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	2	66.7	2	66.7
El profesional de la salud me hizo sentir a gusto explicándome cada paso realizado durante la cita.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
El sistema de Telesalud reduce la necesidad de viajar largas distancias para poder consultar con mi profesional de la salud.				

	Pre		Post	
	n	%	n	%
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	1	33.3	0	0.0
Totalmente de acuerdo	2	66.7	3	100.0
Pude ver al profesional de la salud en el vídeo claramente.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Pude escuchar al profesional de la salud en el vídeo claramente.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
En general, estoy satisfecho con la consulta de Telesalud por vídeo.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	0	0.0	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	3	100.0	3	100.0
Confío en el sistema de Telesalud como parte de mi atención médica general en el VA.				
Totalmente en desacuerdo	0	0.0	0	0.0
En desacuerdo	0	0.0	0	0.0
Ni de acuerdo, ni en desacuerdo	1	33.3	0	0.0
De acuerdo	0	0.0	0	0.0
Totalmente de acuerdo	2	66.7	3	100.0

The sociodemographic data of the three Veterans that had the TBI evaluation using Telehealth/VVC in Spanish is summarized in Table 3. The items of the TBI Demographic and Language Preference Data Collection Tool are shown in Spanish as used in the primary study by Molina-Vicenty et al.

Table 3: Sociodemographic data

	n	%
Edad		
21 – 41	2	66.7
42 – 61	1	33.3
62 – 81	0	0.0
82 o más	0	0.0
Género		
Masculino	3	100.0
Femenino	0	0.0
Etnicidad		
Hispano o Latino	3	100.0
No Hispano o Latino	0	0.0
Raza		
Blanco	3	100.0
Negro o Afroamericano	0	0.0
Asiático	0	0.0
Indio americano o nativo de Alaska	0	0.0
Nativo de Hawái u otra isla del Pacífico	0	0.0
Otro	0	0.0
Estado civil		
Soltero (nunca se ha casado)	1	33.3
Casado	1	33.3
Divorciado	1	33.3
Viudo	0	0.0
Lugar de nacimiento		
Puerto Rico	3	100.0
Estados Unidos	0	0.0

	n	%
Otro	0	0.0
Lugar de nacimiento de los padres		
Ambos en Puerto Rico	3	100.0
Al menos uno en Puerto Rico	0	0.0
Ninguno en Puerto Rico	0	0.0
Lugar de nacimiento de los abuelos		
Todos en Puerto Rico	2*	100.0*
Al menos uno en Puerto Rico	0	0.0
Ninguno en Puerto Rico	0	0.0
Residió fuera de Puerto Rico		
Sí	3	100.0
No	0	0.0
Educación		
No terminó la escuela superior	0	0.0
Escuela superior o examen de equivalencia	0	0.0
Algunos años universitarios	2	66.7
Grado asociado	1	33.3
Bachillerato	0	0.0
Maestría	0	0.0
Doctorado	0	0.0
Empleo		
Full-time	1	33.3
Part-time	0	0.0
Estudiante	1**	33.3**
Desempleado	1	33.3
Retirado	0	0.0
Incapacitado	1**	33.3**
Ingreso		
Menos de \$10,000	0	0.0
\$10,000 - \$14,999	0	0.0
\$15,000 - \$24,999	0	0.0
\$25,000 - \$34,999	0	0.0
\$35,000 - \$49,999	2	66.7
\$50,000 o más	1	33.3
Veterano de guerra		
Sí	2	66.7

	n	%
No	1	33.3
Conflictos de guerra		
WW1	0	0.0
WW2	0	0.0
Corea	0	0.0
Vietnam	0	0.0
Golfo Pérsico	0	0.0
Desert Storm	0	0.0
OEF	3***	100.0***
OIF	2***	66.7***
OND	1***	33.3***
Idioma de preferencia		
Inglés	0	0.0
Español	2	66.7
Ambos	1	33.3
“Service Connected”		
Sí	3	100.0
No	0	0.0
Edad de lesión traumática al cerebro (TBI)	29.0 (Promedio)	9.0 (Desv. Estándar)
Hospital donde ha recibido servicios para TBI		
San Juan	2	66.7
Los Ángeles	0	0.0
Bronx	0	0.0
Tampa	0	0.0
San Antonio	0	0.0
Palo Alto	0	0.0
Miami	0	0.0
Gainesville	0	0.0
Charleston	0	0.0
Washington	0	0.0
Otro	0	0.0
Ninguno	1	33.3
Días hospitalizado a causa del TBI	0	--

- * One participant did not report his/her grandparents place of birth
- ** For this item, participants could choose all applicable options. One participant marked both “student” and “disabled”
- *** For this item, participants could choose all applicable options depending on how many conflicts the Veteran participated in.



Discussion:

The research team used a Demand Dimension, composed of Participation Rate and Target Population Size, and an Implementation Dimension, composed of the SWOT analysis using a Focus Group, to evaluate the feasibility of the Telehealth/VVC implementation for TBI care in the preferred language of the patient. The Veteran's preference for the use of Telehealth was explored using a one-question survey. A total of four subjects were surveyed and all of them reported that they preferred to receive their medical intervention through Telehealth or VA Video Connect (VVC) for a 100% of acceptance. The reported Target Population Size by catchment area of 11,068 unique Veterans in Ponce and 9,416 Veterans in Mayaguez as measured during fiscal year 2019, was significant. This represents the number of Veterans that can benefit of Telehealth/VVC in those geographical areas.

Barriers and facilitators of TBI care implementation using Telehealth/VVC were explored by analyzing the results of the focus group with Telehealth providers and staff. The purpose of the focus group was introduced as a way to look at the strengths, weaknesses, challenges and opportunities that may be encountered implementing Telehealth services and VVC in an environment able to give evaluations to the patients with Traumatic Brain Injury (TBI). A transcription of the recorded focus group was used to complete a qualitative analysis.

The Telehealth providers and staff reported that they thought the Telehealth program increases the accessibility the patient has to the services and allows the patient to be seen where they live. Another felt that the program increases equity in terms of the types of patients that can be reached. They believed that it also provides more insight into the environment of the patient, especially with the VVC modality.

In considering strengths of the program, it was reported the Telehealth program provides resources for care, well-trained personnel who know all the modalities and up to date equipment. The infrastructure and technology already exist to make Telehealth possible, which was another advantage that was highlighted, but it needs to be noted that the scope and potential of patient assessment may vary by specialty. Though providers may need to adjust to this new reality and to the technology, the patient is the one who benefits most. Another advantage cited were all the types of assessment that could be done remotely using advanced technology, such as weight, blood pressure, and glucose.

In terms of the weaknesses of the program, the first issue raised was connectivity, since it may differ from one location to another, with variations in speed faster or slower that can cause pixilation or lost audio or video during the call. Another person felt that it took up a lot of time of the provider, since it extended the time of the interview. However, this also gave the patient more time to ask questions. Another weakness that was raised was the capacity of elderly patients to work with the cyber-technology. Some do not have family to help. It was observed that they may not have a tablet programmed or an email address. Another factor which can be seen as a weakness is the amount of time it may take for the provider to call and explain how to use the technology to the patient and troubleshoot difficulties with use. Providers may see the process at first as tedious, when it is not. Another felt that physical exams in the office enabled clinical decision more. The concern seemed to be an increase in workload.

As for the opportunities, they considered that Telehealth should extend beyond Ponce and Mayaguez, so that there would be other clinics that could also do Telehealth. In regard to TBI, it was thought that when a doctor receives a TBI consult, a reach can be made beyond existing clinics. The number of patients that could be seen would be more, especially in areas without

services. Additionally, another opportunity that would increase Telehealth viability would be education. The facilitator confirmed that it was felt that an educational program about available modules and how the Telehealth system worked was needed for patients, providers and office staff as well. Besides educating and orienting the patients about VVC, it was felt that the providers and staff also need education about the increased options offered. One person pointed out that having a clinical reminder in the patient's record, as the one being offered nationally, about who is eligible for telemedicine would also prove beneficial. The program could also use more marketing about what the VVC program offers and how it can be used.

The group that felt Telehealth offers a convenient way to see patients in their home and decreases their possible exposure to COVID at this time in history. Telemedicine can shorten the waiting time for visits and the amount of time for travel. As the number of patients grow, providers could be used from other locations, as far away as Miami, Texas or Chicago. With COVID, providers are seeing more new polytrauma patients with video conferencing.

It was felt that though Veterans were indoctrinated to use English in the military, Spanish is the primary language for many patients who find it easier for the interview and for understanding. It was said that VA needs to overcome the language barrier to provide TBI care to those patients whose preferred language is Spanish.

Veteran's responses of the CVT Satisfaction Survey after the administration of the Spanish versions of the Initial Traumatic Brain Injury (TBI) Screening, Neurobehavioral Symptoms Inventory (NSI), and Comprehensive TBI Evaluation (CTBIE) were evaluated. The population included Veterans with suspected TBI who prefer Spanish as the language of provision of care. The data of a total of three subjects was collected. The population was relatively young (2 subjects in the range of 21-41 years of age and one in the range of 42-61 years of age) and with

diverse marital status, education, status of employment and participations in OEF, OIF and OND conflicts. All participants were male and identified as White Hispanics or Latinos. They reported being born in Puerto Rico as well as their parents. The majority of the sample (2 out of 3) preferred Spanish as their language for provision of care. One subject preferred both, Spanish and English.

CVT Satisfaction Survey was administered twice in order to compare any change in the subject's answers before (PRE) and after (POST) the debriefing and discussion of the questions by the investigators. As for the comparison of results of the PRE and POST administration of the CVT Satisfaction Survey, no statistical significance was found, although there were different answers reported in four items. The lack of statistical significance may be related to the limited sample size. However, this may also imply adequate initial comprehension of the survey's questions in Spanish, PRE debriefing, by the subjects interviewed, which suggests that there may not be a need to modify the questions with the purpose of making them more understandable for patients. The results suggest that overall, participants felt satisfied with the health service provided using the Telehealth or VVC modalities. One of the questions specifically states "Overall, I am satisfied with the video Telehealth visit" and 100% of the participants answered they "strongly agree". However, the results also suggest that improvements could be implemented so patients can feel more confident when using these programs, as they better understand how to work with the technology and the steps that need to be followed.

Conclusions:

Telehealth and VA Video Connect are telemedicine programs that have proven to enhance access to health services therefore minimizing health disparities and improving health equity.

This study's results suggest that providing TBI care by Telehealth/VVC, in the preferred language of the patient, is not only feasible but well accepted by Veterans and clinical providers. In overall, patients and providers feel satisfied when using these programs for medical interventions. All participants surveyed agreed to participate of these modalities when offered to them. In addition to that, subjects who participated of the interventions reported they felt they could trust the program to receive their health services and that they felt comfortable when in the intervention both with the provider and with the features of the platform (e.g. they could hear and see their provider adequately). They also believed this technology was beneficial in that it reduced the necessity of traveling long distances.

On the other hand, providers and Telehealth staff expressed they felt that these programs were especially beneficial for the patient. Although it has many strengths (e.g. reducing the need to travel long distances, enhancing access, and ability of receiving medical care from where the patient feels more comfortable), they shared a few details that could be improved that would help providers have a more pleasant experience when using these platforms. For them, the issues with the connectivity, an increased workload and the limitations of some specialties when using these modalities, are some of the weaknesses of the programs. They suggested having staff to contact the patients prior to the interventions for testing and troubleshooting, educating the patient on how to use the technologies and clarify doubts, and reminding them about their appointments would be extremely beneficial for providers and would help improve Telehealth utilization. Additionally, they suggest having other clinics around the island with the ability to provide Telehealth. Regardless, providers and Telehealth staff concluded that Telehealth and VVC are technologies that will keep growing and improving to enhance access to all patients, and that it has proven to be especially useful in

times of a global pandemic when receiving health services at a distance not only protects that one patient, but also protects the provider and other persons who might've encountered the patient in case of a face-to-face intervention.

One of the limitations of this study is that it had a small sample (N=3) that consisted of only White Hispanic Males. Although the target population size measured was significant, the recruitment for the primary study was affected by the COVID-19 pandemic. To protect the Veterans and VA staff, the VACHS put on hold all research related activities, including recruitment. On December 2020, the hold was lifted but at that time the Principal Investigator of the primary study decided to close enrollment, which affected the sample size of the primary study and consequently the secondary analysis of the data. Regardless, these preliminary results were important for the creation of a new study that will further explore the feasibility of Telehealth and VVC interventions with a larger sample, including Hispanic population of different origins. It is important to continue exploring the barriers and facilitators of these modalities to improve the access to health services across diverse populations that also include women and other races and ethnicities. Another area that could be explored in future studies is extending these interventions to populations with other diseases and comorbidities. This way researchers could identify the special needs of the distinct populations and address them for better provision of medical care.

This pilot study demonstrated that it is feasible to conduct the TBI Initial Evaluation using the preferred language of the patient. According to the results of the target population size, the preliminary data of the Telehealth/VVC interventions and the focus group analysis, there is a large population that could benefit of the Telehealth/VVC interventions, especially when they are offered in the preferred language of the subject.

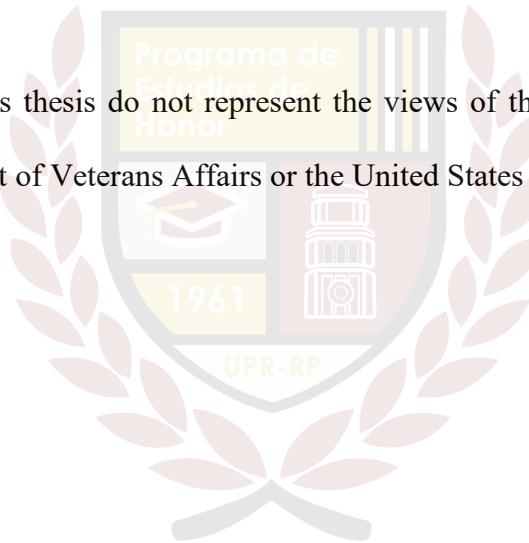
Acknowledgements:

This research study was approved by CIPSHI at the University of Puerto Rico Rio Piedras and acknowledged by the IRB at the VACHS.

This material is based upon work supported by the Charleston Health Equity and Rural Outreach Innovation Center (HEROIC) at Charleston, SC, with resources and the use of facilities at the VA Caribbean Healthcare System at San Juan, PR. We thank the contribution of the VACHS Telehealth Program and the VACHS Medical Media Production Service.

Disclaimer:

The contents of this thesis do not represent the views of the VA Caribbean Healthcare System, the Department of Veterans Affairs or the United States Government.



V. Bibliography:

1. (2010). Returning home from Iraq and Afghanistan. doi:10.17226/12812.
2. Amara, J., Pogoda, T., Krengel, M., Iverson, K., Baker, E., & Hendricks, A. (2014). Determinants of Utilization and Cost of VHA Care by OEF/OIF Veterans Screened for Mild Traumatic Brain Injury. *Military Medicine*, 179(9), 964-972.
3. Arasaratnam, L. A., & Doerfel, M. L. (2005). Intercultural communication competence: Identifying key components from multicultural perspectives. *International Journal of Intercultural Relations*, 29, 137-163.
4. Arriola, V., & Rozelle, J. (2016). Traumatic brain injury in United States operation enduring freedom/operation Iraqi freedom (OEF/OIF) Hispanic Veterans—A review using the PRISMA method. *Behavioral Sciences*, 6(1), 3. doi:10.3390/bs6010003
5. Bain L., Keren N.I., and Stroud C., Developing Multimodal Therapies for Brain Disorders: Proceedings of a Workshop: The National Academies of Sciences-Engineering-Medicine. (2017) *The National Academies Press* 1-96.
6. Barrera, M. Jr. and González Castro, F. (2006). A heuristic framework for the cultural adaptation of interventions. *Clinical Psychology: Science And Practice*, 13 (4), 311-316.
7. Bazarian, J. J., Pope, C., McClung, J., Cheng, Y. T., & Flesher, W. (2003). Ethnic and racial disparities in emergency department care for mild traumatic brain injury. *Academic Emergency Medicine*, 10(11), 1209–1217. doi:10.1111/j.1553-2712.2003.tb00605.x
8. Belanger, H., Vanderploeg, R., Soble, J., & Groer, S. (2012). Validity of the Veterans Health Administratio's Traumatic Brain Injury Screen. Archives of physical medicine and rehabilitation, 93(7).
9. Bernal G, Bonilla J, Bellido C: (1995).Ecological validity and cultural sensitivity for outcome research: issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology*, 23 (1), 67-82.
10. Bernal, G. and Domenech Rodriguez, M. (Eds.). (2012). *Cultural adaptations: Tools for evidence-based practice with diverse populations*, 1st Ed. Washington, DC: American Psychological Association (APA).
11. Bishop, M. D., Romero, S., Patterson, T. S., Singletary, F. F., & Light, K. (2012). Exploration of patient-centered success criteria and clinically measured improvement during falls rehabilitation. *Journal of Geriatric Physical Therapy*, 35(4), 181–190. doi:10.1519/jpt.0b013e318248e29d
12. Bowen, D., et al (2010). How we design feasibility studies. *NIH-PA*, 36(5): 452–457. doi:10.1016/j.amepre.2009.02.002.
13. Cabassa, L. and Baumann, A. (2013). A two-way street: bridging implementation science and cultural adaptations of mental health treatments. *Implementation Science*, 8:90.-
14. Castro, F. G., Barrera, M. and Steiker, L.H, (2010). Issues and Challenges in the Design of Culturally Adapted Evidence-Based Interventions. *Annual Review of Clinical Psychology*, 6: 213–239.

15. Davis, B. Project MORE: An online digital portal keyed to oral community language collection for Limited English students. Retrieved December 12, 2016, from <http://education.uncc.edu/more>
16. De Fina, A. Schiffрин, D. and Michael Bamberg, M. (Eds.). Discourse and Identity (Studies in Interactional Sociolinguistics). Cambridge, UK: Cambridge University Press
17. Del Toro, C. M., Bislick, L. P., Comer, M., Velozo, C., Romero, S., Gonzalez Rothi, L. J., & Kendall, D. L. (2011). Development of a short form of the Boston naming test for individuals with Aphasia. *Journal of Speech Language and Hearing Research*, 54(4), 1089. doi:10.1044/1092-4388(2010/09-0119)
18. DePalma R.G. and Hoffman S.W., Combat blast related traumatic brain injury (TBI): Decade of recognition; promise of progress. *Behav Brain Res* (2016), <http://dx.doi.org/10.1016/j.bbr.2016.08.036>
19. DeWalt, D. A., Rothrock, N., Yount, S., & Stone, A. A. (2007). Evaluation of item candidates: The PROMIS Qualitative Item Review. *Medical Care*, 45(Suppl 1), S12–S21. doi:10.1097/01.mlr.0000254567.79743.e2
20. Dismuke C., Gebregziabher M., Yeager D., Egede L. Racial/Ethnic Differences in Combat- and Non-Combat-Associated Traumatic Brain Injury Severity in the Veterans Health Administration: 2004–2010. (2014) *AJPH*. In Press.
21. Dismuke-Greer, C.E., Egede, L.E., Gebregziabher, M., Pugh, M.J., Ritchwood, T., Uchendu, U.S., & Walker, R.J. (2018). Geographic Disparities in Mortality Risk Within a Racially Diverse Sample of U.S. Veterans with Traumatic Brain Injury. *Health Equity*, 2(1):304-312. doi: 10.1089/heq.2018.0047.
22. Dismuke, C. E., Gebregziabher, M., & Egede, L. E. (2015). Racial/ethnic disparities in VA services utilization as a partial pathway to mortality differentials among Veterans diagnosed with TBI. *Global Journal of Health Science*, 8 (2):260-72. doi:10.5539/gjhs.v8n2p260
23. Domenech Rodriguez, M., Baumann, A. and Schwartz, A. (2011). Cultural adaptation of an evidence based intervention: from theory to practice in a latino/a community context. *American Journal of Community Psychology*, 47, 170–186.
24. Egede L., Dismuke C., Echols C. (2011). Racial/Ethnic Disparities in Mortality Risk Among US Veterans with Traumatic Brain Injury. *AJPH*, 102(2), 266-271.
25. Evans, C., Andre, J., Pape, T., Steiner, M., Stroupe, K., Hogan, T., Smith, B. (2013). An Evaluation of the Veterans Affairs Traumatic Brain Injury Screening Process Among Operation Enduring Freedom and/or Operation Iraqi Freedom Veterans. *PM&R*, (5), 210-220.
26. Gallois, C., Ogay, T., & Giles, H. (2005). Communication accommodation theory: A look back and a look ahead. In W.B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 121-148). Thousand Oaks, CA: Sage.
27. Gebregziabher, M., Axon, R. N., Dismuke, C. E., ., Egede, L. E., Ozieh, M., Taber D. J., Walker R. J., & Ward, R. C. (2018). Ethnic and geographic variations in multimorbidity: Evidence from three large cohorts. *Social Science & Medicine*, 211, 198-206. doi:[10.1016/j.socscimed.2018.06.020](https://doi.org/10.1016/j.socscimed.2018.06.020)

28. Gjersing, L., Caplehorn,J. and Clausen, T. (2010). Cross-cultural adaptation of research instruments: language, setting, time and statistical considerations. *BMC Medical Research Methodology*, 10, 13-23. <http://www.biomedcentral.com/1471-2288/10/13>
29. Gonzalez Barrera, A., & Hugo Lopez, M. (2013). Spanish is the most spoken non-english language in U.S. Homes, even among non-hispanics. *Spanish is the most spoken non-english language in U.S. Homes, even among non-hispanics*. Retrieved 12 December 2016, from <http://www.pewresearch.org/fact-tank/2013/08/13/spanish-is-the-most-spoken-non-english-language-in-u-s-homes-even-among-non-hispanics>
30. Harrison-Felix, CL., Whiteneck, GG., Jha, A., DeVivo, MG., Hamond, FM. & Hart, DM. (2009). Mortality over four decades after traumatic brain injury rehabilitation: a retrospective cohort study. *Arch Phys Med Rehabil*, 90(9), 1506-1513.
31. Hernandez, A., Dapretto, M., & Bookheimer, S. (2000). Language switching and language representation in Spanish-English bilinguals: An fMRI study. *NeuroImage*, 11(5), S340. doi:10.1016/s1053-8119(00)91272-2
32. Hernández, H., Moore, E., & Scholten, J. (2015). Home Clinical Video Telehealth Promotes Education and Communication with Caregivers of Veterans with TBI. *Telemedicine journal and e-health*, 21(9):761-6. doi: 10.1089/tmj.2014.0155.
33. Hong, I., Velozo, C. A., Li, C.-Y., Romero, S., Gruber-Baldini, A. L., & Shulman, L. M. (2016). Assessment of the psychometrics of a PROMIS item bank: Self-efficacy for managing daily activities. *Quality of Life Research*, 25(9), 2221–2232. doi:10.1007/s11136-016-1270-1
34. Johnson, M. (2014). Secondary Data Analysis: A Method of which the Time Has Come. *Qualitative and Quantitative Methods in Libraries (QQML)* 3:619–626.
35. Ko, L., Reuland, D., Jolles, M., Clay, R. and Pignone, M. (2014). Cultural and linguistic adaptation of a multimedia colorectal cancer screening decision aid for Spanish-speaking Latinos. *Journal of Health Communication*, 19(2), 192-209.
36. Kovelman, I., Baker, S. A., & Petitto, L.-A. (2008). Bilingual and Monolingual brains compared: A functional magnetic resonance imaging investigation of syntactic processing and a possible “Neural Signature” of Bilingualism. *Journal of Cognitive Neuroscience*, 20(1), 153–169. doi:10.1162/jocn.2008.20.1.153
37. Kreuter, M., Lukwago, S., Bucholtz, D., Clark, E. and Sanders-Thompson, V. (2003). Achieving cultural appropriateness in health promotion programs: targeted and tailored approaches. *Health Education & Behavior*, 30 (2), 133-146
38. Labov, w. (2010). *Principles of linguistic change: cognitive and cultural factors*, vol. 3. Malden, MA: Wiley Blackwell.
39. Lesser D. (2010). Theoretical bases of a conceptual framework with reference to intercultural communicative competence. *Journal of Applied Linguistics* 4(3), 309-332.
40. Li, C., Romero, R., Bonilha, H., Simpson, K., Hong, A., & Velozco, C. (2016). Existing Instruments to Develop an Activity of Daily Living Item Bank. *Journal of Evaluation & Health Professions*

41. Liu, S. and Gallois, C. (2014). Integrating intercultural communication and crosscultural psychology: Theoretical and pedagogical implications. *Online Readings in Psychology and Culture*, Article 12, 1-20. Available from: <http://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1129&context=orpc>
42. Martinez, R. N., Hogan, T. P., Lones, K., Balbale, S., Scholten, J., Bidelsbach, D., ... Smith, B. M. (2016). Evaluation and treatment of mild traumatic brain injury through the implementation of clinical video Telehealth: Provider perspectives from the Veterans Health Administration. *PM&R*. doi:10.1016/j.pmrj.2016.07.002
43. Molina-Vicenty, I., et al (2021). Enhancing Language Access: A Pilot Study to Examine the Importance of Understanding the Language Preference and Acculturization Level in the Provision of Healthcare for Hispanics Veterans With Traumatic Brain Injury. *Military Medicine*, 186(S1): 572-578. doi: 10.1093/milmed/usaa256.
44. Molina-Vicenty, I., Matos, A., Motta, K., Alonso, H., Valdes, S., Marrero, F., Quijano., C., Frontera, M., Reyes, C., (2015). The Utility of SPECT-CT and PET-CT in the Diagnosis of Traumatic Brain Injury at the VA Caribbean Healthcare System (VACHS): Retrospective Descriptive. Unpublished Data.
45. Molina-Vicenty, I., Santiago, M., Sorando, D., Velez, I., Motta, K., Borras, I., Monltavan, C., Figueroa, J., Jones, G., Freytes, M., Mendez, J., Gonzalez, G., Ocasio, L., Rodríguez, A., Vargas, M., Rosado, N., Jusino, K., Faris, V., Quijano, C., Feliciano, C., Landron, K., (2015). Model of Traumatic Brain Injury Using Imaging, Physiological & Psychosocial Parameters: Descriptive Study. Unpublished Data.
46. Rodriguez-Fornells, A., Britti, B., Heinze H.J., Münte, T.F., Rotte M., & van der Lugt, A. (2005). Second language interferes with word production in fluent bilinguals: brain potential and functional imaging evidence. *Journal of cognitive neuroscience*;17(3):422-33. doi:[10.1162/0898929053279559](https://doi.org/10.1162/0898929053279559).
47. Román, P., González, J., Ventura-Campos, N., Rodríguez-Pujadas, A., Sanjuán, A., & Ávila, C. (2015). Neural differences between monolinguals and early bilinguals in their native language during comprehension. *Brain and Language*, 150, 80–89. doi:10.1016/j.bandl.2015.07.011
48. Sousa, V. and Rojjanasrirat, W. (2011). Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: a clear and user-friendly guideline. *Journal of Evaluation in Clinical Practice*, 17, 268–274.
49. VA/DoD Clinical Practice Guidelines. (n.d.). Retrieved from <http://www.healthquality.va.gov/>
50. Van Rompay, M., McKeown, N., Castaneda-Sceppa, C., Falcón, L., Ordovás, J. and Tucker, K. (2012). Acculturation and sociocultural influences on dietary intake and health status among Puerto Rican adults in Massachusetts. *Journal of Academic Nutrition and Dietetics*, 112, 64-74.
51. Velozo, C. A., Seel, R. T., Magasi, S., Heinemann, A. W., & Romero, S. (2012). Improving measurement methods in rehabilitation: Core concepts and recommendations for scale development. *Archives of Physical Medicine and Rehabilitation*, 93(8), S154–S163. doi:10.1016/j.apmr.2012.06.001
52. Wang, Y., deGrauw, T., Holland, S., Holroyd, T., Horn, P., Liu, Y., Narmoneya, D., Rose, D., Vannest, J., & Xiang, J. (2011). Neuromagnetic measures of word processing in

- bilinguals and monolinguals. *Clinical neurophysiology*, 122(9):1706-17. doi: 10.1016/j.clinph.2011.02.008.
53. Wennergren, J., Munshi, I., Fajardo, A. D., & George, V. V. (2014). Implementation of clinical video Telemedicine (CVT) within a VA medical center is cost effective and well received by Veterans. *International Journal of Clinical Medicine*, 05(12), 711–716. doi:10.4236/ijcm.2014.512097
54. WHO. (2010, November 5). Process of translation and adaptation of instruments. Retrieved February 19, 2017, from World Health Organization, http://www.who.int/substance_abuse/research_tools/translation/en/
55. Willis, G. (2005). Cognitive interviewing: a tool for improving questionnaire design. Thousand Oaks, CA: Sage Publications.
56. Willis, G. (2015). *Cognitive Interviewing: A Tool for Improving Questionnaire Design*, 3rd ed, Thousand Oaks, CA: Sage Publications.
57. Willis, G. and Artino, A. (2013). What do our respondents think we're asking? using cognitive interviewing to improve medical education surveys. *Journal of Graduate Medical Education*, 5(3):353-6.
58. Willis, G. and Artino, A. (2013). What do our respondents think we're asking? using cognitive interviewing to improve medical education surveys. *Journal of Graduate Medical Education*, 5(3):353-6.
59. Zhang, Y., Wang, T., Huang, P., Li, D., Qiu, J., Shen, T., & Xie, P. (2015). Free language selection in the bilingual brain: An event-related fMRI study. *Scientific Reports*, 5, 11704. doi:10.1038/srep11704





Appendix A:
Clinical Video Telehealth (CVT) Satisfaction Survey (English Version)

SURVEY 1: <https://survey.voice.medallia.com/va-telehealth-CVT-Appointment-Scheduling>

- Survey Name 1: Clinical Video Telehealth (CVT) Appointment Scheduling
- Survey Topic 1: scheduling a telehealth appointment in preparation for Clinical Video Telehealth (CVT)



VA |  U.S. Department of Veterans Affairs

The Veterans Crisis Line provides free, confidential support for Veterans in crisis and their families and friends. Dial 1 (800) 273-8255 (Press 1), or text 838255 to receive confidential support 24/7 (System of Records Notice VA158VA10NC5). Visit <https://www.veteranscrisisline.net> for more information.

OMB Number: 2900-0770
Expiration: 09/30/2020
Estimated Burden: 2 minutes

Help us serve you better
Estudios de

Tell us about your experience scheduling a Telehealth appointment.

Please respond to the following statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

1961 UPR-RP

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I was given a choice between having my appointment in-person at a VA facility or through Telehealth. Required	1	2	3	4	5
I got my appointment on a date and time that worked for me. Required	1	2	3	4	5

When scheduling my appointment, I was treated with respect. Required	1	2	3	4	5
It was clear before my appointment what to expect. Required	1	2	3	4	5
I trust Telehealth as part of my overall VA healthcare. Required	1	2	3	4	5

This information is collected in accordance with section 3507 of the Paperwork Reduction Act of 1995, Title 38, United States Code, allows us to ask for this information. We estimate that you will need an average of two minutes to review the instructions and complete this survey. The results of this survey will be used to inform opportunities for program improvement in the quality of VA services. Participation in this survey is voluntary and your decision not to respond will have no impact on VA benefits or services to which you may currently be receiving. By filling out this survey, you are authorizing VA database access to retrieve veteran contact information, to follow up with you accordingly for purposes of service recovery, potential crisis, or to learn more about feedback you have shared regarding your experience with VA. VA cannot conduct or sponsor a collection of information unless a valid OMB control number is displayed. You are not required to respond to a collection of information if this number is not displayed. Valid OMB control numbers can be located on the OMB Internet Page at www.reginfo.gov/public/do/PRAList.

Would you like to volunteer your demographic information to help VA better serve you?

Yes

No

If you provide feedback, you may be contacted by VA. Serving you is our top priority.

Next

[Privacy Policy](#)



SURVEY 2: <https://survey.voice.medallia.com/va-telehealth-CVT-VAMC-CBOC-Appointment>

- Survey 2 Name: Clinical Video Telehealth (CVT) VAMC or CBOC Appointment
- Survey Topic 2: Clinical Video Telehealth (CVT) appointment at <LOCATION>



VA**U.S. Department
of Veterans Affairs**

The Veterans Crisis Line provides free, confidential support for Veterans in crisis and their families and friends. Dial 1 (800) 273-8255 (Press 1), or text 838255 to receive confidential support 24/7 (System of Records Notice VA158VA10NC5). Visit <https://www.veteranscrisisline.net> for more information.

OMB Number: 2900-0770
Expiration: 09/30/2020
Estimated Burden: 2 minutes

Help us serve you better

Tell us about your experience scheduling a Telehealth appointment at C.W. Bill Young VA Medical Center.

Please respond to the following statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
-------------------	----------	----------------------------	-------	----------------

After I checked in for my appointment, the clinic staff explained how the video Telehealth technology would work in a way that was easy to understand. Required

1	2	3	4	5
---	---	---	---	---

My provider explained things to me in a way

1	2	3	4	5
---	---	---	---	---

that was easy to understand. Required

My provider listened to me during the appointment in a caring manner. Required

1	2	3	4	5
---	---	---	---	---

I was able to see the provider clearly by video. Required

1	2	3	4	5
---	---	---	---	---

I was able to hear the provider clearly by video. Required

1	2	3	4	5
---	---	---	---	---

The provider made me feel at ease by explaining every step they took during my appointment. Required

1	2	3	4	5
---	---	---	---	---

Overall, I am satisfied with the video Telehealth visit. Required

1	2	3	4	5
---	---	---	---	---

After my appointment, I was clear on what my next steps were. Required

1	2	3	4	5
---	---	---	---	---

Telehealth reduces the need to travel long distances in order to meet with my provider. Required

1	2	3	4	5
---	---	---	---	---

I trust Telehealth as part of my overall VA healthcare. Required

1	2	3	4	5
---	---	---	---	---

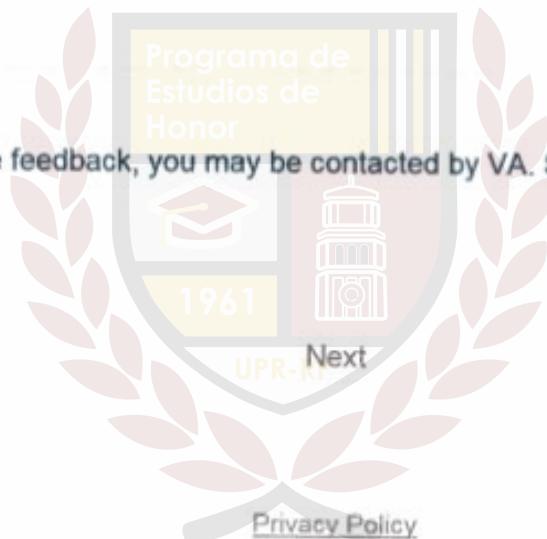
This information is collected in accordance with section 3507 of the Paperwork Reduction Act of 1995, Title 38, United States Code, allows us to ask for this information. We estimate that you will need an average of two minutes to review the instructions and complete this survey. The results of this survey will be used to inform opportunities for program improvement in the quality of VA services. Participation in this survey is voluntary and your decision not to respond will have no impact on VA benefits or services to which you may currently be receiving. By filling out this survey, you are authorizing VA database access to retrieve veteran contact information, to follow up with you accordingly for purposes of service recovery, potential crisis, or to learn more about feedback you have shared regarding your experience with VA. VA cannot conduct or sponsor a collection of information unless a valid OMB control number is displayed. You are not required to respond to a collection of information if this number is not displayed. Valid OMB control numbers can be located on the OMB Internet Page at www.reginfo.gov/public/do/PRAMain.

Would you like to volunteer your demographic information to help VA better serve you?

Yes

No

If you provide feedback, you may be contacted by VA. Serving you is our top priority.



[Privacy Policy](#)

SURVEY 3: <https://survey.voice.medallia.com/va-telehealth-CVT-Home-Mobile-Appointment>

- Survey Name 3: Clinical Video Telehealth (CVT) Home or Off-Site Appointment
- Survey Topic 3: Clinical Video Telehealth (CVT) appointment that occurred using your mobile phone, tablet or computer





U.S. Department
of Veterans Affairs

The Veterans Crisis Line provides free, confidential support for Veterans in crisis and their families and friends. Dial 1 (800) 273-8255 (Press 1), or text 838255 to receive confidential support 24/7 (System of Records Notice VA158VA10NC5). Visit <https://www.veteranscrisisline.net> for more information.

OMB Number: 2900-0770
Expiration: 09/30/2020
Estimated Burden: 2 minutes

Help us serve you better

Tell us about your experience scheduling a Telehealth appointment.

Please respond to the following statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

**Connecting to my VA Video Connect appointment was easy.
Required**

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Connecting to my VA Video Connect appointment was easy. Required	1	2	3	4	5

The VA staff gave me information about connecting to my video Telehealth appointment.

1	2	3	4	5
---	---	---	---	---

My provider listened to me during the

1	2	3	4	5
---	---	---	---	---

appointment in a caring manner. Required	1	2	3	4	5
My provider explained things to me in a way that was easy to understand. Required	1	2	3	4	5
After my appointment, I was clear about my next steps of care. Required	1	2	3	4	5
The provider made me feel at ease by explaining every step they took during my appointment. Required	1	2	3	4	5
Telehealth reduces the need to travel long distances in order to meet with my provider. Required	1	2	3	4	5
I was able to see the provider clearly by video. Required	1	2	3	4	5
I was able to hear the provider clearly by video. Required	1	2	3	4	5
Overall, I am satisfied with the video Telehealth visit. Required	1	2	3	4	5
I trust Telehealth as part of my overall VA healthcare. Required	1	2	3	4	5

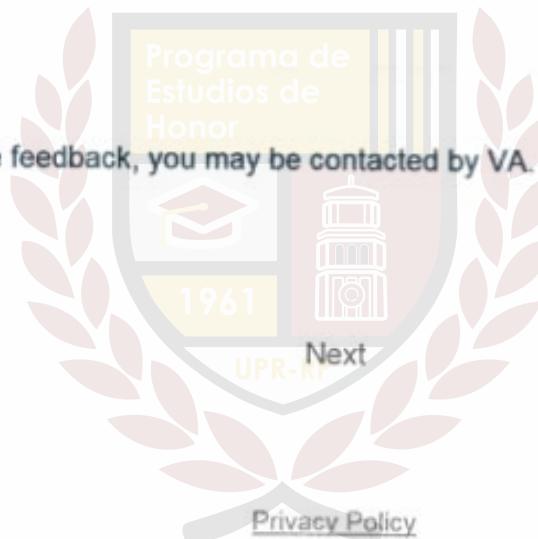
This information is collected in accordance with section 3507 of the Paperwork Reduction Act of 1995. Title 38, United States Code, allows us to ask for this information. We estimate that you will need an average of two minutes to review the instructions and complete this survey. The results of this survey will be used to inform opportunities for program improvement in the quality of VA services. Participation in this survey is voluntary and your decision not to respond will have no impact on VA benefits or services to which you may currently be receiving. By filling out this survey, you are authorizing VA database access to retrieve veteran contact information, to follow up with you accordingly for purposes of service recovery, potential crisis, or to learn more about feedback you have shared regarding your experience with VA. VA cannot conduct or sponsor a collection of information unless a valid OMB control number is displayed. You are not required to respond to a collection of information if this number is not displayed. Valid OMB control numbers can be located on the OMB Internet Page at www.reginfo.gov/public/do/PRAMain.

Would you like to volunteer your demographic information to help VA better serve you?

Yes

No

If you provide feedback, you may be contacted by VA. Serving you is our top priority.



Demographic Survey



VA



U.S. Department
of Veterans Affairs

Help VA Improve its Services

We are working to better understand our customers. The following question is **voluntary**. By providing your data, your responses can help us improve VA care and services. Thank you for your participation.

Estudios de

laboratorio

Are You Hispanic or Latino?

Yes

No

What is your race? Select one or more.

White

Black or African American

Asian

Native Hawaiian or Other Pacific Islander

American Indian or Alaska Native

How do you describe your gender?

Male

Female

Non-Binary / Third Gender

Prefer not to say

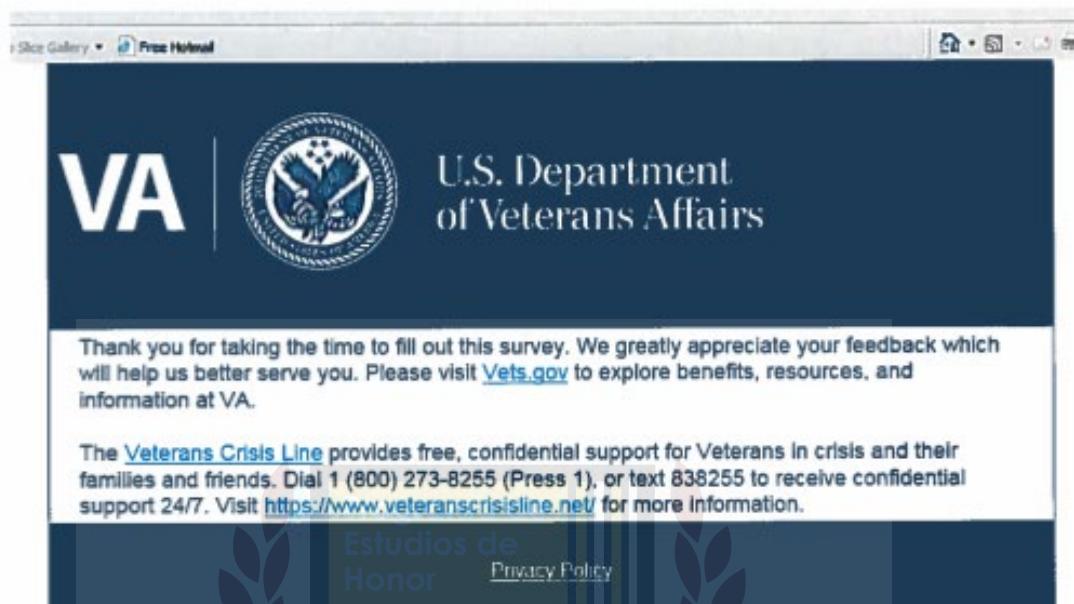
Back

Finish



Thank you Note





Email: In addition to the surveys, respondents will receive an initial email and a reminder email. I have attached a PDF with the text and design of this email.

Open Response Question: One element not currently on the survey but could be in the future is a comment box. This copy is in page 3 of the attached PDF





[INSERT SURVEY NAME] Survey – 2 minutes

Veterans Experience Office <va@va.voice.medallia.com>
To: daniel.goldberg@partners.medallia.com

Fri, Jul 20, 2018 at 7:54 PM



The Veteran Crisis Line provides free, confidential support for Veterans in crisis and their families and friends. Dial 1 (800) 273-8255 (Press 1), or text 838255 to receive confidential support 24/7 (System of Records Notice VA-158VA10MCS). Visit <https://www.veterancrisisline.net> for more information.

OMB Number: 2900-0770

Expiration: 09/30/2020

Estimated Burden: 2 minutes

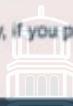
Help us serve you better

Tell us about your experience [place survey topic here]:

Dear <Firstname>, Programa de
Estudios do

We care about your experience with VA services. The more you share with us about your recent [place survey topic here] with VHA Telehealth Services, the better we can serve you.

Because serving you is our top priority, if you provide feedback, you may be contacted by an individual at VA.

 Take Survey

UPR-RP

Thank you,

Veterans Experience Office
Department of Veterans Affairs

Please do not "Reply" to this message

If you wish to share your feedback, please do so by August 03, 2018 at 12:35 AM

You received this email because you provided your email address to VA.

The National Call Center for Homeless Veterans (NCCHV) provides free, confidential support for Veterans who are homeless or at risk of homelessness--and their family members, friends and supporters. Veterans can make the call to or chat online with the National Call Center for Homeless Veterans, where trained counselors are ready to talk confidentially 24 hours a day, 7 days a week. Dial 1 (877) 424-3838 or visit <https://www.va.gov/HOMELESS> to receive confidential support. If you would like to opt out from receiving future surveys, please click [here](#).

[Unsubscribe from this VA Survey](#) | [VA Privacy Policy](#)

Department of Veterans Affairs
Veterans Experience Office (30)
810 Vermont Avenue, NW
Washington, DC 20420



REMINDER: [INSERT SURVEY NAME] Survey – 2 minutes

Veterans Experience Office <va@va.voice.medallia.com>
To: daniel.goldberg@partners.medallia.com

Fri, Jul 20, 2018 at 7:54 PM



The Veterans Crisis Line provides free, confidential support for Veterans in crisis and their families and friends. Dial 1 (800) 273-8255 (Press 1), or text 838255 to receive confidential support 24/7 (System of Records Notice VA158PVA00MCS). Visit <https://www.veteranscrisisline.net> for more information.

OMB Number: 2900-0770
Expiration: 09/30/2020
Estimated Burden: 2 minutes

Help us serve you better

We are eager to hear about experience [place survey topic here] with VHA Telehealth Services.

Dear <Firstname>, Programa de
Estudios do

We care about your experience with VA services. The more you share with us about your recent [place survey topic here] with VHA Telehealth Services, the better we can serve you.

Because serving you is our top priority, if you provide feedback, you may be contacted by an individual at VA.

 Take Survey

UPR-RP

Thank you,

Veterans Experience Office
Department of Veterans Affairs

Please do not "Reply" to this message.

If you wish to share your feedback, please do so by August 03, 2018 at 12:05 AM.

You received this email because you provided your email address to VA.

The National Call Center for Homeless Veterans (NCCHV) provides free, confidential support for Veterans who are homeless or at risk of homelessness—and their family members, friends and supporters. Veterans can make the call to or chat online with the National Call Center for Homeless Veterans, where trained counselors are ready to talk confidentially 24 hours a day, 7 days a week. Dial 1 (877) 424-3838 or visit <https://www.va.gov/HOMELESS/> to receive confidential support. If you would like to opt out from receiving future surveys, please click [here](#).

[Unsubscribe from this VA Survey](#) | [VA Privacy Policy](#)

Department of Veterans Affairs
Veterans Experience Office (30)
810 Vermont Avenue, NW
Washington, DC 20420

Compliment, Concern Recommendation Question

Would you like to provide additional feedback with a concern, compliment, or recommendation about your experience filing your NOD. Please select from one of the following options. **Required**

- Select -

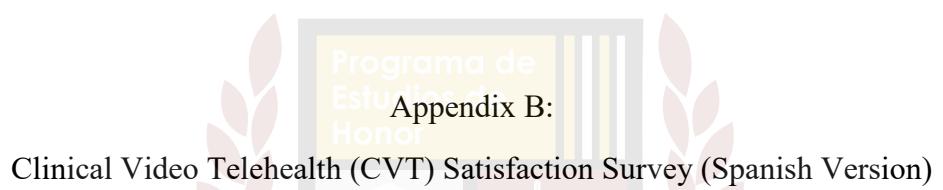


Note: This will be a dropdown with the options: compliment, concern or recommendation

Use the text box below to enter details of the additional feedback (optional). Please do not include any personally identifiable information, Social Security Number, Veteran ID, or medical information, but do provide details about your experience. **Required**

0/400





[Logo:] U.S. Department of Veterans Affairs

La Línea de Crisis para Veteranos ofrece apoyo gratuito y confidencial para los veteranos en crisis, sus familiares y amigos. Llame al 1 (800) 273-8255 (marque el 1) o envíe un mensaje de texto al 838255 para recibir apoyo confidencial 24/7 (Aviso del Sistema de Registros del VA 158VA10NC5). Acceda a <https://www.veteranscrisisline.net> para más información.

Número de la OMB: 2900-0770
Fecha de vencimiento: 30/9/2020
Tiempo aproximado: 2 minutos

Ayúdenos a servirle mejor

Cuéntenos cuál ha sido su experiencia al programar citas de Telesalud.

Conteste las siguientes aseveraciones usando una escala del 1 (totalmente en desacuerdo) al 5 (totalmente de acuerdo):

	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo, ni en desacuerdo	De acuerdo	Totalmente de acuerdo
Me dieron la opción de ir a una cita presencial en algún centro del VA o mediante el sistema de Telesalud. Requerido	1	2	3	4	5
Conseguí mi cita para una fecha y hora convenientes para mí. Requerido	1	2	3	4	5
Cuando programé mi cita, me trataron con respeto. Requerido	1	2	3	4	5
Sabía qué esperar antes de ir a mi cita. Requerido	1	2	3	4	5
Confío en el sistema de Telesalud como parte de mi atención médica general en el VA. Requerido	1	2	3	4	5

Esta información se recopila de conformidad con la sección 3507 de la Ley de Reducción de Trámites de 1995. El Título 38 del Código de los Estados Unidos nos permite solicitarle esta información. Calculamos que demorará un promedio de dos minutos en leer las instrucciones y completar la encuesta. Los resultados de esta encuesta se usarán con el fin de arrojar luz a oportunidades que mejoren la calidad del programa de servicios del VA. La participación en esta encuesta es voluntaria. Si decide no llenarla, esto no afectará los beneficios ni los servicios del VA que recibe actualmente. Al completar esta encuesta, usted autoriza el acceso a la base de datos del VA para recuperar la información de contacto de veteranos; darle el debido seguimiento con fines de servicios de recuperación; atender posibles crisis o para conocer más sobre los comentarios que ha compartido sobre su experiencia con el VA. El VA no puede realizar ni patrocinar la recopilación de información, a menos que se muestre un número de control válido de la OMB. No está obligado a proveer información si este número no aparece. Los números de control válidos pueden conseguirse en la página de internet de la OMB: www.reginfo.gov/public/do/PRAMain.

¿Desea divulgar su información demográfica voluntariamente para ayudar al VA a servirle mejor?

Sí

No

Si usted hace comentarios, es posible que el VA se comunique con usted. Servirle es nuestra prioridad principal.

Siguiente

[Política de Privacidad](#)

[Logo:] U.S. Department of Veterans Affairs

La Línea de Crisis para Veteranos ofrece apoyo gratuito y confidencial para los veteranos en crisis, sus familiares y amigos. Llame al 1 (800) 273-8255 (marque el 1) o envíe un mensaje de texto al 838255 para recibir apoyo confidencial 24/7 (Aviso del Sistema de Registros del VA 158VA10NC5). Acceda a <https://www.veteranscrisisline.net> para más información.

Número de la *OMB*: 2900-0770
Fecha de vencimiento: 30/9/2020
Tiempo aproximado: 2 minutos

Ayúdenos a servirle mejor

Cuéntenos cuál ha sido su experiencia al programar citas de Telesalud con el Centro Médico del Departamento de Asuntos del Veterano C.W. Bill Young.

Conteste las siguientes aseveraciones usando una escala del 1 (totalmente en desacuerdo) al 5 (totalmente de acuerdo):

	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo, ni en desacuerdo	De acuerdo	Totalmente de acuerdo
Después de haberme registrado para la cita, el personal de la clínica me explicó de forma sencilla cómo funciona la tecnología videográfica de Telesalud. Requerido	1	2	3	4	5
El profesional de la salud me explicó todo de manera sencilla. Requerido	1	2	3	4	5
El profesional de la salud me escuchó amablemente durante la cita. Requerido	1	2	3	4	5
Pude ver al profesional de la salud en el video claramente. Requerido	1	2	3	4	5

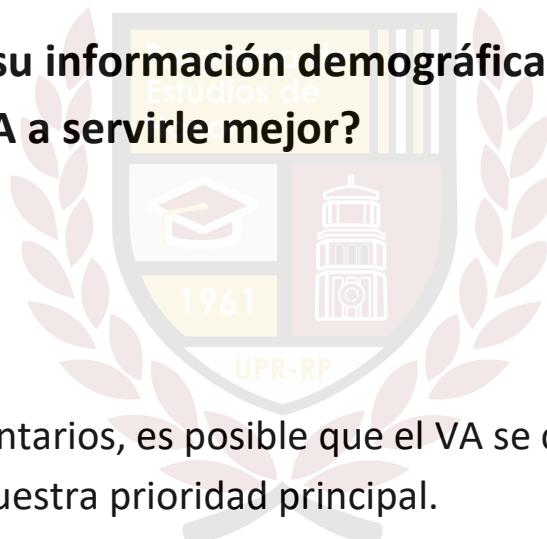
Pude escuchar al profesional de la salud en el vídeo claramente. Requerido	1	2	3	4	5
El profesional de la salud me hizo sentir a gusto explicándome cada paso realizado durante la cita. Requerido	1	2	3	4	5
En general, estoy satisfecho con la consulta de Telesalud por video. Requerido	1	2	3	4	5
Después de la cita, no me quedaron dudas sobre cuáles eran los próximos pasos que tenía que seguir. Requerido	1 Programa de Estudios de Honor	2	3	4	5
El sistema de Telesalud reduce la necesidad de viajar largas distancias para poder consultar con mi profesional de la salud. Requerido	1 1961	2 UPR-RP	3	4	5
Confío en el sistema de Telesalud como parte de mi atención médica general en el VA. Requerido	1	2	3	4	5

Esta información se recopila de conformidad con la sección 3507 de la Ley de Reducción de Trámites de 1995. El Título 38 del Código de los Estados Unidos nos permite solicitarle esta información. Calculamos que demorará un promedio de dos minutos en leer las instrucciones y completar la encuesta. Los resultados de esta encuesta se usarán con el fin de arrojar luz a oportunidades que mejoren la calidad del programa de servicios del VA. La participación en esta encuesta es voluntaria. Si usted decide no llenarla, esto no afectará los beneficios ni los servicios del VA que recibe actualmente. Al completar esta encuesta, usted autoriza el acceso a la base de datos del VA para recuperar la información de contacto de veteranos; darle el debido seguimiento con fines de servicios de recuperación; atender posibles crisis; o para conocer más sobre los comentarios que ha compartido sobre su experiencia con el VA. El VA no puede realizar ni patrocinar la recopilación de información, a menos que se muestre un número de control válido de la OMB. Usted no está obligado a proveer información si este número no aparece. Dichos números de control válidos pueden conseguirse en la página de internet de la OMB: www.reginfo.gov/public/do/PRAMain.

¿Desea divulgar su información demográfica voluntariamente para ayudar al VA a servirle mejor?

Sí

No



Si usted hace comentarios, es posible que el VA se comunique con usted. Servirle es nuestra prioridad principal.

Siguiente

[Política de Privacidad](#)

[Logo:] U.S. Department of Veterans Affairs

La Línea de Crisis para Veteranos ofrece apoyo gratuito y confidencial para los veteranos en crisis, sus familiares y amigos. Llame al 1 (800) 273-8255 (marque el 1) o envíe un mensaje de texto al 838255 para recibir apoyo confidencial 24/7 (Aviso del Sistema de Registros del VA 158VA10NC5). Acceda a <https://www.veteranscrisisline.net> para más información.

Número de la OMB: 2900-0770
Fecha de vencimiento: 30/9/2020
Tiempo aproximado: 2 minutos

Ayúdenos a servirle mejor

Cuéntenos cuál ha sido su experiencia al programar citas de Telesalud.

Conteste las siguientes aseveraciones usando una escala del 1 (totalmente en desacuerdo) al 5 (totalmente de acuerdo):

	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo, ni en desacuerdo	De acuerdo	Totalmente de acuerdo
Fue fácil hacer la conexión por video a mi cita del VA. Requerido	1	2	3	4	5
El personal del VA me brindó información sobre cómo hacer la conexión a mi cita de Telesalud por video.	1	2	3	4	5
El profesional de la salud me escuchó amablemente durante la cita. Requerido	1	2	3	4	5
El profesional de la salud me explico todo de manera sencilla. Requerido	1	2	3	4	5
Después de la cita, no me quedaron dudas sobre cuáles eran los próximos	1	2	3	4	5

pasos de atención médica que tenía que seguir. Requerido					
El profesional de la salud me hizo sentir a gusto explicándome cada paso realizado durante la cita. Requerido	1	2	3	4	5
El sistema de Telesalud reduce la necesidad de viajar largas distancias para poder consultar con mi profesional de la salud. Requerido	1	2	3	4	5
Pude ver al profesional de la salud en el video claramente. Requerido	1	2	3	4	5
Pude escuchar al profesional de la salud en el video claramente. Requerido	1	2	3	4	5
En general, estoy satisfecho con la consulta de Telesalud por video. Requerido	1	2	3	4	5
Confío en el sistema de Telesalud como parte de mi atención médica general en el VA. Requerido	1	2	3	4	5

Esta información se recopila de conformidad con la sección 3507 de la Ley de Reducción de Trámites de 1995. El Título 38 del Código de los Estados Unidos nos permite solicitarle esta información. Calculamos que demorará un promedio de dos minutos en leer las instrucciones y completar la encuesta. Los resultados de esta encuesta se usarán con el fin de arrojar luz a oportunidades que mejoren la calidad del programa de servicios del VA. La participación en esta encuesta es voluntaria. Si usted decide no llenarla, esto no afectará los beneficios ni los servicios del VA que recibe actualmente. Al completar esta encuesta, usted autoriza el acceso a la base de datos del VA para recuperar la información de contacto de veteranos; darle el debido seguimiento con fines de servicios de recuperación; atender posibles crisis; o para conocer más sobre los comentarios que ha compartido sobre su experiencia con el VA. El VA no puede realizar ni patrocinar la recopilación de información, a menos que se muestre un número de control válido de la OMB. Usted no está obligado a proveer información si este número no aparece. Dichos números de control válidos pueden conseguirse en la página de internet de la OMB: www.reginfo.gov/public/do/PRAMain.

¿Desea divulgar su información demográfica voluntariamente para ayudar al VA a servirle mejor?

Sí

No

Si usted hace comentarios, es posible que el VA se comunique con usted. Servirle es nuestra prioridad principal.

Siguiente

[Política de Privacidad](#)

[Logo:] **U.S. Department of Veterans Affairs**

Ayude al VA a mejorar sus servicios

Estamos trabajando para entender mejor a nuestros clientes. La pregunta que sigue es **voluntaria**. Al proveer su información, sus respuestas pueden ayudarnos a mejorar la atención y los servicios del VA. Gracias por su participación.

¿Es usted de etnia hispana o latina?

Sí

No

¿A qué raza pertenece? Seleccione una o más.

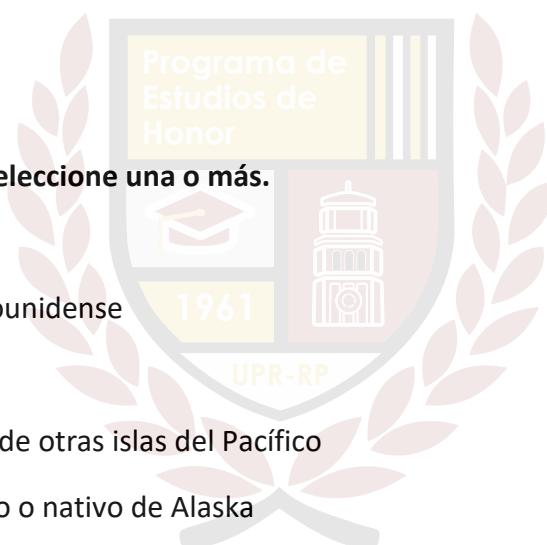
Blanca

Negra o afroestadounidense

Asiática

Nativo de Hawái o de otras islas del Pacífico

Indígena americano o nativo de Alaska



¿Cómo describe su género?

Masculino

Femenino

Género no binario / Tercer género

Prefiere no responder

[Regresar](#)

[Terminar](#)

[Política de Privacidad](#)

[Logo:] **U.S. Department of Veterans Affairs**

Muchas gracias por tomarse el tiempo de llenar esta encuesta. Valoramos inmensamente sus comentarios, pues nos ayudarán a servirle mejor. Acceda a [Vets.gov](#) para que conozca sobre los beneficios, recursos e información disponibles en el VA.

La Línea de Crisis para Veteranos ofrece apoyo gratuito y confidencial para los veteranos en crisis, sus familiares y amigos. Llame al 1 (800) 273-8255 (marque el 1) o envíe un mensaje de texto al 838255 para recibir apoyo confidencial 24/7. Acceda a <https://www.veteranscrisisline.net> para más información.



[Logo:] MEDALLIA

[INSERTAR EL NOMBRE DE LA ENCUESTA] Encuesta – 2 minutos

[Logo:] U.S. Department of Veterans Affairs

La Línea de Crisis para Veteranos ofrece apoyo gratuito y confidencial para los veteranos en crisis, sus familiares y amigos. Llame al 1 (800) 273-8255 (marque el 1) o envíe un mensaje de texto al 838255 para recibir apoyo confidencial 24/7 (Aviso del Sistema de Registros del VA 158VA10NC5). Acceda a <https://www.veteranscrisisline.net> para más información.

Número de la OMB: 2900-0770

Fecha de vencimiento: 30/9/2020

Tiempo aproximado: 2 minutos

Ayúdenos a servirle mejor

Cuéntenos su experiencia [insertar aquí el tema de la encuesta]:

Estimado(a) <Nombre>:

Para nosotros es importante su experiencia con los servicios del VA. Cuanto más usted comparta con nosotros sobre su reciente [insertar aquí el tema de la encuesta] con los servicios de Telesalud de la Administración de Salud del Veterano, mejor podremos servirle.

Como servirle es nuestra prioridad principal, si usted nos envía comentarios, es posible que un representante del VA se comunique con usted.

Llenar la encuesta

Gracias,

Oficina de Experiencias de los Veteranos

Departamento de Asuntos del Veterano

No responda a este mensaje.

Si desea compartir sus comentarios, tiene hasta el 3 de agosto a las 12:35 AM para hacerlo.

Usted ha recibido este correo electrónico porque dio su dirección al VA.

El Centro Nacional de Llamadas para Veteranos sin Hogar (NCCHV, por sus siglas en inglés) ofrece apoyo gratuito y confidencial a los veteranos que no tienen hogar o están en riesgo de quedarse sin hogar, así como a sus familiares, amigos y colaboradores. Los veteranos pueden comunicarse por teléfono o chatear en línea con el Centro Nacional de Llamadas para Veteranos sin Hogar, el cual cuenta con consejeros adiestrados y preparados para conversar confidencialmente 24 horas al día, los 7 días de la semana. Llame al 1 (877) 424-3838 o acceda a <https://www.va.gov/HOMELESS/> para recibir apoyo confidencial. Si desea que se le excluya de recibir encuestas futuras, haga clic [aquí](#).

[Cancelar la suscripción a esta encuesta del VA | Política de Privacidad del VA](#)

Department of Veterans Affairs
Veterans Experience Office (30)
810 Vermont Avenue, NW
Washington, DC 20420



[Logo:] MEDALLIA

RECORDATORIO: [INSERTAR EL NOMBRE DE LA ENCUESTA] Encuesta – 2 minutos

[Logo:] U.S. Department of Veterans Affairs

La Línea de Crisis para Veteranos ofrece apoyo gratuito y confidencial para los veteranos en crisis, sus familiares y amigos. Llame al 1 (800) 273-8255 (marque el 1) o envíe un mensaje de texto al 838255 para recibir apoyo confidencial 24/7 (Aviso del Sistema de Registros del VA 158VA10NC5). Acceda a <https://www.veteranscrisisline.net> para más información.

Número de la OMB: 2900-0770

Fecha de vencimiento: 30/9/2020

Tiempo aproximado: 2 minutos

Ayúdenos a servirle mejor

Estamos deseosos de escuchar sobre su experiencia [insertar aquí el tema de la encuesta] con los servicios de Telesalud de la Administración de Salud del Veterano.

Estimado(a) <Nombre>:

Para nosotros es importante su experiencia con los servicios del VA. Cuanto más usted comparta con nosotros sobre su reciente [insertar aquí el tema de la encuesta] con los servicios de Telesalud de la Administración de Salud del Veterano, mejor podremos servirle.

Como servirle es nuestra prioridad principal, si usted nos envía comentarios, es posible que un representante del VA se comunique con usted.

Llenar la encuesta

Gracias,

Oficina de Experiencias de los Veteranos

Departamento de Asuntos del Veterano

No responda a este mensaje.

Si desea compartir sus comentarios, tiene hasta el 3 de agosto a las 12:35 AM para hacerlo.

Usted ha recibido este correo electrónico porque dio su dirección al VA.

El Centro Nacional de Llamadas para Veteranos sin Hogar (NCCHV, por sus siglas en inglés) ofrece apoyo gratuito y confidencial a los veteranos que no tienen hogar o están en riesgo de quedarse sin hogar, así como a sus familiares, amigos y colaboradores. Los veteranos pueden comunicarse por teléfono o chatear en línea con el Centro Nacional de Llamadas para Veteranos sin Hogar, el cual cuenta con consejeros adiestrados y listos para conversar confidencialmente 24 horas al día, los 7 días de la semana. Llame al 1 (877) 424-3838 o acceda a <https://www.va.gov/HOMELESS/> para recibir apoyo confidencial. Si desea que se le excluya de recibir encuestas futuras, haga clic [aquí](#).

[Cancelar la suscripción a esta encuesta del VA | Política de Privacidad del VA](#)

Department of Veterans Affairs

Veterans Experience Office (30)

810 Vermont Avenue, NW

Washington, DC 20420



Pregunta sobre comentarios, inquietudes o recomendaciones

¿Desea hacer comentarios adicionales para expresar inquietudes, reseñas positivas o recomendaciones sobre su experiencia al presentar su Aviso de Desacuerdo (NOD, por sus siglas en inglés)? Escoja una de las siguientes opciones. **Requerido**

-Seleccionar-	<i>Nota: Aquí habrá una lista desplegable con las opciones: reseña positiva, inquietud o recomendación.</i>
---------------	---

Use la caja de texto a continuación para abundar sobre sus comentarios (opcional). No incluya ningún tipo de información personal identificatoria ni su número de seguro social, identificación de veterano o información médica, pero sí ofrezca detalles sobre su experiencia. **Requerido**

0/400

Appendix C:
MEASUREMENT OF THE VIABILITY TO IMPLEMENT
THE PRELIMINARY DIAGNOSIS AND COMPREHENSIVE EVALUATION OF TBI THROUGH TELEHEALTH
(Used in primary study)

1. Define strengths such as the attributes, skills or positive elements that the program has that give it an advantage over other programs or service modalities.

Using this definition as a basis:

- a. What or what are the strengths of the Telehealth program that maximize the possibility of successfully achieving the objectives of this intervention?

[Another way to ask]

- b. What existing factors of the program would facilitate this intervention and achieve the objectives?

2. Define weaknesses as the factors that, if not identified and addressed, undermine the operation of the program.

Using this definition as a basis:

- a. What are the weaknesses of the Telehealth program that could reduce the possibility of successfully achieving the objectives of this intervention?

[Another way to ask]

- b. What factors would make it difficult to carry out this intervention and achieve the objectives?

3. Define opportunities as positive factors that can be identified and exploited to improve the functioning of the program. Opportunities can also be considered areas of growth.

Using this definition as a basis:

- a. What or what are the opportunities that the Telehealth program has that, if exploited, could maximize the possibility of successfully achieving the objectives of this intervention?

[Another way to ask]

- b. What factors internal or external to the program can be used to maximize the possibility of successfully achieving the objectives of this intervention?

4. In your opinion, is it feasible to carry out this intervention through Telehealth? Why?

Appendix D:
MEDICION DE LA VIABILIDAD DE IMPLEMENTAR
EL DIAGNÓSTICO PRELIMINAR Y EVALUACION COMPRENSIVA DE TBI A TRAVÉS DE TELEHEALTH
(Usado en estudio primario)

1. Definamos fortalezas como los atributos, destrezas o elementos positivos con los que cuenta el programa que le dan una ventaja sobre otros programas o modalidades de servicio.

Usando esta definición como base:

- a. ¿cuál o cuáles son las fortalezas que tiene el programa Telehealth que maximizan la posibilidad de lograr exitosamente los objetivos de esta intervención?

[*Otra manera de preguntar*]

- b. ¿qué factores ya existentes del programa facilitarían realizar esta intervención y alcanzar los objetivos?

2. Definamos debilidades como los factores que, de no ser identificados y atendidos, atentan contra el funcionamiento del programa.

Usando esta definición como base:

- a. ¿cuál o cuáles son las debilidades que tiene el programa Telehealth que podrían reducir la posibilidad de lograr exitosamente los objetivos de esta intervención?

[*Otra manera de preguntar*]

- b. ¿qué factores dificultarían el poder realizar esta intervención y alcanzar los objetivos?

3. Definamos oportunidades como factores positivos que se pueden identificar y aprovechar para mejorar el funcionamiento del programa. Las oportunidades también pueden considerarse como áreas de crecimiento.

Usando esta definición como base:

- a. ¿cuál o cuáles son las oportunidades que tiene el programa Telehealth que, de aprovecharse, podrían maximizar la posibilidad de lograr exitosamente los objetivos de esta intervención?

[*Otra manera de preguntar*]

- b. ¿qué factores internos o externos al programa se pueden aprovechar para maximizar la posibilidad de lograr exitosamente los objetivos de esta intervención?

4. En su opinión, ¿es viable realizar esta intervención a través de Telehealth? ¿Por qué?

Appendix E:

TBI Demographic and Language Preference Data Collection Tool: Enhancing Language Access: A Pilot Study to develop linguistically and culturally appropriate Spanish adaptations of Traumatic Brain Injury (TBI) assessment instruments for Face-to-Face & Telehealth interventions (Used in primary study)

TBI Sociodemographic Survey

1. What is your age?

- 21 – 41
- 42 – 61
- 62 – 81
- 82 or more

2. What is your gender?

- Male
- Female
- Other

3. What is your ethnicity?

- Hispanic or Latino
- Not Hispanic or Latino

4. What is your race? Mark one or more as you consider yourself to be.

- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

5. What is your marital status?

- Single
- Married
- Divorced
- Widowed

6. Where were you born?

- | | |
|--|-----------------------------|
| <input type="checkbox"/> Puerto Rico | Specify municipality: _____ |
| <input type="checkbox"/> United States | Specify state: _____ |
| <input type="checkbox"/> Other | Specify country: _____ |

7. Where were your parents born?

- Both in Puerto Rico
- At least one in Puerto Rico
- None were born in Puerto Rico

8. Where were your grandparents born?
- All in Puerto Rico
 At least one in Puerto Rico
 None were born in Puerto Rico

9. Have you lived outside of Puerto Rico?
- Yes Specify the amount of years/months: _____ years _____ months
 No

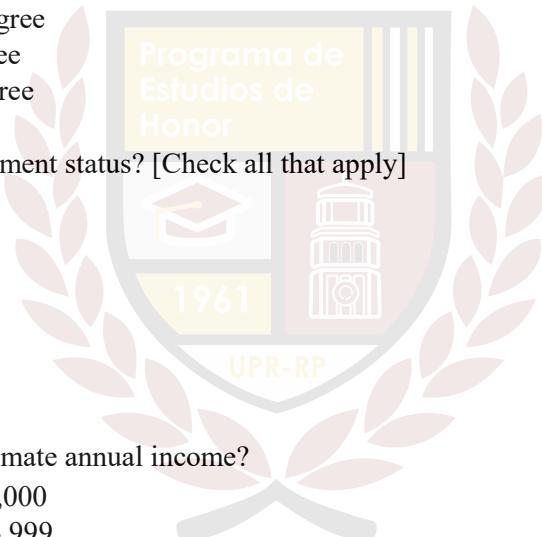
10. In what city do you currently reside? _____

11. What is the highest educational level you have completed?
- Did not finish high school
 High school
 Some college years
 Associate degree
 Bachelor's degree
 Master's degree
 Doctorate degree

12. What is your employment status? [Check all that apply]
- Full-time job
 Part-time job
 Student
 Unemployed
 Retired
 Disabled

13. What is your approximate annual income?
- Less than \$10,000
 \$10,000 – \$14,999
 \$15,000 – \$24,999
 \$25,000 – \$34,999
 \$35,000 – \$49,999
 \$50,000 or more

14. Are you a combat veteran?
- Yes
 No



15. In which conflict(s) did you participate? [Check all that apply]

- World War I
- World War II
- Korea
- Vietnam
- Persian Gulf
- Desert storm (Kuwait)
- Operation Enduring Freedom (OEF)
- Operation Iraqi Freedom (OIF)
- Operation New Dawn (OND)

16. What language do you prefer that your healthcare provider uses to communicate with you?

- English
- Spanish
- Other: _____

17. Is your injury service connected?

- Yes What is your service connection percentage? _____
- No

18. What was your age when you suffered the traumatic brain injury (TBI)? _____

19. In which VA hospital do you receive your TBI related healthcare?

- VA Caribbean Healthcare System San Juan, PR-672
- VA Greater Los Angeles Healthcare System Los Angeles, CA-691
- James J Peters VA Medical Center Bronx, NY-526
- James A. Haley Veterans' Hospital Tampa, FL-673
- South Texas Veterans Health Care System San Antonio, TX-671
- VA Palo Alto Health Care System Palo Alto, CA-640
- Miami VA Healthcare System Miami, FL-546
- North Florida/ South Georgia Veterans Health System Gainesville, FL-573
- Ralph H. Johnson VA Medical Center Charleston, SC-534
- Washington DC VA Medical Center Washington, DC-688
- Other

20. On average, how many days were you hospitalized annually due to TBI between 2000 and 2015?

Appendix F:

Herramienta de Colección de datos para Demografía de “TBI” y Preferencia de Idioma:
“Enhancing Language Access: A Pilot Study to develop linguistically and culturally appropriate
Spanish adaptations of Traumatic Brain Injury (TBI) assessment instruments for Face-to-Face &
Telehealth interventions”
(Usado en estudio primario)

Instrumento de recolección de datos sobre TBI

1. ¿Cuál es su edad?

- 21 – 41
- 42 – 61
- 62 – 81
- 82 o más

2. ¿Cuál es su género?

- Masculino
- Femenino
- Otro

3. ¿Cuál es su etnicidad?

- Hispano o Latino
- No-Hispano o Latino

4. ¿Cuál es su raza? Seleccione una o más según se considere.

- Blanco
- Negro o Afroamericano
- Asiático
- Indio Americano o Nativo de Alaska
- Nativo de Hawái u otra isla del Pacífico

5. ¿Cuál es su estado civil?

- Soltero (nunca se ha casado)
- Casado
- Divorciado
- Viudo

6. ¿Dónde nació?

- | | |
|---|---------------------------------|
| <input type="checkbox"/> Puerto Rico | Especifique el municipio: _____ |
| <input type="checkbox"/> Estados Unidos | Especifique el estado: _____ |
| <input type="checkbox"/> Otro | Especifique el país: _____ |

7. ¿Dónde nacieron sus padres?

- Ambos en Puerto Rico
- Al menos uno en Puerto Rico
- Ninguno en Puerto Rico

8. ¿Dónde nacieron sus abuelos?

- Ambos en Puerto Rico
- Al menos uno en Puerto Rico
- Ninguno en Puerto Rico

9. ¿Ha vivido fuera de Puerto Rico?

- Sí Especifique la cantidad de años/meses: _____ años _____ meses
- No

10. ¿En qué ciudad reside actualmente? _____

11. ¿Cuál es el nivel de educación más alto que ha completado?

- No terminó escuela superior
- Escuela superior o examen de equivalencia
- Algunos años universitarios
- Grado asociado
- Bachillerato
- Maestría
- Doctorado



12. ¿Cuál es su estatus de empleo actual? [Seleccione todas las que apliquen]

- Trabaja a tiempo completo o "full-time"
- Trabaja a tiempo parcial o "part-time"
- Estudiante
- Desempleado
- Retirado
- Incapacitado

13. Aproximadamente, ¿cuál es su ingreso anual?

- Menos de \$10,000
- \$10,000 – \$14,999
- \$15,000 – \$24,999
- \$25,000 – \$34,999
- \$35,000 – \$49,999
- \$50,000 o más

14. ¿Es usted veterano de guerra o "combat veteran"?

- Sí
- No

15. ¿En qué conflicto(s) participó? [Seleccione todas las que apliquen]

- Primera Guerra Mundial
- Segunda Guerra Mundial
- Corea
- Vietnam
- Golfo Pérsico
- Desert Storm (Kosovo)

- Operation Enduring Freedom (OEF)
 Operation Iraqi Freedom (OIF)
 Operation New Dawn (OND)

16. ¿Cuál idioma prefiere que su proveedor de servicios de salud utilice para comunicarse con usted?

- Inglés
 Español
 Otro: _____

17. ¿Es usted considerado “service connected” por su lesión?

- Sí ¿Cuál es su porcentaje de “service connection”? _____
 No

18. ¿Qué edad tenía cuando sufrió su lesión traumática al cerebro (TBI)? _____

19. ¿En qué hospital de VA recibe sus servicios relacionados a TBI?

- VA Caribbean Healthcare System San Juan, PR-672
 VA Greater Los Angeles Healthcare System Los Angeles, CA-691
 James J Peters VA Medical Center Bronx, NY-526
 James A. Haley Veterans' Hospital Tampa, FL-673
 South Texas Veterans Health Care System San Antonio, TX-671
 VA Palo Alto Health Care System Palo Alto, CA-640
 Miami VA Healthcare System Miami, FL-546
 North Florida/ South Georgia Veterans Health System Gainesville, FL-573
 Ralph H. Johnson VA Medical Center Charleston, SC-534
 Washington DC VA Medical Center Washington, DC-688
 Otro

20. Aproximadamente, ¿cuántos días pasó hospitalizado anualmente entre el 2000 y el 2015 debido a TBI? _____

Appendix G:
General Tasks that can be assigned to the mentee

ITEM	PROCEDURES: (May require competencies or credentials)	YES	NO
1	Prepares study initiation activities on site. (e.g., service approvals)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Initiates submission of regulatory documents to the VA IRB, VA R&D Committee and sponsor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Develops recruitment methods to be utilized in the study.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Accesses patient medical information while maintaining patient confidentiality.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Screens patients to determine study eligibility criteria by reviewing patient medical information or interviewing subjects.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Maintains screening logs and subjects master list.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Is authorized to obtain informed consent from research subject and is knowledgeable to perform the informed consent process. (requires demonstrated and documented competencies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Provides education regarding study activities to patient, relatives and VACHS staff as necessary per protocol(s).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Provides education and instruction of study medication use, administration, storage, side effects and how to notify researcher of adverse drug reactions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Uses VISTA/CPRS computer system for record review, documenting in progress notes, and scheduling subjects research visits (requires demonstrated and documented competencies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Is authorized to interview and/or administer questionnaires/surveys/tests to research subjects.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Obtain medical history. (requires demonstrated and documented competencies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Record vital signs. (requires demonstrated and documented competencies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Perform physical examination and other clinical interventions. (within limits of license)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Schedules participant research visits and study procedures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16	Performs clinical procedures to obtain specific specimens required by study protocol (e.g. venipuncture). (within limits of license or training; requires demonstrated and documented competencies)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Handles various types human specimens as per protocol. (requires demonstrated and documented competencies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18	Process various types human specimens as per protocol. (requires demonstrated and documented competencies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19	Handling; packaging and shipping biological materials. (requires having the IATA training certificate prior to perform this procedure)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20	Initiates intravenous (IV) therapy and administers IV solutions and medications. (requires demonstrated and documented competencies)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Order diagnostic testing including laboratory processing of samples, X-rays, etc. as outlined in the research protocol. (may required co-signature of responsible MD)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Order in-patient and out-patient medication. (including study medication)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Drug accountability. (obtain study medication from pharmacist, provide medication to participant, count returned medication, dispose of returned medication per pharmacy policies) (requires demonstrated and documented competencies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24	Maintains complete and accurate records including data collection and reporting in case report forms and source documents.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25	Obtains and organizes data such as tests results, diaries/cards or other necessary information for the study.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
26	Data processing/scanning.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27	Initiates requests for consultation, special tests or studies following the Investigator's approval.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Maintains research related database(s) and/or performs statistical analyses and queries using individually identifiable data as appropriate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
29	Prepare voucher for participants payment pursuant to approved schedule.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Specific Task for the Study Honor Program Proposal from MIRB 00781

1. Retrieve data and perform data entry in the electronic data collection form
 - a. Maintains complete and accurate records including data collection and reporting in case report forms and source documents

- b. Maintains research related database(s) and/or performs statistical analyses and queries using individually identifiable data as appropriate
 - c. Obtains and organizes data such as tests results, diaries/cards or other necessary information for the study.
- 2. Report Adverse Events, or any other IRB reportable event
- 3. Administrative and coordination task for the study:
 - a. Initiates submission of regulatory documents to the UPR CIPSHI, VA IRB, and VA R&D Committee.
 - b. Coordinate with Charleston VA Qualitative Researcher and VACHS statistician for data analysis
- 4. Attend the Seminar Courses for the Introductory Research Program every Friday starting in August 2019



Appendix H:

Timeline: Enhancing Access: A Pilot Study to evaluate feasibility of Traumatic Brain Injury (TBI) assessment using Telehealth

Goals	2019		2020 ¹		2021	
	Semester 1 (January)	Semester 2 (August)	Semester 1 (January)	Semester 2 (August)	Semester 1 (January)	Semester 2 (August)
“Teoria, Metodología y Técnica de Investigacion” Class at UPR Rio Piedras	X					
• Bibliography and Literature Review						
• Proposal						
VACHS Regulatory Approvals	X					
PREH Proposal Presentation and Defense		X				
CIPSHI Approval					X	
Data Analysis					X	
Thesis Preparation					X	
Thesis Presentation					X	
Presentations/Publications					X	X

interventions

Notes:

1. Due to COVID-19 pandemic, there was a hold of research activities from March 2020 to December 2020

