9-3-2019

Proposed Improvements in Veteran Administration Mental Health and Substance Abuse Treatment Services

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By

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Thesis for Master of Science in Science, Technology and Public Policy

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Rochester, NY
September 3, 2019

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Abstract

The U.S. government provides many health care benefits to veterans, both during and after they serve. Unfortunately, the benefits become a necessity for many veterans who return home because of the mental and physical trauma that they sustain during their time being active duty. The U.S. Department of Veterans Affairs has created a healthcare system specifically for veterans that provides medical centers and outpatient clinics with a variety of services throughout the country. The trauma that veterans experience often requires them to have care that is specialized for them in areas like substance abuse and mental health. While they can receive care at VA locations, it is often not a choice for a veteran to travel the distance to that location or wait weeks or months for an appointment and are forced to get care in the civilian sector. Because of this, the VA has started to allow veterans to receive care at non-VA facilities and as a result, quality of care and specialization for veterans is very important. The services that are provided at those locations are reviewed for both availability and range of services for veterans. This thesis analyzes existing data on substance abuse treatment services and mental health services for both veterans and civilians in order to assess trends for services available and treatment options. Overall, treatment type availability has not changed since the Opioid Safety Initiative. VA facilities are not increasing their availability of alternative therapies, but telemedicine therapy has become more available nationwide. Veteran specific programs are slightly decreasing in non-VA mental health facilities unlike non-VA substance abuse facilities where the program availability is increasing. Increased access to alternative treatments can help medical institutions provide more diverse and better-quality treatment plans for veterans.

Introduction

Within the military community, specifically US veterans that were deployed in Iraq or Afghanistan, there is a higher risk for receiving opioids for pain, having adverse clinical outcomes and high-risk opioid use (Seal, 2012). As of 2011, there were 1.44 million patients at the VA that had chronic non-cancer pain and about 50% of them were prescribed opioids (Edlund, 2014). Within the fiscal year of 2010, over 10.3 million prescriptions were written for 1,446,519 active duty service members, with one-third of the service members receiving a prescription for opioids and 858,128 filled prescriptions being for opioids (Jeffery, 2014). Jeffery's study shows that, the opioid epidemic has an impact on many lives of veterans. There is a wide variety of uses for opioids for chronic pain. This pain can from either mental or physical pain that the patient is experiencing. Within the military, chronic pain could be a result of post-traumatic stress disorder (PTSD) and other mental health issues or physical pain from age, active duty service or an accident.

In 2017, opioid abuse claimed more than 64,000 lives in the US and on October 16, 2017, the government declared a public health emergency (Jones, 2018). Various strategies and plans for implementation have been established to try to reduce the severity of this epidemic. However, the numbers are still too high. Within the military community, 25% of veterans were receiving opioids from outpatient care as of 2012. Since then, the Department of Veteran Affairs (VA) created the Opioid Safety Initiative (OSI). Established in 2013, the OSI was an initiative to be adapted nationwide for all military personnel to try to reduce opioid use (Gellad, 2017). The main goals of the OSI were to increase opioid use education for both veterans and clinicians, decrease amounts of opioids being prescribed, and improve the safety of opioid use. Instead of

opioids, alternative pain therapies were introduced and implemented in various VA locations for treatment of pain as an alternative to opioids.

When a veteran leaves the military and settles into their civilian life, they receive care from either private sector physicians or the VA, and sometimes both. At the VA, veterans receive care for little to no cost, but only at VA medical centers or clinics, depending on their insurance. There is another process that veterans must go through to have private sector care costs covered by the VA. At the VA medical centers and outpatient facilities, veterans and their families have a large variety of care available to them.

A military member, veteran or active duty, may need to access VA services for pain for multiple reasons. In the military, many soldiers are placed in situations that can be very traumatic due to disturbing situations or high levels of danger. Because of this, as soldiers are returning home, they require medical attention for physical or mental illness because of the side effects of serving. Regardless of what each soldier had endured during their time in service, many of them are left with their painful memories and physical pain. Since each veteran has different experiences, the treatments that are offered to them cannot all be the same.

According to a study done from the 2012-2013 National Epidemiologic Survey on Alcohol and Related Conditions-III, women veterans have the highest rates of PTSD followed by women civilians, male veterans, and male civilians (Lehavot, 2018). With PTSD being one of the largest “wounds” from being in the military, these statistics have a large impact on how the veteran population is being treated. As the VA started their OSI for all VA locations, new interventions and alternative pain management therapies compared to prescription opioids have been introduced.

In this thesis, I will be reviewing the different therapies that are currently being used for veteran's treatment of chronic non-cancer pain. I look at the difference in treatment option between VA and non-VA facilities nationwide using data from two different national surveys on mental health. I analyze the trends in treatment services and programs from 2014 to 2017 at both the national and state level.

Literature Review

The goal of this literature review was to attain a better understanding of the pain management therapies available. Studies were compiled using phrases such as “VA non-opioid PTSD treatment” or “veteran PTSD treatment” or “therapies for PTSD treatment in veterans”. Therapies were also found by adding words to the phrases, like acupuncture, yoga or psychotherapy, as they were listed in studies. Because the focus of the study was to review successful pain management therapies for United States veterans, I excluded studies that only looked at civilians, international studies, and therapies that are no longer being used in the medical field. Research was also limited to those therapies that have to be proven to work specifically for veterans, were not in clinical trials, and are accessible through the VA. In total, 16 papers were assessed for proven treatments.

The different therapies covered in the literature were coded and sorted. I created four pain management categories: cognitive, creative, physical and medical, as shown in table 1. Cognitive therapies that were specifically working with the person’s state of mind, and would include psychotherapy, image therapy, and mindfulness. Anything that was supposed to help with mental well-being and requires no medication or physical medical treatment was included in this category. For the creative category, therapies that focused more on creative expression such as writing and painting. These therapies use writing, for example, to channel internal emotions and express them. The category for physical means that the therapy introduces physical activity to the person’s lifestyle. Some therapies can range from yoga to ju-jitsu, all with the intention of keeping the person active and expressing their feelings in that way. The last therapy is medical, and this category needs a medical professional, such as primary care, in order

to receive the therapy. There are generally medical procedures that take place either invasively or non-invasively.

Table 1. Description of different pain management categories determined for literature sorting.

PAIN MANAGEMENT CATEGORY	FOCUS	EXAMPLES
COGNITIVE	Patient's State of Mind	Psychotherapy, Mindfulness
CREATIVE	Expression of Feelings	Art, Writing, Music
PHYSICAL	Activity for Patient	Yoga, Ju-jitsu, Gym
MEDICAL	Medical Treatment	Acupuncture, Prescriptions

As the studies were read and coded, other aspects of the therapies were noted as well. For example, some therapies were shown to work when paired with another treatment. For these cases, each therapy was counted once, another category for both was not created. This allowed for each therapy to be acknowledged and sorted. Physicians or scientists from different studies assessed improvement in the patients differently, and this was noted to acknowledge differences in study effectiveness. Lastly, a category for the obstacles that the patients faced was created as well. These obstacles could range from number of appointments to travelling distances. Figure 1 shows the categorization of the pain management therapies found that have proven to work for veterans with PTSD with the frequency of the treatment type in the studies found.

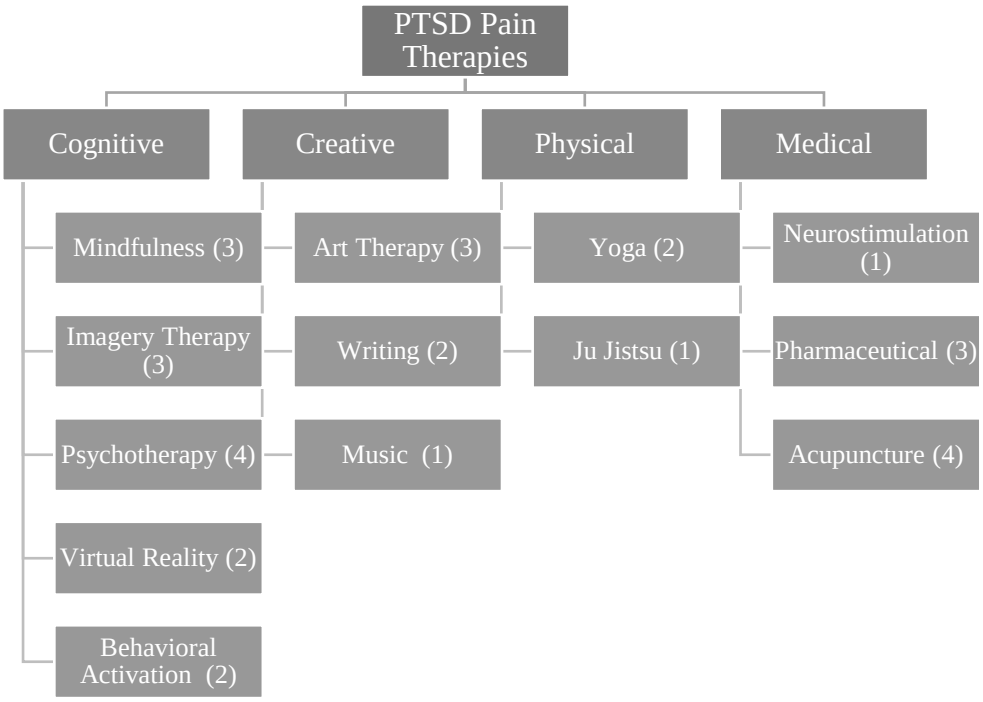

Figure 1. Categories pain management therapies for veterans with PTSD with number of studies that focus on the therapy in parenthesis.

Cognitive

Fourteen of the studies included cognitive-based therapies. For the cognitive therapies, there are a multitude of therapies that can be used. Some of those include, behavioral activation, imagery therapy, psychotherapy, and mindfulness. When using mindfulness as a therapy, the goal is to help veterans to channel their feelings and stress in a specific way that keeps them centered with themselves. With mindfulness, it is important that it be used throughout the day and acknowledging when the steps to take are no longer being as effective (King, 2013). When a veteran is using behavioral activation, the idea is to use the "outside-in" approach in order to use problem solving skills to overcome barriers that arise from PTSD symptoms (Jakupcak, 2010).

Psychotherapy can include individual, group therapy, and family therapy. There are different hypotheses about what forms of psychotherapy work best for individuals. These hypotheses can vary in part based on the situation that a veteran is in. For veterans who are

single without any dependents, it may be better to have them focus more directly on themselves, while a veteran who has a spouse and children may better respond to family-based therapy (King, 2013).

Creative

Out of 16 studies, 6 of them included creative-based therapies. Creative therapies encourage creative expression for veterans. Campbell (2016), studied 2 patient groups, one that were treated as cognitive processing therapy (CPT) and one that had art therapy with CPT. With this study, they used art therapy to creative a visual trauma narrative in order to creative new insight for the situation and provide a safe environment for a veteran to express their feelings. For CPT, the veterans did written homework between sessions and wrote a trauma narrative as well.

Physical

Three of the studies included physical-based therapies for PTSD. Physical fitness for a veteran is very important, not only for reducing the impact of aging, but also because it gives a veteran a sense of control over themselves (Cukor, 2009). Yoga is a way to practice mindfulness as well as stay physically fit. For yoga, there is an aspect of breathing techniques that is practiced and can be used for PTSD situations. The sense of control can be found through the techniques as situations that seem like they cannot be controlled are able to after they use these breathing techniques.

Medical

Eight of the studies included medical therapies, which require a physician or medical professional to administer the treatment. For these therapies, pharmaceuticals, neuro-stimulation, and acupuncture have been proven to show results for veterans with combat-related

PTSD. For a therapy such as acupuncture, specifically battlefield acupuncture, it requires a certain certification in order to perform the procedure and it requires going to a primary care facility to have the procedure done. For pharmaceutical therapy, this does not include opioids, and is aimed to help with other comorbid illnesses instead of specifically PTSD, this would include depression and anxiety.

Multiple Therapies

For many of the therapies that have been established for treatment, it has been shown that they are more successful when used with other therapies (Cukor, 2009). Since every veteran has different symptoms and different severities of PTSD, using therapies together can help to treat different aspects of the illness. For example, by using yoga with image therapy, the veteran can learn more about mindfulness and breathing techniques through yoga and change the images that are causing anxiety from their past. By combining both, will help the veteran better control disturbing images and flashbacks.

To better understand how treatments can be combined and the different approaches that can be used, the following studies in Table 2 were reviewed. Each study looked at a population with a specific mental illness and with a certain level of pain that they endure. In order to keep some commonalities between the studies, only studies from table 1 were included so they have proven to work for veterans with PTSD.

Table 2. Studies with comparisons of successful dual treatment use

STUDY	POPULATION	TREATMENT	INCLUSIONS	DIAGNOSIS SCALES	TREATMENT LENGTH
BORMANN	29 males	Mindfulness + Treatment as usual (TAU)	Combat Veterans, >18 yrs old, enrolled in VA, diagnosed with combat-related PTSD, self-rated >50 on PTSD checklist	CAPS	1.5 hr sessions for 6 weeks
KING	Not Specific	Mindfulness + TAU	>10 yrs PTSD, PTSD partial remission	PDS, PTCI, CAPS	8 hr sessions for 8 weeks
KRUPNICK	31 males and 3 females	Online Intervention + TAU	served in OIF/OEF/OND, >18 yrs old, >50 on PCL, had intake session at trauma services program	PTSD-M, AUDIT	daily for 12 weeks
CAMPBELL	11 males	Cognitive Processing Therapy + Art Therapy	>50 score on PCL-M	BDI-II, PCL-M	8, 75-minute sessions
ROTHBAUM	1 male	Virtual Reality + Medication	met PTSD diagnosis criteria, manageable suicidal ideation	CAPS, DISM-IV, BDI, STAXI, IES	2x week 90-minute sessions for 7 weeks
JAKUPCAK	all male	Cognitive Behavioral Therapies + Behavior Activation	>50 on CAPS	DSM-IV Axis I, PTSD-M, BDI-II, CSQ, QLI	8 sessions
PRICE	14 females	Mindfulness + TAU	PTSD and chronic pain diagnosis, use pf prescription analgesics	DES, PCL-C, BSI	8 1-hour sessions over 10 weeks

Overall, there is evidence that certain therapies can work to help veterans with their PTSD, whether they are used alone or with other therapies as well. With every veteran, there are different pain thresholds and severity of PTSD which calls for a variety of interventions. Because the available therapies have shown their ability to help with PTSD, the VA frequently uses them at clinics and centers all over the country. However, the ability for the VA to continue use of the available therapies with the required resources has not been analyzed. While using treatments that have proven to work is important, it is also important to address the need for veterans to have more options for treatments and more availability of those treatments.

Expert Opinions

The opinions of two experts were solicited to supplement the literature review. Both experts work with veterans in facilities that provide or study mental illness and substance abuse treatment experiences for veterans. The two people who were interviewed were Kinga Kondor-Hine from the Veterans Outreach Center, or VOC, in Rochester, NY and Bruce Leise from the Cofrin Logan Center for Addiction Research and Treatment at the University of Kansas.

Kinga worked at the VOC as the wellness manager through March 2019, when the wellness program will be terminated due to funding issues. She was responsible for overseeing the services being provided to veterans such as art therapy, mental health counseling and groups to help to address isolation or triggers from PTSD. Since the VOC is volunteer-based, all funding of programs comes from the donations given to their organization with collaboration with the VA but is not directly affiliated. For the last eight or so years, the program was looking to use therapeutic interventions for veterans. Her previous experience with veterans extends past her time with the VOC and includes working for 20 years as a licensed counselor working with both male and female veterans with various issues such as anxiety, depression, PTSD war trauma and hand to hand trauma.

During her interview, Kinga talks about the importance for veterans to keep their sense of comradery that they are used to in the military which can be achieved through their community, often more than going to clinics or other facilities provided by the VA or others. This comradery combined with a wide variety of interventions is what is going to help veterans get the treatment that they need from any provider they can use with their healthcare coverage. Another issue that Kinga included in her interview when talking about changes to the VA system regarding treatment services was the importance of changing the current policies for giving

coverage to veterans who was discharged from the military for a reason other than honorably and still have issues as a result of the military without the coverage and resources they need.

Bruce is a professor at the University of Kansas and provides mental health services designed curriculum for veterans and 1st responders. He started to become more involved with veterans and 1st responders when they started to go to him for help. He is also a part of the warriors' ascent which is a group of people who volunteer to help veterans and first responders who experience post-traumatic stress. They aim to provide a community of support that allows everyone to have a place to go to overcome feelings of hopelessness, anger and isolation with a variety of healing practices. In his opinion, issues with alcohol are worse than opioids primarily for the availability of alcohol compared to opioids. A change that he would make to how veterans are receiving healthcare would be to increase the mental health experts who specialize in addiction and pain and also to decrease the wait times that the VA faces with their veteran to facility ratios. The alternative interventions for mental health and substance abuse such as creative writing and physical activity can be beneficial however he believes that adding ties to cognitive behavioral therapies will be more beneficial.

Research Questions

To what extent have treatments offered by VA and non-VA institutions in the United States varied since the passage of OSI was established in 2013? To what extent are there veteran specific programs in non-VA institutions? How does the availability of veteran specific programs in non-VA facilities impact the types treatments offered? What can be done to improve quality of care for veterans?

Methods

Study Design and Data Collection

Using data provided by the US Department of Health and Human Services (USDHHS) and the Substance Abuse and Mental Health Services Administration (SAMHSA), a data analysis of two different surveys provided by the USDHHS over four one-year periods will be conducted. Those two surveys span from 2014 to 2017; all four years are used for each survey. The surveys are the National Mental Health Services Survey and the National Survey of Substance Abuse Treatment Services. From each of the surveys, different aspects about services for veterans and civilians are compared and contrasted for the services and/or treatments available to each group. Combined with the qualitative research, this information will show for services that are available to veterans compare to those that are available to civilians.

Four years of surveys are being used for two reasons, the first being that it shows the changes of services over time and the second is because not all surveys from 2013 were available and nothing past 2017 is available to use. Since surveys change over years to improve the information being collected, each year of each survey was examined and compared. Questions that were not the same were excluded as well as questions not related to the purpose of this research; this allowed for trends between the four years to be shown. The questions used for the N-MHSS survey are in Appendix A and questions used for the N-SSATS survey are in Appendix B. Both appendices also include information about facilities that answered the surveys.

The first survey, the National Mental Health Services Survey or N-MHSS, is an annual survey that is given to all known mental health treatment facilities and is the only source of data involving both private and publicly-operated facilities. The second survey, the National Survey of Substance Abuse Treatment Services or N-SSATS, is an annual survey that is given to all

known facilities which provide substance abuse treatment. This survey looks at three main areas, characteristics of individual facilities, client count information and general information about the facility. Both of these two surveys are often used to together and are meant to complement each other with their related data.

Within the data from the surveys, there are certain questions that will be used to separate veteran specific information and civilian information. Both surveys have questions that allow the facility to identify what type of organization the facility identifies and specific groups that the facility has tailored programs for those groups which allows the data to be separated based on answers directly related to veterans and the Department of Veteran Affairs.

There are three main areas that are going to be observed for the N-MHSS data, which are the changes over time, the differences between VA and non-VA facilities and other trends related to the services being provided. The trends that are being observed look at the location of facilities nationwide, what programs are available at those locations and programs designed specifically for veterans. The data was collected by counts of facilities responses based on different answers they provide. Those facilities will then be compared to the civilian equivalents based on the number of facilities in each category.

For this survey, there are 12 treatment types that a facility may say that they do or do not provide at their location. The descriptions of those treatments are listed in the table below in Table 3.

Table 3. Descriptions of treatments types listed in N-MHSS survey that facilities may provide.

TREATMENT TYPE	DESCRIPTION
INDIVIDUAL PSYCHOTHERAPY	Treatment that focuses on individual patient's lives and relationships in different environments such as work, social and family by speaking one-on-one with a therapist. During the session, the therapist works with the patient to identify and resolves problems and work to build strengths of the patient's life.
COUPLES/FAMILY THERAPY	Works with the patients and their family or significant other to better understand ways to respond to one another during times of conflict. This is achieved through discussions and problem-solving sessions with the therapist. This often helps families and significant others better understand and aid a loved one who suffers from a mental illness.
GROUP THERAPY	Used for groups of about 4 to 12 people who all have a similar problem or condition and meet regularly with a therapist. The idea behind group therapy is to help the members gain relief from the stress related to their problems and possibly modify their behavior toward themselves or others through emotional interactions with others in the group.
COGNITIVE/BEHAVIOR THERAPY	Uses both cognitive and behavioral therapies that helps patients to change their negative thoughts, patters, beliefs and/or behaviors in a way that allows them to manage their symptoms and have a more productive and less stressful life.
DIALECTICAL BEHAVIOR THERAPY	A therapy with two main characteristics, to focus on behavioral problem-solving while also using acceptance-based strategies. This cognitive-behavioral treatment uses dialectical processes where dialectical refers to the complexity when treating a patient with multiple disorders and the approach for treatment.
BEHAVIOR MODIFICATION	Aims to modify behaviors with learning and conditioning principles
INTEGRATED DUAL DISORDERS TREATMENT	Uses a combined treatment approach for both mental illness and substance abuse. These treatments are long-term recovery processes that involve the patient, the treatment team and the other people in the patient's life
TRAUMA THERAPY	A type of therapy that looks to reduce symptoms and negative effects from traumatic events. Those traumatic events can be anything from emotional or physical abuse, natural disasters, family tragedies, war and more.
ACTIVITY THERAPY	A wide range of therapies like art, music, recreational, psychodrama and occupational therapies
ELECTROCONVULSIVE THERAPY	Uses low-voltage electrical simulation for the brain for treatment of some types of depression, mania, and some schizophrenia. This is a therapy that is used as a sort of last result therapy for seriously ill patients
TELEMEDICINE THERAPY	Used by healthcare providers to be able to help patients from a distance. With telemedicine, providers can diagnose, treat and talk with patients about their illnesses so that patients can receive care regardless of their location.
PSYCHOTROPIC MEDICATION	Patients are prescribed medications as treatment while ensuring the effectiveness, efficacy and risks of the drugs for the patient are worth the benefits

Veteran population data from the National Center for Veteran Analysis and Statistics was taken for the year of 2017. This year was used because it is the most up to date year for the N-MHSS data. The Geographic Distribution of VA Expenditures FY2017 shows the population for

all veterans in each state. Two territories, US Virgin Islands and American Samoa, were not included in the report.

For the N-SSATS data, there was not a lot of consistency of questions that were included in the data sets. This meant that the treatment types that were listed in the survey were not always included in the data from year to year. For this reason, the only two areas that could be observed from the NSSATS data was the facilities who have veteran specific programs and the locations of the VA and non-VA facilities.

Using quantitative research, the goal is an over-arching search about the availability of treatment services for both mental health and substance abuse for both veterans and civilians. By including specific data from each of the two studies and looking at the trends of services being provided over time and the availability of those services. The location of facilities and what is available nationwide plays a large role is where veterans are required to go for treatment. Not only is this information important, but also understanding how this information can be used to help improve known treatment services for veterans and show the importance of their availability to them as well.

Findings

Data

Frequency of Treatment Availability

The treatments below are the 12 treatments that are listed on the N-MHSS survey. As shown in figure 2, electroconvulsive therapy has the lowest percentage of use in the facilities at about 11%. This percent means that out of all of the VA facilities, about 11% of them offer electroconvulsive therapy. Out of the 12 treatment types, the two highest percentages are individual psychotherapy and psychotropic medication with 99% and 95%, respectively. While this looks at the highest number of facilities that use that treatment method, it does not look at the number of times that treatment is used with patients within the facility. With 12 treatment types, there are only three types that are used in less than 50% of facilities, those are dialectical behavior, activity and electroconvulsive therapy.

Looking at the data over time, couples/family therapy, trauma therapy, integrated dual disorders treatment and activity therapy all have a slight decrease in use during the year 2015. Overall, however, the availability of therapies does not change to a large extent over the four years. The therapy with the largest increase from 2014 to 2017 was telemedicine therapy, it increased from 87.2% to 92.7%.

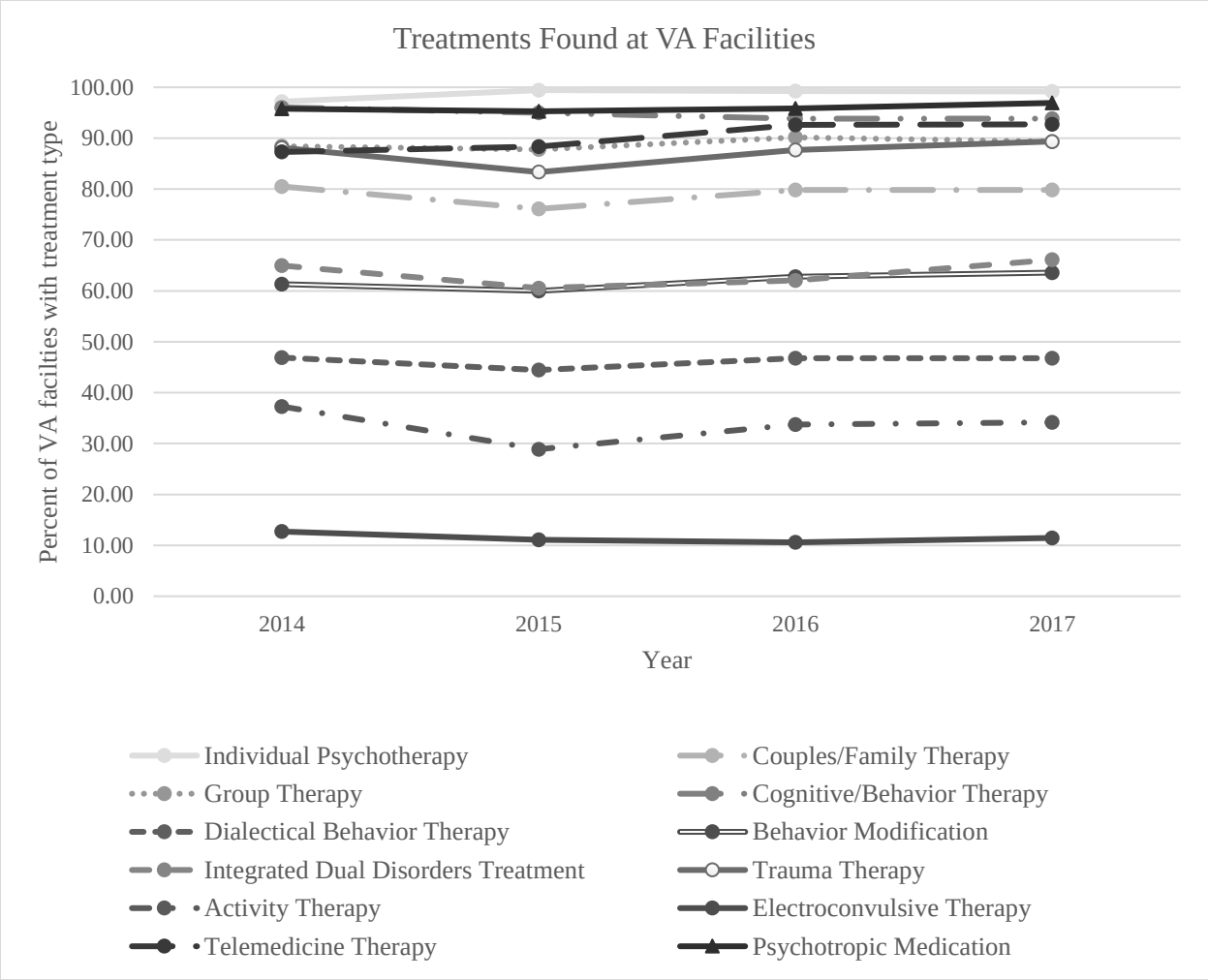

Figure 2. Progression of treatments available at nationwide VA facilities. Number of VA facilities with the treatment out of the total number of VA facilities in that year.

Figures 3 through 14 show the difference between VA and non-VA facilities for each of the treatment types. Dialectical behavior therapy, behavior modification and activity therapy, in figures 7, 8 and 11 respectively, are more commonly offered in non-VA facilities than to VA facilities. Data shows that for the remaining 9 treatments, a higher percent of VA facilities provide the treatment, as compared to non-VA. As seen in figure 13, telemedicine shows the largest difference in percent of facilities that provide the treatment between VA and non-VA facilities.

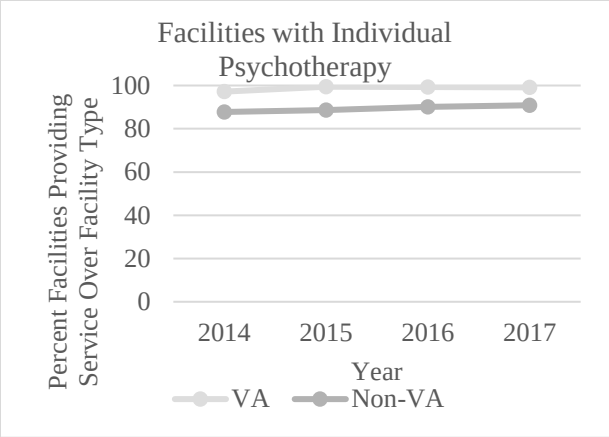

Figure 3. Comparison of percent of VA and Non-VA facilities that provide individual psychotherapy for treatment.

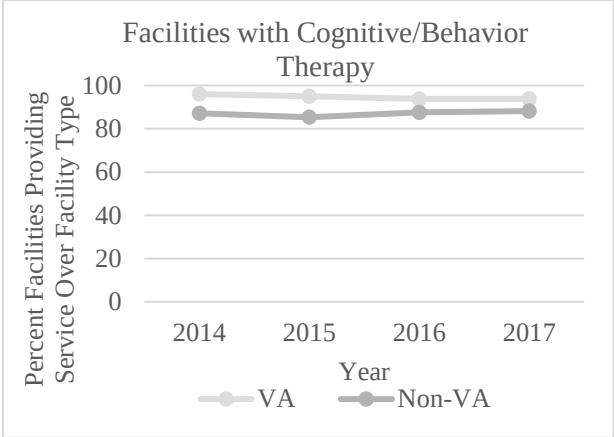

Figure 6. Comparison of percent of VA and Non-VA facilities that provide cognitive/behavior therapy for treatment.

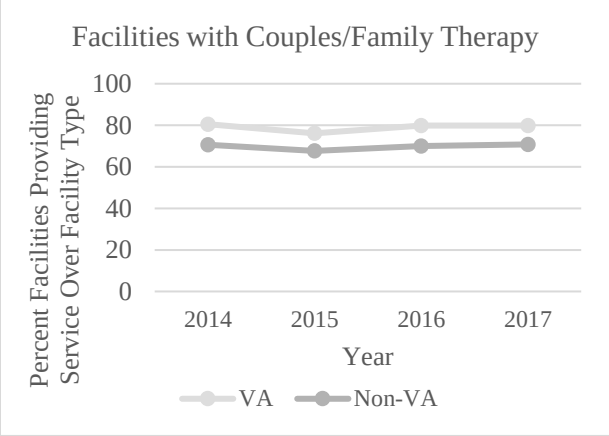

Figure 4. Comparison of percent of VA and Non-VA facilities that provide couples/family therapy for treatment.

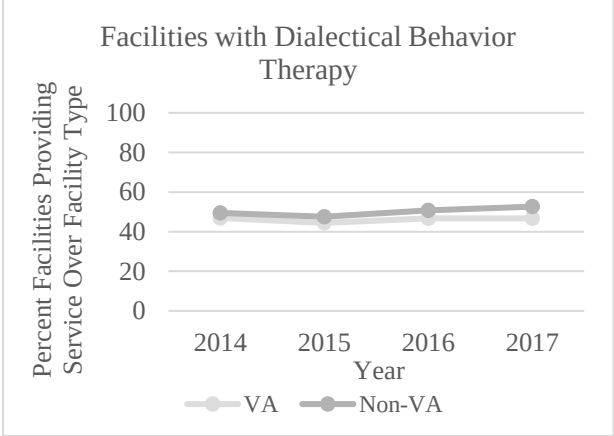

Figure 7. Comparison of percent of VA and Non-VA facilities that provide dialectical behavior therapy for treatment.

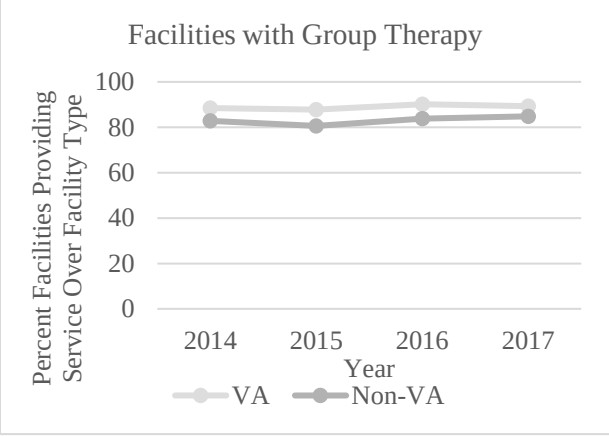

Figure 5. Comparison of percent of VA and Non-VA facilities that provide group therapy for treatment.

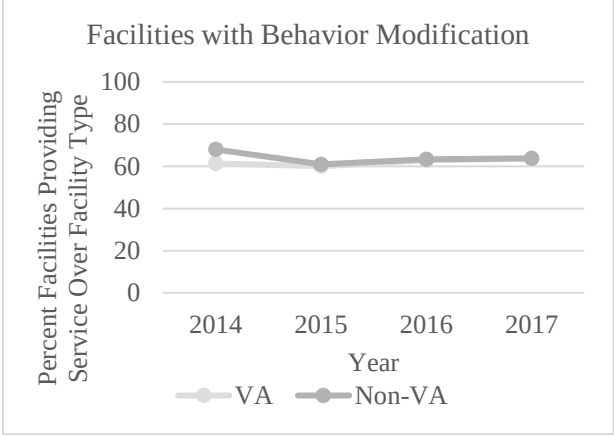

Figure 8. Comparison of percent of VA and Non-VA facilities that provide behavior modification for treatment.

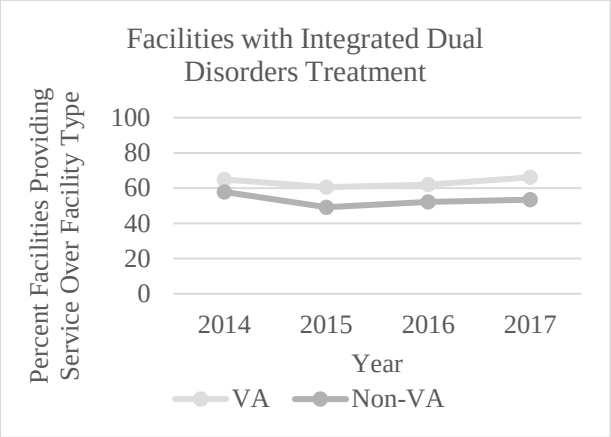

Figure 9. Comparison of percent of VA and Non-VA facilities that provide dual disorders treatment.

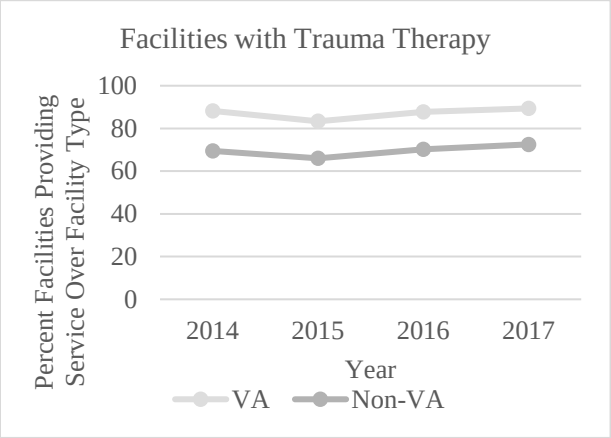

Figure 10. Comparison of percent of VA and Non-VA facilities that provide trauma therapy for treatment.

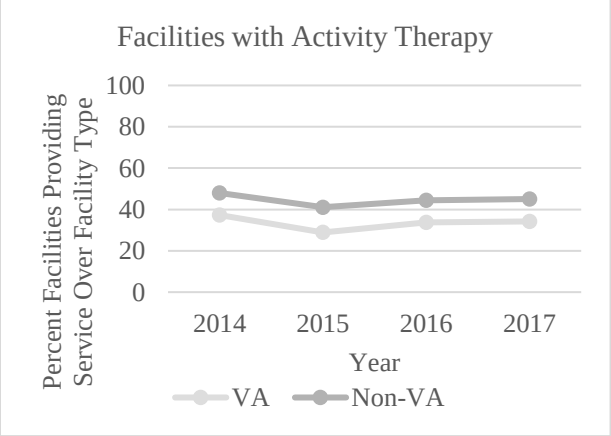

Figure 11. Comparison of percent of VA and Non-VA facilities that provide activity therapy for treatment.

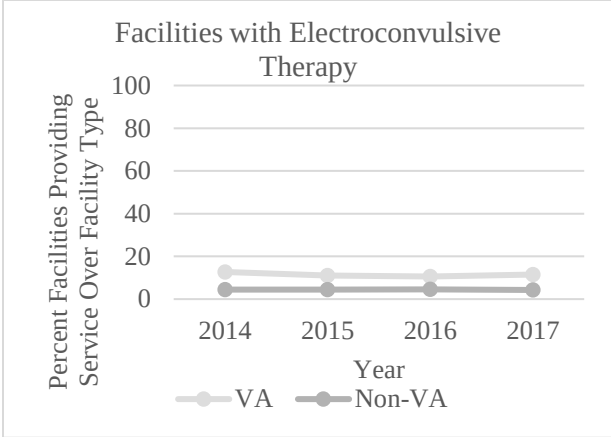

Figure 12. Comparison of percent of VA and Non-VA facilities that provide electroconvulsive therapy for treatment.

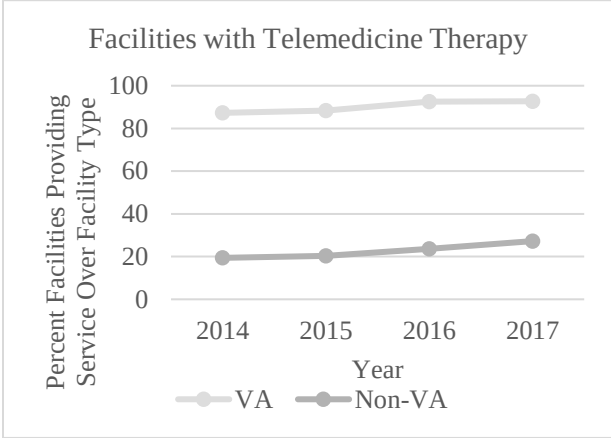

Figure 13. Comparison of percent of VA and Non-VA facilities that provide telemedicine therapy for treatment.

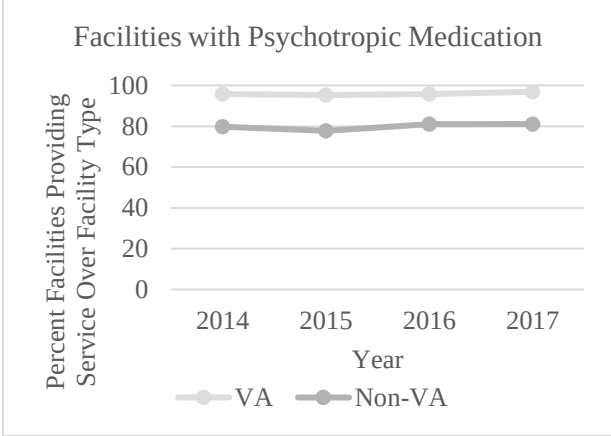

Figure 14. Comparison of percent of VA and Non-VA facilities that provide psychotropic medication for treatment.

Veteran Specific Programs

Using data from the N-MHSS survey, Figure 15 shows all non-VA facilities that do or do not provide veteran specific programs. There was a decrease in the facilities with veteran specific programs until 2017, when the number of programs begins to increase. Since VA facilities are for veterans specifically, it expected that VA facilities would have veteran specific programs. However, there are many non-VA facilities that do provide veteran specific programs as well.

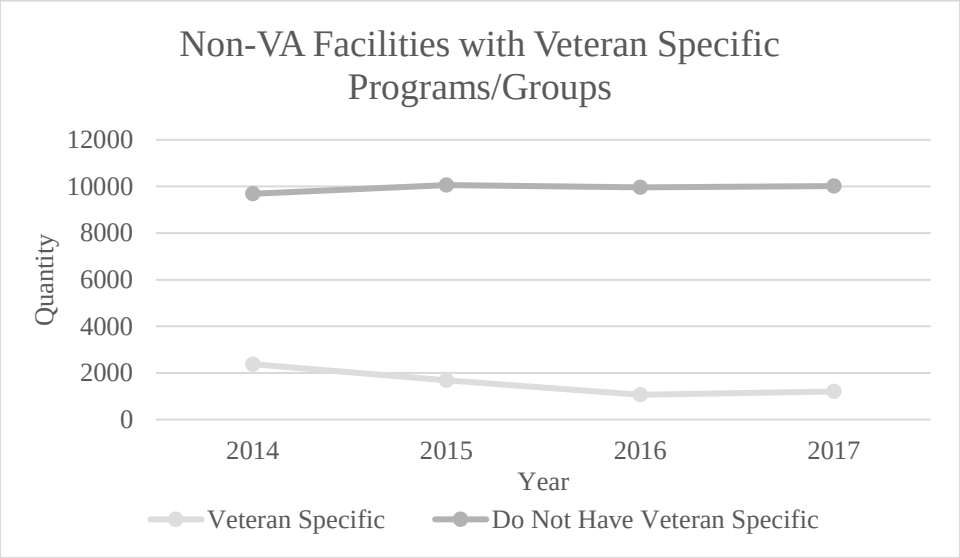

Figure 15. The number of non-VA facilities with or without veteran specific programs that answered the survey question.

Specific numbers of included facilities for each year of the N-MHSS data can be found in Appendix A. Table 4 reports the number of non-VA facilities in each state that have groups or programs specifically made for veterans. For a majority of the states, there is either not a large change in the number of programs between 2014 and 2017, or the number seems to slowly be dropping. For a few states, the number of programs in the state decreases in 2015 or 2016 but starts to increase again by 2016 or 2017, those states are New Hampshire, Iowa, Alabama, Arizona, Oregon and Texas, which has the largest increase in 2017.

Table 4. State trends from 2014-2017 of all non-VA facilities that have veteran specific programs or groups throughout the United States

SUM OF VETERAN SPECIFIC PROGRAMS/GROUPS				
STATE/ TERRITORY	**2014**	**2015**	**2016**	**2017**
ALABAMA	25	23	18	21
ALASKA	18	16	13	12
ARIZONA	102	65	28	37
ARKANSAS	27	7	2	6
CALIFORNIA	125	108	63	66
COLORADO	32	28	17	21
CONNECTICUT	47	23	21	23
DELAWARE	8	5	2	7
DISTRICT OF COLUMBIA	10	6	4	3
FLORIDA	99	86	56	62
GEORGIA	59	49	45	46
HAWAII	17	12	12	7
IDAHO	51	49	21	27
ILLINOIS	72	45	28	30
INDIANA	42	51	41	32
IOWA	24	5	3	8
KANSAS	18	10	9	11
KENTUCKY	30	41	36	26
LOUISIANA	50	36	30	26
MAINE	44	25	13	13
MARYLAND	57	53	28	35
MASSACHUSETTS	51	43	22	25
MICHIGAN	61	46	28	30
MINNESOTA	32	26	18	19
MISSISSIPPI	55	27	16	21
MISSOURI	57	50	8	16
MONTANA	28	38	16	12
NEBRASKA	19	20	12	19
NEVADA	7	11	3	4
NEW HAMPSHIRE	5	12	9	11
NEW JERSEY	50	26	30	35
NEW MEXICO	20	16	8	8
NEW YORK	196	114	61	63
NORTH CAROLINA	54	39	27	26
NORTH DAKOTA	4	2	0	1
OHIO	87	51	38	45
OKLAHOMA	34	25	19	25
OREGON	22	10	9	15
PENNSYLVANIA	68	47	37	42
RHODE ISLAND	11	1	5	6
SOUTH CAROLINA	20	25	7	10
SOUTH DAKOTA	13	5	1	1
TENNESSEE	56	41	26	28
TEXAS	83	68	55	88
UTAH	16	11	8	8
VERMONT	18	2	2	3
VIRGINIA	76	51	30	37
WASHINGTON	34	28	19	22
WEST VIRGINIA	17	17	5	8
WISCONSIN	90	58	33	37
WYOMING	15	11	6	6
AMERICAN SAMOA	1	0	0	0
GUAM	0	1	0	0
PUERTO RICO	35	19	11	9
US VIRGIN ISLANDS	2	1	0	0
GRAND TOTAL	2294	1685	1059	1199

National Survey of Substance Abuse Treatment Services

Because of the limitation of data provided for the N-SSATS survey, only general information about veteran specific programs could be analyzed. Table 5 shows the change in percent of non-VA facilities that provide veteran specific programs based on the N-MHSS data and the N-SSATS data. The two surveys target two types of facilities, mental health and

substance abuse. Both of the surveys also have similar number of facilities answering the surveys each year, shown in Appendices A and B.

Out of all of the facilities that answered the question on the survey, only about 17% of non-VA substance abuse facilities have programs for veterans specifically at their location compared to the decreasing number of non-VA mental health facilities from 2014 to 2017. This information shows that there are more facilities focusing on veteran treatment in mental health compared to substance abuse.

Table 5. Comparison of veteran specific programs/groups between all non-VA facilities in each year based on N-MHSS data and N-SSATS data.

	N-MHSS				N-SSATS			
	2014	*2015*	*2016*	*2017*	*2014*	*2015*	*2016*	*2017*
VETERAN SPECIFIC PROGRAMS	18.55%	13.54%	9.06%	10.69%	16.14%	16.31%	17.25%	17.79%

Veteran Specific Programs vs Treatment

Next, we compared treatments offered in non-VA institutions that offered veteran specific programs vs those offered in non-VA institutions that didn't offer specific programs. In Table 6, the percent of facilities that are non-VA or VA and provide the treatment type is shown. By comparing the treatment availability in these two groups, we might get some insight into what treatments are more likely to be offered to veterans.

Table 6. Trends for non-VA facilities that provide veteran specific programs/groups and provide specific treatment types. Red = difference between 1-5%, yellow = difference between 6-10%, green = difference over 11%

Table Formulas:

$$\%\ treatment\ X = \frac{\#\ of\ non{-}VA\ facilities\ w/\ treatment\ X\ that\ provide\ vet.spec.\ programs}{\#\ of\ non{-}VA\ facilities\ that\ provide\ vet.spec.programs}\ x\ 100$$

$$\%\ total\ treatment\ X = \frac{\#\ non{-}VA\ facilities\ that\ provide\ treatment\ X}{\#\ of\ non{-}VA\ facilities}\ x\ 100$$

Veteran Specific Programs				
Treatment Type	2014	2015	2016	2017
% Individual Psychotherapy	91%	93%	94%	94%
% Total IP	83%	83%	85%	86%
% Couples/Family Therapy	73%	74%	74%	75%
% Total C/FT	67%	63%	66%	67%
% Group Therapy	87%	87%	89%	89%
% Total GT	78%	75%	79%	80%
% Cognitive/ Behavior Therapy	91%	90%	92%	92%
% Total C/BT	82%	80%	82%	83%
% Dialectical Behavior Therapy	56%	55%	57%	60%
% Total DBT	47%	45%	48%	50%
% Behavior Modification	75%	70%	70%	72%
% Total BM	64%	56%	58%	59%
% Integrated Dual Disorders Treatment	72%	67%	68%	72%
%Total IDDT	56%	47%	50%	52%
% Trauma Therapy	74%	77%	79%	80%
% Total TT	65%	61%	65%	68%
% Activity Therapy	54%	47%	49%	51%
% Total AT	44%	37%	40%	41%
% Electroconvulsive Therapy	6%	6%	4%	5%
% Total ET	4%	4%	5%	4%
% Telemedicine Therapy	27%	31%	33%	39%
% Total TMT	19%	20%	23%	26%
% Psychotropic Medication	82%	78%	84%	84%
% Total PM	75%	73%	76%	76%

Based on the information in Table 6, there are four treatment type that has a large different between the total and the treatment percentages. Those are behavior modification, IDDT, trauma therapy and telemedicine therapy. This means that when considering both the treatment availability with veteran specific program availability, there is a higher likelihood that there are veteran specific programs at the non-VA facility when going for any of those 4 treatments. This may also imply that these types of programs are particularly helpful to veterans. Electroconvulsive therapy has the smallest change when considering both treatment and veteran specific programs.

Treatment Availability by Location

Since the N-MHSS data is collected from mental health facilities nationwide, I then looked at the number of facilities that provide the 12 treatments for each state. Each treatment is looked at separately for the VA and non-VA facilities within each state or territory to better understand the availability throughout the U.S.

Table 7 shows the number of facilities that provide individual psychotherapy for treatment by state/territory. The first thing to notice is that there are significantly more non-VA facilities compared to VA facilities, which is constant throughout all treatment types. The number of facilities in each state is important because of rural and populated states. We can also see that there are a few U.S. territories that don't have many mental health facilities, with only one facility each in 2017 in Guam and American Samoa, and 4 in the U.S. Virgin Islands.

For the states above, there are different trends occurring within each state. However, when looking at non-VA facilities, there is an overall decrease in those that offer individual psychotherapy from 2014 to 2017each year. Eleven states had an increase between 2014 and 2017 and the states with the largest increase in non-VA facilities that provide individual psychotherapy over the 4 years are Texas, Utah, and Washington, as seen in table 7. Washington has a very large increase over the 4 years of 71 facilities.

Table 7. Comparison of VA and non-VA type facilities that provide individual psychotherapy treatment categorized by state/territory.

SUM OF INDIVIDUAL PSYCHOTHERAPY				
	Non-VA		VA	
STATE/TERRITORY	2014	2017	2014	2017
ALABAMA	177	155	3	8
ALASKA	91	81	1	1
ARIZONA	321	322	8	4
ARKANSAS	249	209	7	5
CALIFORNIA	768	775	17	13
COLORADO	188	168	5	8
CONNECTICUT	215	192	2	1
DELAWARE	35	28	1	2
DISTRICT OF COLUMBIA	36	36	2	0
FLORIDA	449	387	18	23
GEORGIA	195	168	6	7
HAWAII	51	30	3	2
IDAHO	196	137	6	5
ILLINOIS	394	339	20	20
INDIANA	266	244	8	4
IOWA	142	129	5	7
KANSAS	123	113	2	1
KENTUCKY	194	191	5	9
LOUISIANA	159	172	3	2
MAINE	170	156	1	4
MARYLAND	241	214	4	2
MASSACHUSETTS	286	277	16	7
MICHIGAN	320	302	11	18
MINNESOTA	207	189	2	11
MISSISSIPPI	180	147	1	2
MISSOURI	187	190	9	7
MONTANA	98	83	1	1
NEBRASKA	101	112	3	1
NEVADA	41	44	3	1
NEW HAMPSHIRE	57	51	1	3
NEW JERSEY	278	250	11	13
NEW MEXICO	62	53	2	4
NEW YORK	940	768	26	20
NORTH CAROLINA	245	189	6	8
NORTH DAKOTA	29	30	0	0
OHIO	497	482	19	24
OKLAHOMA	152	134	3	4
OREGON	172	138	6	6
PENNSYLVANIA	542	505	26	26
RHODE ISLAND	58	48	1	2
SOUTH CAROLINA	105	97	9	5
SOUTH DAKOTA	46	46	2	4
TENNESSEE	268	236	7	4
TEXAS	267	291	9	14
UTAH	110	134	4	2
VERMONT	64	59	2	6
VIRGINIA	232	225	4	5
WASHINGTON	221	282	8	6
WEST VIRGINIA	106	105	5	4
WISCONSIN	435	390	11	16
WYOMING	52	39	2	1
AMERICAN SAMOA	2	1	0	0
GUAM	0	1	2	0
PUERTO RICO	102	51	0	1
US VIRGIN ISLANDS	9	4	0	0
GRAND TOTAL	11131	10199	339	354

The rest of the states or territories have either no change over the years or a decrease in facilities. New York has the largest reported decrease of 172 facilities. For VA facilities, 24 states had an increase from 2014 to 2017 and 11 had an increase of 3 or more. The largest reported increases were in Michigan with 7 new facilities and Minnesota with 9. Massachusetts had the largest decrease, with over a 50% reduction in facilities from 16 to 7 from 2014 to 2017.

Table 8 shows the facilities that provide couples or family therapy in each state. Looking at the non-VA facilities, 31 of the states reported to have a decrease in the number of facilities providing the therapy by 10 or more, but 7 states, have an increase in availability, 5 with an increase between 1 and 10 with Utah and Washington having the largest increase in facilities of 29 and 46 respectively, shown in table 7.

Table 8. Comparison of VA and non-VA type facilities that provide couples/family therapy treatment categorized by state/territory.

SUM OF COUPLES/FAMILY THERAPY

	Non-VA		**VA**	
STATE/TERRITORY	**2014**	**2017**	**2014**	**2017**
ALABAMA	118	95	2	8
ALASKA	84	66	1	1
ARIZONA	258	261	8	3
ARKANSAS	222	187	6	4
CALIFORNIA	567	549	15	12
COLORADO	159	142	5	7
CONNECTICUT	198	165	1	1
DELAWARE	22	24	1	1
DISTRICT OF COLUMBIA	23	25	1	0
FLORIDA	360	294	20	19
GEORGIA	155	145	6	6
HAWAII	34	19	3	2
IDAHO	180	118	4	4
ILLINOIS	301	256	14	17
INDIANA	224	215	6	4
IOWA	120	111	4	3
KANSAS	100	88	2	1
KENTUCKY	169	166	3	8
LOUISIANA	108	95	3	2
MAINE	130	126	0	2
MARYLAND	217	181	2	2
MASSACHUSETTS	251	244	14	7
MICHIGAN	264	234	8	9
MINNESOTA	160	151	2	11
MISSISSIPPI	146	117	1	2
MISSOURI	140	116	8	6
MONTANA	91	68	1	1
NEBRASKA	90	100	3	1
NEVADA	34	39	2	1
NEW HAMPSHIRE	42	36	1	3
NEW JERSEY	212	184	3	3
NEW MEXICO	51	42	2	4
NEW YORK	729	583	19	17
NORTH CAROLINA	192	126	5	7
NORTH DAKOTA	23	21	0	0
OHIO	386	370	18	17
OKLAHOMA	131	109	3	4
OREGON	119	87	5	3
PENNSYLVANIA	439	411	21	23
RHODE ISLAND	36	36	1	2
SOUTH CAROLINA	80	79	9	2
SOUTH DAKOTA	43	41	2	4
TENNESSEE	233	199	7	4
TEXAS	178	174	8	14
UTAH	88	117	3	1
VERMONT	46	43	2	6
VIRGINIA	183	158	3	4
WASHINGTON	146	192	6	4
WEST VIRGINIA	96	87	5	4
WISCONSIN	397	364	8	12
WYOMING	48	36	2	1
AMERICAN SAMOA	2	1	0	0
GUAM	0	1	2	0
PUERTO RICO	75	46	0	1
US VIRGIN ISLANDS	7	4	0	0
GRAND TOTAL	**8907**	**7944**	**281**	**285**

In Louisiana, there was a large amount of change between each year for non-VA facilities that provide family therapy, also seen in table 8. Twenty states had an increase of VA facilities that provide family therapy. Of those 20 states, seven states had a reported increase higher than 2 and the states with the largest increase in facilities with family therapy are Alabama, Minnesota, and Texas. The largest decrease in VA facilities that provide family therapy was Arizona, Massachusetts and South Carolina.

Facilities that provide group therapy are shown in Table 9. The states that had an increase of facilities with group therapy were eight for non-VA facilities and twenty-four for VA facilities. That is a large difference in the number of states increasing facilities with group therapy, only two of the states were increasing both VA and non-VA facilities. For facilities that are non-VA, three states had an increase in the number of facilities providing group treatment over 5, those states are Texas, Utah and Washington. New York had the largest reported decrease in facilities of 168 between 2014 and 2017. The rest of the facilities had smaller changes or no changes over the 4 years.

Table 9. Comparison of VA and non-VA type facilities that provide group therapy treatment categorized by state/territory.

SUM OF GROUP THERAPY				
	Non-VA		VA	
STATE/TERRITORY	2014	2017	2014	2017
ALABAMA	167	143	3	8
ALASKA	87	78	1	1
ARIZONA	330	326	8	3
ARKANSAS	254	206	5	5
CALIFORNIA	750	753	18	13
COLORADO	188	172	5	8
CONNECTICUT	217	194	2	1
DELAWARE	33	28	1	1
DISTRICT OF COLUMBIA	32	30	1	0
FLORIDA	429	359	18	21
GEORGIA	190	174	5	7
HAWAII	41	22	3	2
IDAHO	158	115	6	5
ILLINOIS	370	319	17	18
INDIANA	247	231	7	4
IOWA	111	101	5	5
KANSAS	116	102	2	1
KENTUCKY	186	190	3	8
LOUISIANA	141	144	3	2
MAINE	126	113	1	2
MARYLAND	239	215	3	2
MASSACHUSETTS	281	274	16	7
MICHIGAN	287	279	11	18
MINNESOTA	192	168	2	6
MISSISSIPPI	177	148	1	2
MISSOURI	181	179	9	7
MONTANA	98	72	1	1
NEBRASKA	83	88	2	1
NEVADA	40	39	3	1
NEW HAMPSHIRE	43	43	1	3
NEW JERSEY	273	256	4	6
NEW MEXICO	58	47	1	4
NEW YORK	890	722	23	16
NORTH CAROLINA	254	192	6	8
NORTH DAKOTA	29	30	0	0
OHIO	477	458	19	24
OKLAHOMA	149	131	3	4
OREGON	165	132	5	5
PENNSYLVANIA	470	456	22	22
RHODE ISLAND	55	46	1	2
SOUTH CAROLINA	110	99	9	5
SOUTH DAKOTA	50	45	2	4
TENNESSEE	258	216	7	4
TEXAS	248	260	9	14
UTAH	103	125	4	1
VERMONT	58	56	2	6
VIRGINIA	231	222	3	5
WASHINGTON	195	257	7	5
WEST VIRGINIA	92	82	3	4
WISCONSIN	337	292	10	15
WYOMING	49	39	2	1
AMERICAN SAMOA	1	0	0	0
GUAM	0	1	2	0
PUERTO RICO	94	47	0	1
US VIRGIN ISLANDS	9	4	0	0
GRAND TOTAL	**10449**	**9520**	**307**	**319**

Out of the twenty-four states with VA facilities that had an increase over the 4 years, 10 had increases in for 3 or higher. The highest increase was Michigan with an increase in facilities with group therapy of 7. This is a much larger number of states with an increase compared to individual psychotherapy and couples/family therapy, which shows that group therapy is becoming a more popular approach out of the three therapy options.

Table 10 looks at the trends for the number of facilities that provide cognitive/behavior therapy at their facility. This therapy does not show any states with a noteworthy increase in VA facilities. However, it does show that in Arizona, Indiana and Massachusetts, between 2014 and 2017, the number of facilities decreases by half in each state.

Table 10. Comparison of VA and non-VA type facilities that provide cognitive/behavior therapy categorized by state/territory.

SUM OF COGNITIVE/BEHAVIOR THERAPY				
	Non-VA		VA	
STATE/TERRITORY	2014	2017	2014	2017
ALABAMA	155	140	3	8
ALASKA	93	79	1	1
ARIZONA	335	309	8	4
ARKANSAS	238	194	7	4
CALIFORNIA	770	763	19	13
COLORADO	187	163	5	8
CONNECTICUT	218	195	2	1
DELAWARE	35	31	1	2
DISTRICT OF COLUMBIA	33	30	2	0
FLORIDA	448	359	20	23
GEORGIA	184	170	6	7
HAWAII	47	24	3	2
IDAHO	190	131	5	5
ILLINOIS	379	319	20	19
INDIANA	256	246	8	4
IOWA	143	122	5	2
KANSAS	118	109	2	1
KENTUCKY	190	191	5	9
LOUISIANA	146	154	3	2
MAINE	165	144	1	3
MARYLAND	239	203	3	2
MASSACHUSETTS	292	273	16	7
MICHIGAN	300	287	11	18
MINNESOTA	218	190	1	4
MISSISSIPPI	194	156	1	2
MISSOURI	192	186	9	7
MONTANA	88	81	1	1
NEBRASKA	101	112	3	1
NEVADA	40	42	3	1
NEW HAMPSHIRE	56	49	1	3
NEW JERSEY	272	239	11	12
NEW MEXICO	59	52	1	4
NEW YORK	905	732	26	20
NORTH CAROLINA	272	203	8	8
NORTH DAKOTA	27	30	0	0
OHIO	506	481	19	24
OKLAHOMA	148	133	3	4
OREGON	169	135	6	6
PENNSYLVANIA	522	464	25	26
RHODE ISLAND	55	47	1	2
SOUTH CAROLINA	107	98	9	5
SOUTH DAKOTA	49	45	2	4
TENNESSEE	283	248	7	4
TEXAS	295	292	9	14
UTAH	104	124	4	2
VERMONT	64	57	2	6
VIRGINIA	244	219	3	5
WASHINGTON	218	274	8	6
WEST VIRGINIA	102	99	4	4
WISCONSIN	429	385	11	13
WYOMING	51	38	2	1
AMERICAN SAMOA	1	0	0	0
GUAM	0	1	2	0
PUERTO RICO	88	44	0	1
US VIRGIN ISLANDS	9	4	0	0
GRAND TOTAL	**11029**	**9896**	**338**	**335**

Out of the states that have non-VA facilities with the treatment type, there were eight states with an increase, Washington, Utah and Nebraska had increases in facilities with

cognitive/behavior therapy over 10. New York and Florida had the largest decrease in facilities with the therapy of over 85 facilities. Both Massachusetts and Nebraska had a large increase or decrease every year for all four years.

In Table 11, the states with VA and non-VA facilities that provide dialectical behavior therapy are shown. Overall, there are few significant increases or decreases in either VA or non-VA facilities that provide dialectical behavior therapy over the four-year time. There are 20 states that reported to have an increase in facilities that provide dialectical behavior therapy in non-VA facilities and 22 states that reported to have increases in VA facilities with the therapy, 7 of which are the same state for both. Another note about the trends below is that the number of non-VA facilities offering dialectical behavior therapy in Hawaii decreases by half from 2014 to 2017. For VA facilities in Illinois, there is a large change from year to year as well. As of 2017, 12 states/territories do not have any VA facilities that provide dialectical behavior therapy, 2 of the 12 are territories don't have any VA or non-VA facilities that provide the therapy.

Table 11. Comparison of VA and non-VA type facilities that provide dialectical behavior therapy categorized by state/territory.

SUM OF DIALECTICAL BEHAVIOR THERAPY				
	Non-VA		VA	
STATE/TERRITORY	2014	2017	2014	2017
ALABAMA	102	67	1	3
ALASKA	67	56	1	0
ARIZONA	153	164	2	2
ARKANSAS	108	123	6	3
CALIFORNIA	418	420	8	6
COLORADO	153	147	3	5
CONNECTICUT	124	118	0	0
DELAWARE	12	14	0	1
DISTRICT OF COLUMBIA	13	14	1	0
FLORIDA	227	182	9	9
GEORGIA	106	114	4	3
HAWAII	22	11	1	0
IDAHO	130	98	3	4
ILLINOIS	232	199	17	9
INDIANA	142	161	2	2
IOWA	90	83	3	1
KANSAS	60	54	2	0
KENTUCKY	108	117	2	6
LOUISIANA	75	60	3	1
MAINE	128	107	0	2
MARYLAND	121	111	2	1
MASSACHUSETTS	170	174	4	1
MICHIGAN	208	192	3	5
MINNESOTA	119	112	1	3
MISSISSIPPI	72	80	0	1
MISSOURI	113	110	4	2
MONTANA	56	53	0	1
NEBRASKA	67	83	3	1
NEVADA	33	32	2	1
NEW HAMPSHIRE	44	36	1	3
NEW JERSEY	112	121	3	6
NEW MEXICO	33	28	0	3
NEW YORK	533	488	19	16
NORTH CAROLINA	131	103	5	7
NORTH DAKOTA	22	26	0	0
OHIO	263	274	8	10
OKLAHOMA	82	51	2	4
OREGON	121	101	1	1
PENNSYLVANIA	307	287	11	8
RHODE ISLAND	40	38	0	2
SOUTH CAROLINA	52	38	4	1
SOUTH DAKOTA	32	36	1	1
TENNESSEE	165	141	2	0
TEXAS	101	108	7	12
UTAH	79	108	1	0
VERMONT	50	46	1	6
VIRGINIA	113	116	1	3
WASHINGTON	146	197	5	2
WEST VIRGINIA	49	49	1	3
WISCONSIN	219	204	2	5
WYOMING	42	35	2	1
AMERICAN SAMOA	0	0	0	0
GUAM	0	1	1	0
PUERTO RICO	32	20	0	0
US VIRGIN ISLANDS	4	0	0	0
GRAND TOTAL	**6201**	**5908**	**165**	**167**

Table 12 summarizes the facilities, both VA and non-VA, that provide behavior modification treatment for the 4 years observed. The data below shows many fluctuations from multiple states. There are 8 states that reported an increase in the number of non-VA facilities with behavior modification, however the rest aside from Nevada have a decrease in facilities. Out of the 46 decreasing states, about half of those have an overall reduction of 20 facilities or more. The states with large decreases over 75 in non-VA facilities offering behavior

modification treatment are Florida, North Carolina, New York, and Wisconsin. There are 19 states with an increase in VA facilities offering this treatment, 10 of those states had an increase of double or higher.

Table 12. Comparison of VA and non-VA type facilities that provide behavior modification treatment categorized by state/territory.

SUM OF BEHAVIOR MODIFICATION

	Non-VA		VA	
STATE/TERRITORY	**2014**	**2017**	**2014**	**2017**
ALABAMA	111	93	0	7
ALASKA	74	65	1	1
ARIZONA	275	247	2	2
ARKANSAS	198	167	6	2
CALIFORNIA	552	523	15	11
COLORADO	153	121	3	5
CONNECTICUT	160	124	1	0
DELAWARE	29	25	0	0
DISTRICT OF COLUMBIA	24	19	0	0
FLORIDA	321	243	8	17
GEORGIA	151	124	5	4
HAWAII	34	19	2	1
IDAHO	168	110	4	4
ILLINOIS	282	238	17	16
INDIANA	171	143	5	3
IOWA	110	75	3	2
KANSAS	92	89	2	1
KENTUCKY	152	170	4	4
LOUISIANA	106	121	3	2
MAINE	112	99	1	2
MARYLAND	206	171	2	2
MASSACHUSETTS	207	172	11	2
MICHIGAN	235	186	4	10
MINNESOTA	164	140	1	10
MISSISSIPPI	178	135	1	2
MISSOURI	149	134	8	2
MONTANA	76	65	1	1
NEBRASKA	90	87	2	1
NEVADA	36	36	2	1
NEW HAMPSHIRE	37	40	1	3
NEW JERSEY	170	161	4	4
NEW MEXICO	43	27	0	2
NEW YORK	722	495	16	19
NORTH CAROLINA	266	181	6	5
NORTH DAKOTA	24	25	0	0
OHIO	381	332	8	12
OKLAHOMA	119	108	3	4
OREGON	123	95	4	0
PENNSYLVANIA	421	369	19	13
RHODE ISLAND	35	26	0	2
SOUTH CAROLINA	78	64	4	3
SOUTH DAKOTA	37	42	1	3
TENNESSEE	250	182	5	3
TEXAS	182	178	6	10
UTAH	96	114	2	0
VERMONT	63	40	2	6
VIRGINIA	189	133	3	2
WASHINGTON	163	188	5	3
WEST VIRGINIA	72	59	2	3
WISCONSIN	349	271	6	14
WYOMING	45	31	1	0
AMERICAN SAMOA	1	0	0	0
GUAM	0	1	2	0
PUERTO RICO	81	49	0	1
US VIRGIN ISLANDS	9	4	0	0
GRAND TOTAL	**8572**	**7156**	**214**	**227**

Table 13 shows the VA and non-VA facilities in each state and territory that provide integrate dual disorders treatment (IDDT). Overall, there are many states that have decreasing or non-changing trends within the 4 years. There are 4 states that report an increase in non-VA

facilities providing the treatment, those states are shown in table 13. Compared to the 4 states with an increase in non-VA facilities with the treatment, there are 25 states that reported an increase in VA facilities with the treatment. This could imply that the VA is seeing positive results from IDDT because the treatment works to treat both mental health and substance abuse together, instead of as separate disorders.

Table 13. Comparison of VA and non-VA type facilities that provide integrated dual disorders treatment categorized by state/territory.

SUM OF INTEGRATED DUAL DISORDERS TREATMENT				
	Non-VA		**VA**	
STATE/TERRITORY	**2014**	**2017**	**2014**	**2017**
ALABAMA	90	60	2	7
ALASKA	74	55	0	1
ARIZONA	225	226	3	3
ARKANSAS	134	109	2	3
CALIFORNIA	460	435	14	9
COLORADO	133	120	4	3
CONNECTICUT	146	120	2	0
DELAWARE	25	18	1	1
DISTRICT OF COLUMBIA	27	20	1	0
FLORIDA	342	268	10	15
GEORGIA	162	133	4	4
HAWAII	40	19	2	2
IDAHO	127	81	4	5
ILLINOIS	229	158	17	8
INDIANA	154	147	6	3
IOWA	88	61	2	2
KANSAS	67	63	2	1
KENTUCKY	154	141	3	5
LOUISIANA	102	90	1	1
MAINE	126	95	0	3
MARYLAND	157	134	4	2
MASSACHUSETTS	203	164	14	7
MICHIGAN	236	209	6	13
MINNESOTA	112	97	2	3
MISSISSIPPI	127	98	1	2
MISSOURI	122	106	6	6
MONTANA	61	47	1	1
NEBRASKA	80	70	3	1
NEVADA	26	25	2	1
NEW HAMPSHIRE	39	31	1	3
NEW JERSEY	192	166	11	7
NEW MEXICO	39	32	0	4
NEW YORK	616	453	18	20
NORTH CAROLINA	165	105	6	5
NORTH DAKOTA	20	15	0	0
OHIO	274	275	8	12
OKLAHOMA	118	93	2	4
OREGON	106	69	3	2
PENNSYLVANIA	242	171	16	18
RHODE ISLAND	49	41	1	2
SOUTH CAROLINA	66	54	7	2
SOUTH DAKOTA	40	30	1	2
TENNESSEE	194	151	4	2
TEXAS	190	184	8	12
UTAH	77	91	1	0
VERMONT	47	44	1	6
VIRGINIA	182	158	4	3
WASHINGTON	94	120	4	5
WEST VIRGINIA	75	57	3	4
WISCONSIN	274	220	5	9
WYOMING	49	32	2	1
AMERICAN SAMOA	2	1	0	0
GUAM	0	0	2	0
PUERTO RICO	76	35	0	1
US VIRGIN ISLANDS	7	4	0	0
GRAND TOTAL	**7262**	**6001**	**227**	**236**

Table 14 looks at the facilities that provide trauma therapy at the facility. Table 14 shows states that report increase the number of facilities with this type of treatment, 13 states increased non-VA facilities and 23 states increased VA facilities. Kentucky, New Jersey, Ohio and Pennsylvania all showed an increase for both VA and non-VA facility types. Every U.S. state has at least one VA facility that provides trauma therapy as of 2017 except for North Dakota. There were a few states that had a significant decrease in non-VA facilities that provide trauma therapy and they are shown in table 14.

Table 14. Comparison of VA and non-VA type facilities that provide trauma therapy categorized by state/territory.

SUM OF TRAUMA THERAPY

	Non-VA		**VA**	
STATE/TERRITORY	**2014**	**2017**	**2014**	**2017**
ALABAMA	90	77	2	8
ALASKA	83	75	1	1
ARIZONA	242	249	3	3
ARKANSAS	181	165	6	4
CALIFORNIA	622	628	18	13
COLORADO	171	159	5	8
CONNECTICUT	196	171	2	1
DELAWARE	32	29	1	2
DISTRICT OF COLUMBIA	31	28	2	0
FLORIDA	368	308	19	21
GEORGIA	143	138	6	7
HAWAII	35	19	3	2
IDAHO	157	111	6	5
ILLINOIS	274	247	16	14
INDIANA	230	209	8	4
IOWA	123	99	3	2
KANSAS	84	71	2	1
KENTUCKY	159	172	5	9
LOUISIANA	76	84	3	1
MAINE	148	129	1	2
MARYLAND	194	168	3	2
MASSACHUSETTS	260	257	16	7
MICHIGAN	263	248	10	18
MINNESOTA	166	152	1	9
MISSISSIPPI	128	108	1	2
MISSOURI	146	152	9	7
MONTANA	80	69	1	1
NEBRASKA	92	103	3	1
NEVADA	36	38	2	1
NEW HAMPSHIRE	46	46	1	3
NEW JERSEY	164	180	4	5
NEW MEXICO	55	41	2	4
NEW YORK	762	623	22	20
NORTH CAROLINA	190	148	5	8
NORTH DAKOTA	27	28	0	0
OHIO	392	398	18	22
OKLAHOMA	128	115	3	4
OREGON	150	117	6	5
PENNSYLVANIA	395	396	25	26
RHODE ISLAND	42	35	1	2
SOUTH CAROLINA	75	72	8	5
SOUTH DAKOTA	47	41	2	4
TENNESSEE	231	205	7	3
TEXAS	187	184	9	14
UTAH	83	114	4	1
VERMONT	51	47	2	6
VIRGINIA	188	169	4	4
WASHINGTON	178	231	8	6
WEST VIRGINIA	93	85	4	4
WISCONSIN	369	336	10	15
WYOMING	50	37	2	1
AMERICAN SAMOA	1	0	0	0
GUAM	0	0	2	0
PUERTO RICO	49	27	0	1
US VIRGIN ISLANDS	9	4	0	0
GRAND TOTAL	**8772**	**8142**	**307**	**319**

Table 15 shows the number of facilities that offer activity therapy. There are 14 states don't have any VA facilities that provide activity therapy and there is only one territory without any non-VA facilities that provide activity therapy as of 2017. Twenty-one states reported that they had no change between 2014 and 2017 in the number of VA facilities with activity therapy and six states of those states have no VA facilities with activity therapy offered. There are 11 states which had an increase from 2014 to 2017 in non-VA facilities and 14 states had increases in VA facilities using activity therapy. New Hampshire and New Jersey were the only states to increase both VA and non-VA facilities with activity therapy shown in table 15. 18 states had a decrease in non-VA facilities that provide activity therapy that was 25 or greater.

Table 15. Comparison of VA and non-VA type facilities that provide activity therapy categorized by state/territory.

SUM OF ACTIVITY THERAPY				
	Non-VA		**VA**	
STATE/TERRITORY	**2014**	**2017**	**2014**	**2017**
ALABAMA	117	97	0	0
ALASKA	69	52	1	0
ARIZONA	184	174	2	2
ARKANSAS	138	91	3	2
CALIFORNIA	441	450	9	7
COLORADO	94	86	2	2
CONNECTICUT	91	88	0	1
DELAWARE	18	12	0	1
DISTRICT OF COLUMBIA	15	14	1	0
FLORIDA	283	225	6	5
GEORGIA	88	91	3	2
HAWAII	27	15	3	0
IDAHO	110	71	3	1
ILLINOIS	205	175	8	4
INDIANA	121	121	3	3
IOWA	72	53	1	1
KANSAS	64	54	2	1
KENTUCKY	75	79	1	1
LOUISIANA	84	85	1	1
MAINE	55	54	0	0
MARYLAND	116	106	0	1
MASSACHUSETTS	183	156	8	2
MICHIGAN	136	107	1	10
MINNESOTA	96	68	1	2
MISSISSIPPI	137	98	1	1
MISSOURI	124	96	2	2
MONTANA	49	42	1	0
NEBRASKA	47	43	1	1
NEVADA	18	22	2	0
NEW HAMPSHIRE	27	32	0	2
NEW JERSEY	142	150	1	5
NEW MEXICO	29	31	1	1
NEW YORK	493	366	13	7
NORTH CAROLINA	162	116	4	4
NORTH DAKOTA	18	14	0	0
OHIO	220	176	6	6
OKLAHOMA	87	69	0	2
OREGON	135	92	2	3
PENNSYLVANIA	301	251	9	4
RHODE ISLAND	36	27	0	1
SOUTH CAROLINA	61	45	2	2
SOUTH DAKOTA	28	24	1	3
TENNESSEE	146	107	3	2
TEXAS	158	153	5	8
UTAH	66	72	1	0
VERMONT	54	46	1	5
VIRGINIA	149	121	3	3
WASHINGTON	111	122	4	3
WEST VIRGINIA	45	38	3	3
WISCONSIN	148	118	2	5
WYOMING	36	23	1	0
AMERICAN SAMOA	0	1	0	0
GUAM	0	0	1	0
PUERTO RICO	67	31	0	0
US VIRGIN ISLANDS	7	4	0	0
GRAND TOTAL	**5983**	**5054**	**129**	**122**

Table 16 shows the states and territories that have facilities that provide electroconvulsive therapy (ECT). Since this type of therapy is considered a last resort type of therapy according to the N-MHSS survey, there are a very small number of facilities which still perform the treatment. None of the states had a notable increase in VA facilities that perform ETC but since the number of facilities that provide the therapy is so small, smaller changes are considered relevant, 15 states had an increase larger than 1 between the 4 years in non-VA facilities. A few

states had large increases in non-VA facilities with ECT, especially Arizona, which went from 0 to 9.

Table 16. Comparison of VA and non-VA type facilities that provide electroconvulsive therapy categorized by state/territory.

SUM OF ELECTROCONVULSIVE THERAPY				
	Non-VA		VA	
STATE/TERRITORY	2014	2017	2014	2017
ALABAMA	6	7	0	0
ALASKA	1	2	0	0
ARIZONA	0	9	1	1
ARKANSAS	0	3	1	2
CALIFORNIA	23	28	3	4
COLORADO	7	7	1	0
CONNECTICUT	9	7	0	0
DELAWARE	0	1	0	0
DISTRICT OF COLUMBIA	1	0	0	0
FLORIDA	28	28	2	2
GEORGIA	4	6	2	0
HAWAII	2	1	0	0
IDAHO	3	4	2	1
ILLINOIS	24	21	2	2
INDIANA	8	9	0	1
IOWA	11	9	1	1
KANSAS	6	3	0	0
KENTUCKY	7	9	0	1
LOUISIANA	2	5	0	0
MAINE	7	7	0	0
MARYLAND	4	5	1	0
MASSACHUSETTS	27	21	5	0
MICHIGAN	15	14	1	2
MINNESOTA	13	14	1	1
MISSISSIPPI	4	5	0	0
MISSOURI	13	13	1	2
MONTANA	2	1	0	0
NEBRASKA	9	7	1	0
NEVADA	1	1	0	0
NEW HAMPSHIRE	6	5	0	0
NEW JERSEY	13	16	0	0
NEW MEXICO	-1	4	0	1
NEW YORK	45	42	3	4
NORTH CAROLINA	12	15	0	2
NORTH DAKOTA	6	2	0	0
OHIO	12	24	1	1
OKLAHOMA	2	3	0	1
OREGON	1	1	0	0
PENNSYLVANIA	28	25	1	1
RHODE ISLAND	2	4	0	1
SOUTH CAROLINA	5	5	1	0
SOUTH DAKOTA	1	2	0	0
TENNESSEE	8	11	3	1
TEXAS	15	20	2	3
UTAH	5	5	1	0
VERMONT	3	3	1	1
VIRGINIA	11	17	1	2
WASHINGTON	1	5	1	1
WEST VIRGINIA	6	6	1	1
WISCONSIN	15	14	1	1
WYOMING	3	1	0	0
AMERICAN SAMOA	0	0	0	0
GUAM	0	0	0	0
PUERTO RICO	4	4	0	0
US VIRGIN ISLANDS	1	0	0	0
GRAND TOTAL	**441**	**481**	**41**	**41**

Table 17 looks at the facilities that provide telemedicine therapy. Telemedicine is a new way for patients to get care without having to travel to get treatment, which is one of the reasons it is a fast-growing type of therapy. As shown in Table 17, 41 states had an increase in non-VA facilities that provide telemedicine while 25 states had an increase in VA facilities. Out of all 12

treatment types, telemedicine has the largest number of states that indicate an increase in both VA and non-VA facilities offering the therapy.

Table 17. Comparison of VA and non-VA type facilities that provide telemedicine therapy categorized by state/territory.

SUM OF TELEMEDICINE THERAPY				
	Non-VA		**VA**	
STATE/TERRITORY	**2014**	**2017**	**2014**	**2017**
ALABAMA	59	69	3	5
ALASKA	50	42	0	1
ARIZONA	116	150	8	4
ARKANSAS	94	123	6	5
CALIFORNIA	125	189	13	13
COLORADO	87	81	4	8
CONNECTICUT	6	8	1	1
DELAWARE	2	17	1	2
DISTRICT OF COLUMBIA	2	7	2	0
FLORIDA	56	82	16	17
GEORGIA	83	100	5	5
HAWAII	14	11	3	2
IDAHO	29	25	6	5
ILLINOIS	50	82	18	21
INDIANA	57	85	8	4
IOWA	59	51	5	6
KANSAS	50	51	2	1
KENTUCKY	73	87	5	9
LOUISIANA	33	38	3	2
MAINE	30	30	0	4
MARYLAND	27	45	4	2
MASSACHUSETTS	12	25	10	5
MICHIGAN	49	94	9	18
MINNESOTA	46	61	2	11
MISSISSIPPI	25	38	1	2
MISSOURI	70	77	9	5
MONTANA	38	35	1	1
NEBRASKA	31	55	4	1
NEVADA	17	19	3	1
NEW HAMPSHIRE	11	17	1	3
NEW JERSEY	24	20	11	13
NEW MEXICO	30	28	2	4
NEW YORK	28	57	24	20
NORTH CAROLINA	64	63	6	8
NORTH DAKOTA	19	19	0	0
OHIO	89	128	18	22
OKLAHOMA	60	64	3	4
OREGON	31	44	6	5
PENNSYLVANIA	69	84	24	26
RHODE ISLAND	1	3	0	1
SOUTH CAROLINA	29	48	8	4
SOUTH DAKOTA	15	19	2	4
TENNESSEE	89	107	7	4
TEXAS	133	181	9	14
UTAH	32	38	3	2
VERMONT	11	10	2	6
VIRGINIA	56	112	3	5
WASHINGTON	12	84	6	6
WEST VIRGINIA	43	46	5	4
WISCONSIN	62	75	11	14
WYOMING	25	27	2	1
AMERICAN SAMOA	1	0	0	0
GUAM	0	0	1	0
PUERTO RICO	0	2	0	0
US VIRGIN ISLANDS	2	3	0	0
GRAND TOTAL	**2312**	**3056**	**306**	**331**

Table 18 looks at the facilities that have psychotropic medication treatment available at the facility. Overall, there are 33 states that have an increase between 2014 and 2017. Out of the 33 states, 24 of those states had an increase in VA facilities and 9 are states with an increase in non-VA facilities. None of the states have an increase in both VA and non-VA facilities. This

shows that there are a large number of states that are increasing the use of psychotropic medication treatment, regardless of the facility type. There are 13 states that are decreasing both VA and non-VA facilities that use psychotropic medication. New York has the largest decrease in non-VA facilities that provide the therapy with a decrease of 190 facilities, followed by Illinois with a decrease of 83 facilities and Florida with a decrease of 66 facilities from 2014 to 2017.

Table 18. Comparison of VA and non-VA type facilities that provide psychotropic medication treatment categorized by state/territory.

SUM OF PSYCHOTROPIC MEDICATION

	Non-VA		**VA**	
STATE/TERRITORY	**2014**	**2017**	**2014**	**2017**
ALABAMA	169	155	3	8
ALASKA	67	57	1	1
ARIZONA	266	278	8	4
ARKANSAS	237	202	7	5
CALIFORNIA	697	706	18	12
COLORADO	179	153	5	8
CONNECTICUT	213	197	1	1
DELAWARE	42	27	1	2
DISTRICT OF COLUMBIA	33	28	2	0
FLORIDA	419	353	21	23
GEORGIA	182	174	6	6
HAWAII	46	31	4	2
IDAHO	106	77	6	5
ILLINOIS	368	285	19	20
INDIANA	241	236	8	4
IOWA	136	103	5	5
KANSAS	104	99	2	1
KENTUCKY	183	178	5	8
LOUISIANA	152	157	3	2
MAINE	98	83	1	3
MARYLAND	254	218	4	2
MASSACHUSETTS	296	264	16	7
MICHIGAN	292	274	11	18
MINNESOTA	171	155	1	11
MISSISSIPPI	155	140	1	2
MISSOURI	182	143	9	7
MONTANA	76	57	1	1
NEBRASKA	77	76	3	1
NEVADA	34	38	3	1
NEW HAMPSHIRE	60	51	1	3
NEW JERSEY	281	259	11	13
NEW MEXICO	55	46	2	4
NEW YORK	961	771	26	20
NORTH CAROLINA	242	177	6	8
NORTH DAKOTA	27	30	0	0
OHIO	435	398	18	22
OKLAHOMA	122	107	3	4
OREGON	157	127	6	6
PENNSYLVANIA	496	469	25	26
RHODE ISLAND	62	51	1	2
SOUTH CAROLINA	111	101	7	5
SOUTH DAKOTA	36	31	2	4
TENNESSEE	235	225	7	4
TEXAS	302	298	9	14
UTAH	83	101	3	2
VERMONT	66	53	2	6
VIRGINIA	220	213	4	5
WASHINGTON	187	243	7	6
WEST VIRGINIA	84	85	5	4
WISCONSIN	250	236	11	16
WYOMING	44	34	2	1
AMERICAN SAMOA	1	1	0	0
GUAM	0	1	2	0
PUERTO RICO	78	47	0	1
US VIRGIN ISLANDS	8	3	0	0
GRAND TOTAL	**10078**	**9102**	**335**	**346**

Veteran Populations by Location

Another way to look at access to care for veterans is to calculate the number of facilities in light of the population of veterans those facilities are serving. Table 19 shows the ratio of the veteran population in the states or territories over the number of VA facilities in the state or territory. Table 19 shows that the states with the largest ratio of veterans to VA facility is Nevada with the highest ratio of 218,406 veterans for one mental health VA facility, then Maryland is 194,820 veterans per VA mental health facility and Kansas is 194,186 veterans per VA mental health facility. The state with the smallest ratio is Vermont with 7,189 veterans for each mental health VA facility, the next would be Guam with 10,026 veterans per VA facility.

Table 19. Ratio of veteran population over the number of VA facilities in the state/territory.

STATE/ TERRITORY	2017	VETERANS	RATIO
ALABAMA	8	369,962	46,245
ALASKA	1	68,719	68,719
ARIZONA	4	507,706	126,927
ARKANSAS	6	222,286	37,048
CALIFORNIA	13	1,681,730	129,364
COLORADO	8	403,327	50,416
CONNECTICUT	1	184,302	184,302
DELAWARE	2	71,845	35,923
DISTRICT OF COLUMBIA	0	27,875	N/A
FLORIDA	23	1,525,400	66,322
GEORGIA	7	697,127	99,590
HAWAII	2	112,304	56,152
IDAHO	5	122,067	24,413
ILLINOIS	21	628,254	29,917
INDIANA	4	409,836	102,459
IOWA	7	206,430	29,490
KANSAS	1	194,186	194,186
KENTUCKY	9	295,390	32,821
LOUISIANA	2	284,074	142,037
MAINE	4	114,020	28,505
MARYLAND	2	389,640	194,820
MASSACHUSETTS	7	323,253	46,179
MICHIGAN	18	589,326	32,740
MINNESOTA	11	327,629	29,784
MISSISSIPPI	2	191,411	95,705
MISSOURI	7	442,579	63,226
MONTANA	1	91,336	91,336
NEBRASKA	1	130,126	130,126
NEVADA	1	218,406	218,406
NEW HAMPSHIRE	3	105,390	35,130
NEW JERSEY	13	355,766	27,367
NEW MEXICO	4	158,994	39,748
NEW YORK	20	776,522	38,826
NORTH CAROLINA	8	730,357	91,295
NORTH DAKOTA	0	51,677	N/A
OHIO	24	774,935	32,289
OKLAHOMA	4	303,205	75,801
OREGON	6	303,689	50,615
PENNSYLVANIA	26	819,185	31,507
RHODE ISLAND	2	63,250	31,625
SOUTH CAROLINA	5	402,596	80,519
SOUTH DAKOTA	4	65,335	16,334
TENNESSEE	4	470,390	117,597
TEXAS	14	1,584,844	113,203
UTAH	2	134,313	67,156
VERMONT	6	43,191	7,198
VIRGINIA	5	725,028	145,006
WASHINGTON	6	560,200	93,367
WEST VIRGINIA	4	142,694	35,674
WISCONSIN	17	363,898	21,406
WYOMING	1	47,220	47,220
AMERICAN SAMOA	0	-	-
GUAM	0	10,026	N/A
PUERTO RICO	1	79,322	79,322
US VIRGIN ISLANDS	0	-	-
GRAND TOTAL	357	19,902,577	55,750

Table 20 shows the ratio of the veteran population in the states or territories over the number of non-VA facilities in the state or territory. All of the states and territories have a veteran to non-VA mental health facilities ratio below 5,000 except for Guam which has a ratio of 10,026. To compare table 19 to table 20, all states and territories in table 19 have a ratio that is larger than 10,000 except for Vermont which has a ratio of 7,198 veterans to VA mental health facilities. The largest ratio is in the territory of Guam, Nevada has the next largest ratio which is 4,853 veterans to non-VA facilities, and Texas with a ratio of 4,847 veterans to non-VA

facilities. The smallest ratio is in Maine with a ratio of 626 veterans per non-VA mental health facility and the next lowest ratio is in Vermont with 635 veterans per facility.

Table 20. Ratio of veteran population over the number of non-VA facilities in the state/territory.

STATE/ TERRITORY	2017	VETERANS	RATIO
ALABAMA	167	369,962	2,215
ALASKA	85	68,719	808
ARIZONA	368	507,706	1,380
ARKANSAS	212	222,286	1,049
CALIFORNIA	853	1,681,730	1,972
COLORADO	177	403,327	2,279
CONNECTICUT	215	184,302	857
DELAWARE	31	71,845	2,318
DISTRICT OF COLUMBIA	37	27,875	753
FLORIDA	446	1,525,400	3,420
GEORGIA	193	697,127	3,612
HAWAII	33	112,304	3,403
IDAHO	141	122,067	866
ILLINOIS	368	628,254	1,707
INDIANA	271	409,836	1,512
IOWA	143	206,430	1,444
KANSAS	122	194,186	1,592
KENTUCKY	199	295,390	1,484
LOUISIANA	174	284,074	1,633
MAINE	182	114,020	626
MARYLAND	262	389,640	1,487
MASSACHUSETTS	308	323,253	1,050
MICHIGAN	319	589,326	1,847
MINNESOTA	213	327,629	1,538
MISSISSIPPI	171	191,411	1,119
MISSOURI	205	442,579	2,159
MONTANA	86	91,336	1,062
NEBRASKA	132	130,126	986
NEVADA	45	218,406	4,853
NEW HAMPSHIRE	60	105,390	1,757
NEW JERSEY	293	355,766	1,214
NEW MEXICO	54	158,994	2,944
NEW YORK	823	776,522	944
NORTH CAROLINA	249	730,357	2,933
NORTH DAKOTA	32	51,677	1,615
OHIO	527	774,935	1,470
OKLAHOMA	139	303,205	2,181
OREGON	150	303,689	2,025
PENNSYLVANIA	545	819,185	1,503
RHODE ISLAND	54	63,250	1,171
SOUTH CAROLINA	104	402,596	3,871
SOUTH DAKOTA	47	65,335	1,390
TENNESSEE	270	470,390	1,742
TEXAS	327	1,584,844	4,847
UTAH	136	134,313	988
VERMONT	68	43,191	635
VIRGINIA	260	725,028	2,789
WASHINGTON	311	560,200	1,801
WEST VIRGINIA	110	142,694	1,297
WISCONSIN	403	363,898	903
WYOMING	41	47,220	1,152
AMERICAN SAMOA	1	-	-
GUAM	1	10,026	10,026
PUERTO RICO	58	79,322	1,368
US VIRGIN ISLANDS	4	-	-
GRAND TOTAL	11,225	19,902,577	1,773

Table 21 shows the ratio of the veteran population in the states or territories over the number of veteran specific programs in non-VA facilities in the state or territory. Out of the 4 territories, Puerto Rico is the only one with veteran specific programs at the non-VA facilities and has a ratio of 8,814 veterans for each non-VA facility with veteran specific programs. The state with the smallest ratio is Idaho with a ratio of 4,521 veterans per non-VA facility with

veteran specific programs. The state with the largest ratio is South Dakota with a ratio of 65,335; Nevada also only has one non-VA facility with veteran specific programs in the entire state. This also shows the range of the ratios between states, from the lowest being 4,521 and the largest being 65,335.

Table 21. Ratio of veteran population over the number of veteran specific programs in non-VA facilities in the state/territory.

STATE/TERRITORY	2017	VETERANS	RATIO
ALABAMA	21	369,962	17,617
ALASKA	12	68,719	5,727
ARIZONA	37	507,706	13,722
ARKANSAS	6	222,286	37,048
CALIFORNIA	66	1,681,730	25,481
COLORADO	21	403,327	19,206
CONNECTICUT	23	184,302	8,013
DELAWARE	7	71,845	10,264
DISTRICT OF COLUMBIA	3	27,875	9,292
FLORIDA	62	1,525,400	24,603
GEORGIA	46	697,127	15,155
HAWAII	7	112,304	16,043
IDAHO	27	122,067	4,521
ILLINOIS	30	628,254	20,942
INDIANA	32	409,836	12,807
IOWA	8	206,430	25,804
KANSAS	11	194,186	17,653
KENTUCKY	26	295,390	11,361
LOUISIANA	26	284,074	10,926
MAINE	13	114,020	8,771
MARYLAND	35	389,640	11,133
MASSACHUSETTS	25	323,253	12,930
MICHIGAN	30	589,326	19,644
MINNESOTA	19	327,629	17,244
MISSISSIPPI	21	191,411	9,115
MISSOURI	16	442,579	27,661
MONTANA	12	91,336	7,611
NEBRASKA	19	130,126	6,849
NEVADA	4	218,406	54,601
NEW HAMPSHIRE	11	105,390	9,581
NEW JERSEY	35	355,766	10,165
NEW MEXICO	8	158,994	19,874
NEW YORK	63	776,522	12,326
NORTH CAROLINA	26	730,357	28,091
NORTH DAKOTA	1	51,677	51,677
OHIO	45	774,935	17,221
OKLAHOMA	25	303,205	12,128
OREGON	15	303,689	20,246
PENNSYLVANIA	42	819,185	19,504
RHODE ISLAND	6	63,250	10,542
SOUTH CAROLINA	10	402,596	40,260
SOUTH DAKOTA	1	65,335	65,335
TENNESSEE	28	470,390	16,800
TEXAS	88	1,584,844	18,010
UTAH	8	134,313	16,789
VERMONT	3	43,191	14,397
VIRGINIA	37	725,028	19,595
WASHINGTON	22	560,200	25,464
WEST VIRGINIA	8	142,694	17,837
WISCONSIN	37	363,898	9,835
WYOMING	6	47,220	7,870
AMERICAN SAMOA	0	-	-
GUAM	0	10,026	N/A
PUERTO RICO	9	79,322	8,814
US VIRGIN ISLANDS	0	-	-
GRAND TOTAL	1199	19,902,577	16,599

Discussion and Conclusions

Summary of Results

One of the research questions was if treatment offerings have changed since 2013 when the Opioid Safety Initiative was established. Despite the importance of alternative therapies for veterans and the policies enacted to encourage these alternatives, there was not an increase in the percent of VA facilities offering treatments available nationwide in the four years after Opioid Safety Initiative was established. The only treatment type that showed a significant increase was telemedicine therapy; other treatments showed either a decrease or minimal increase over the 4 years. The therapy types that had a decrease from 2014 to 2017 were electroconvulsive, activity, dialectical behavior, couples/family, and cognitive/behavior therapy.

When looking at the difference in treatment availability in VA versus non-VA facilities nationwide, three therapy types had a higher percent of non-VA facilities offering the therapy compared to VA, those types are dialectical behavior therapy, behavior modification and activity therapy. We also found that a significantly larger percent of VA facilities offers telemedicine therapy options compared to non-VA facilities.

Within the four-year period, there are was no large change in the availability of treatments at the state level. The only state that showed an increase in non-VA facilities that provide every treatment type between 2014 and 2017 was Washington. Texas, Rhode Island, Oklahoma, and Michigan were the only states to have an increase in VA facilities that provide every treatment type between 2014 and 2017. Some states would have an increase in a few treatment types but a decrease in others, so no trends were found other than these few with an increase in every treatment type.

Within the N-MHSS data on non-VA facilities, between the years of 2014 and 2017, the percent of facilities with the veteran programs fluctuates. After 2016, there is a slight increase in the percent of non-VA facilities with those treatment programs for veterans, ideally meaning that more non-VA facilities are starting to have more veteran specific programs. However, no more than 16% of non-VA facilities with any of the treatment types have veteran specific programs. When comparing the N-SSATS and N-MHSS surveys, there is a higher overall percent of substance abuse treatment facilities that have veteran specific programs compared to non-VA mental health treatment facilities.

For those non-VA programs that offer veteran specific programs, are 4 treatment types that show a higher percent as compared to the overall population of non-VA facilities: behavior modification, IDDT, trauma therapy and telemedicine therapy. This shows that there is a higher likelihood of finding any of those 4 treatment types at a non-VA facility that offers a veteran specific program.

From 2014 to 2017, telemedicine therapy has the largest increase in VA facilities that provide the treatment compared to all treatment types. Telemedicine also has the largest difference in the percent of VA versus non-VA facilities that provide the treatment. However, compared to the other 11 treatments, it has the highest number of states indicating an increase in both VA and non-VA facilities with telemedicine.

The veteran population varies throughout the United States, so comparing the ratio of veterans to mental health facilities varies as well. Non-VA mental health facilities had an overall smaller ratio of veterans to non-VA facilities compared to the ratio of veterans to VA mental health facilitates. The highest ratio of veterans to VA facilities was Nevada with 218,406 and the smallest was Vermont with a ratio of 7,189. The highest ratio of veterans to non-VA facilities

was Guam with 10,026 and the smallest was Maine with a ratio of 626 veterans to non-VA facilities. South Dakota has the highest ratio of veterans to non-VA facilities with veteran specific programs.

Limitations

There are a number of limitations to this study. First, the survey data doesn't tell us the extent to which the facilities are treating veterans with different treatments. Because of this, there is no way to know how many veterans are being treated, what treatments are being used, or for what conditions they are being treated.

There is also a limitation with the data because of the years that are available. For consistency, I used data from 2014 to 2017. The OSI program was established in 2013, the four years are able to show a trend over the years after. Since it does not include 2018 or 2019, the current information on facilities is not available to analyze.

Another limitation with the data is that the data is not coming from the Department of Veteran Affairs; it is being extracted from two national surveys. That limits the amount of information that can be extracted about the veteran population. Data directly from the VA could show more about development of current and new treatments in facilities. An important aspect of being treated for an illness is how successful certain treatments are and this data does not address that.

Another limitation from the data is that the person filling out the survey on behalf of the facility may not fully understand some of the definition of treatments or facility types. With more than 12 types of treatments available for mental health, there could be misunderstandings about what categories the treatments they offer fall into. There also may be confusion about the type of facility the facility identifies as, depending on who may be filling out the survey. This

could cause the data to not be totally accurate for a facility. Information about the type of insurance that the facilities accept was not used, for example, because some of the VA facilities claimed to not accept TRICARE insurance even though all VA facilities accept the military insurance. Because of this, the TRICARE insurance data was not used for the data analysis.

Discussion

Availability of Treatments

Veteran populations impact the number of patients that VA facilities are seeing, however the veterans could have more than just VA-affiliated places to go for help. It is important for the surrounding communities to be aware of veterans as well. States with large veteran communities can aide veterans by giving them a sense of acceptance and comradery within the community. These programs can be unaffiliated with the VA but also provide veterans with a place they can go for help and have the potential to be just as effective. Washington state showed an increase in every treatment type in non-VA facilities and it also has the 11th highest veteran population in the nation however, there was a decrease in the number of veteran specific programs reported in the state. That means while there are more mental health resources becoming available, there is not a large specialty for veterans in the state, regardless of the number of veterans located there.

The treatments available in both areas of VA and non-VA can be similar when treating all types of mental health illnesses, regardless of whether a veteran is being treated or not. There are many therapies that have proven to work for mental illnesses like PTSD and depression and for substance abuse issues like with drugs and/or alcohol, but there is a never-ending need to expand the treatments used and new and improved treatment types. Acceptance of alternative treatments has become more popular in recent years. This popularity started as a result of the opioid epidemic facing the United States. More physicians and healthcare professionals are

looking to find new treatments that avoids prescribing opioids and looking at new treatment types. These treatments are those that would be found under the 'Activity Therapy' in the N-MHSS surveys. The treatments can be art therapy, music therapy, and many other treatments. For this thesis, activity therapy is one of the most important treatment types out of the 12 listed because it encompasses alternative treatment types like yoga, ju-jitsu and others.

Expanding treatment options is an area that should be focused on in both VA and non-VA facilities. Expanding these treatments is something that can be beneficial for veterans and civilians. While the groups that are treated and cared for are different, the underlying need of those treatments and services is the same for both groups and can be improved for both groups in the future. The increase in availability of telemedicine between 2014 and 2017 allows for any patient to be talked to by a doctor without having to physically be at an appointment. Telemedicine makes being treated more efficient for the patient and the doctor and hopefully can improve wait times patients face trying to be seen for treatment.

Meeting Veteran Specific Needs

With services that are provided for mental health and substance abuse within the veteran community, healthcare providers aim to provide the best services they can. For that to be possible, it's important to understand how treating a veteran can sometimes be different from treating a civilian. Because of the way that a veteran is trained, they find it much more difficult admitting that they have a problem or are in pain, and even when they do make that first step, they find it difficult to accept the help they are offered. As Kinga from the Rochester VOC states, there is a sort of comradery that veterans have with each other that cannot be found anywhere else (Kindor-Hine, 2019). It is this comradery that helps to open the doors to help that veterans need and can be found in the veteran specific treatment programs and groups that most

of the VA facilities and some of the non-VA facilities provide. That is why is it important for these veteran specific programs to develop and become more popular at non-VA facilities. These programs can give veterans a place to go for treatment and feel accepted and part of a group with other veterans going through the same issues, but those programs should be equally available regardless of treating mental health or substance abuse.

From an article in the New York Times, an Iraq War veteran named Danny O'Neel gave his opinion on the trauma endured in war and the suicide rates of veterans (O'Neel, 2019). O'Neel is a speaker for the Independence Fund who talks about PTSD, suicide prevention and mental health. In his article he talks about the struggle that many veterans face when acknowledging that they need help, "Many vets feel ashamed that they're suffering and work to hide their pain, even from their closest friends and family. When a universally respected officer takes his life, the despair trickles down the chain of command" (O'Neel, 2019). Not only is it important to fix the fact that veterans are choosing suicide, it is important that the root causes of those suicides are being addressed as early as possible with resources available to them.

O'Neel brings up the fact that those root causes of mental illness can start in the battlefield, but the treatment that is made available directly after being deployed is just as important (O'Neel, 2019). He states, "Therapists are badly outnumbered, and vets are hurried through their offices." Situations like these showcase that the often-used treatment of working with a therapist, may not be the best choice for a veteran who needs care. Those veterans who aren't getting the time they need or can't get in to be seen are the ones who would benefit from more treatment options being available and from the increasing availability of telemedicine.

An Air Force veteran named Dr. Paul Little has worked for in the field of addiction treatment and also suffered from addiction himself. In an article by the New York Post, Dr.

Little speaks out about how his experience has helped him to better treat the veterans he sees and provides his own opinion about the veterans who needs help, “So many veterans who are dealing with addiction think that they’re alone in their struggle, but that couldn’t be further from the truth” (Miles, 2019). Comradery between veterans can be the one thing that allows a veteran to get the help that they desire, knowing that they are not alone.

“The reality is that many Americans are facing the same demons. For military veterans, however, there’s a sense that addiction equals weakness, failure or a lack of morals and for years it’s been ‘treated’ with punishment,” said Dr. Little, when speaking about his goal to help veterans who experience what he experienced himself (Miles, 2019). He also spoke out about how not all veterans are going to VA clinics, “Many VA clinics offer their own substance use treatment programs and others refer patients to civilian treatment programs to make sure that our veterans get the care, compassion and recovery services they need to be productive members of civilian society.” Dr. Little, talks about how veterans not only need to feel like they are not alone, but also how both veterans and civilians can face the same issues. There is so much importance in finding solutions that can be applied to all facilities that help with mental health and substance abuse.

There are areas of improvement that need to be considered for the veterans themselves such as distance to travel for appointments, the sense of community and acceptance they feel when they do get their treatment and admitting that they need help in the first place. For many veterans they are trained to say that they are fine when they really are not, and so admitting that they need medical help is a difficult step to take. Once the veteran can admit that they need help, they need to feel like they are accepted by the people around them as well as feel like they have the comradery that many of them rely on.

Implication for Research

With the data available to the public, there aren't many ways for researching the benefits of alternative treatments let alone treating veterans with them. The research done before helps us to understand the importance of one type of treatment, but there has yet to be a comprehensive study about the treatment options that veterans could use. Prescribing opioids has proven to be both beneficial and harmful but if they were more beneficial than harmful, we wouldn't have the opioid crisis today.

Veterans who are at a higher risk for opioid abuse or require treatment for substance abuse need to have better resources to treat their illnesses. Not only is treatment availability an issue, but accessibility of those treatments is important as well. There is a large issue in the wait times at VA locations and the related mortality rates (Prentice, 2007). New research could include finding the relationship between the mental health and substance abuse treatment wait times and the change there could be with more treatment options that may include seeing veterans in groups or the effects of a larger variety of treatment types. By increasing the types of programs that are available to veterans, this has the potential to provide more diverse treatment options as an alternative to being prescribed opioids.

There also a need for research that looks at preventative measures and support groups for veterans that may prevent them from needing medical treatment to begin with. Having the sense of acceptance and community for veterans has been shown to be important. By having a safe place to go, veterans may be more likely to ask for help and feel more comfortable with the process of being diagnosed and treated.

Implications for Policy

Policy for the Department of Veteran Affairs can be complex. The VA has already been working on the Opioid Safety Initiative as a way to make sure that opioids are being used appropriately and safely. Evaluating more than the four years after the OSI was established may be able to show more development in the area of treatment availability. There are veterans who fight daily against their opioid addiction that may have been a result of opioid prescriptions given before the OSI began. Based on the data about substance abuse treatment services nationwide, there has not been a large increase in the veteran specific treatment programs in non-VA facilities. By increasing funding or importance of these programs, there is potential for better outcomes for veterans in substance abuse treatment programs.

Another area that needs to be addressed is the policy regarding veteran insurance and where it is accepted. For many veterans, they are able to get the care they need from the VA, however for other reasons such as travel distance and wait times, veterans are forced to find healthcare services at non-VA facilities. By expanding acceptance of TRICARE insurance at non-VA facilities, can reduce the wait times veterans have for appointments and also allow for easier access to treatment for veterans. This is an issue that faces both the VA and non-VA facilities for both to allow the insurance to be used at a larger variety of locations. Veterans should be able to receive the same care at both VA and non-VA facilities.

Another area for improvement is improving the quality of care and availability of care for veterans. There are many side effects to someone not being treated for an illness and for veterans this includes the likeliness of veteran suicides. By improving the standards of care, decreasing the wait time for treatment and making sure that the treatments available are what veterans need, the number of veteran suicides can likely be reduced.

Conclusions

This thesis has looked at the changes in treatment option availability for veterans. For many veterans, they have served their country and expect to be cared for after that service is complete. The different combat and military service-related situations that soldiers go through can cause many different medical needs as a result and having access to care is an important aspect that both our government and healthcare facilities need to keep in mind. Treatments and other services for veterans that not only help them to overcome their illness or cope with their injuries, but also provide the support that they and their families require, are essential to a veteran's life after their service.

There are treatments that have been established for both mental health and substance abuse that are proven to work. However, with new technology and new research, there are more therapy options available. Many healthcare providers may be skeptical for their effectiveness or may not want to stray from those well-known and often used treatments used today, but they also are seeing the side effects that have risen from opioid treatments. The use of opioids as a treatment for chronic pain was an ideal treatment that allowed for the patient to alleviate their pain in an effective way, but the opioid epidemic emerged from this type of treatment. By starting to use alternative treatments for that pain, there is potential for less risks for the patient.

While some forms of alternative treatment have become more popular, others are not used as much. Telemedicine has shown to be a highly developed form of treatment in both VA and non-VA facilities from 2014 to 2017. This form of treatment is a great way for veterans to get treatment without having to go to the physical location. However, it does not provide the veteran with the community that is important for their care. For VA facilities, there seems to be an overall increase in facilities using integrated dual disorders treatment, a positive for many

veterans who have both mental and substance abuse issues and can be treated at VA facilities. However, for veterans looking for that treatment in non-VA facilities, there was only 4 states with an increase in non-VA facilities that provide IDDT between 2014 and 2017.

The VA is an organization that was created for veterans specifically, so a veteran knows that getting treatment at a VA facility will be effective for symptoms and issues that veterans deal will. However, given the limited number of VA facilities, it is important that veterans can also use non-VA facilities, such as medical centers and outpatient facilities. We found that the treatments available for mental health in VA facilities are not as extensive as compared to non-VA facilities that also provide mental health treatment. Activity therapy is a treatment type that includes alternative treatment options like yoga and ju-jitsu and 21 states reported no change in the number of VA facilities that provide activity therapy, with 6 of those states having no activity therapy offered in the state as of 2017.

Veterans often cannot get the help that they need for multiple reasons that relate to access to care, acceptance by the people around them and quality of care. For veterans who are injured during their time in the military, it would be expected that they would get VA benefits once they leave the military, this however is not always the case. This often leaves veterans without healthcare and are forced to either find their own private health insurance or live without any health insurance at all. For those who get their own private insurance, finding a facility that provides a sense of community for veterans and makes them feel welcome is important. For non-VA facilities to provide programs and groups that are designed specifically for veterans show veterans that their needs are important to them.

Not only is having insurance important for a veteran but feeling like they can ask for help or admit that they need help also plays a large role. People in the military are trained to fight

through pain, physical or mental, and because of this they often have trouble admitting that they need help. By creating a sense of community and increasing the comradery that veterans feel when they are together, this has potential to help veterans get help that they need. The care that the veterans are receiving when they do get help needs to be the best care that they can be given. If VA facilities are trying to rush in and rush out patients so that they can see as many as possible, is the care going to be good quality care? Increasing the healthcare providers that can work with veterans in the VA and outside of the VA means that veterans can get treatment easier and that treatment will be of higher quality.

Treatment for mental health and substance abuse is not an issue that only veterans face. It is a global issue for millions of people, which means that there are millions of people who need treatment, and not all of them have the same illness or to the same degree. There is always a positive to having treatments that can improve different symptoms for a patient and allowing for a combination of treatments to help cope with an illness. The availability, accessibility, and variety of those treatments could be the key to helping people everywhere, both military and civilian, with mental health and substance abuse.

References

Alvarez, L. (2008, July 08). Home from the war, many veterans battle substance abuse. Retrieved from https://www.nytimes.com/2008/07/08/world/americas/08iht-vets.1.14322423.html

Bormann, J. E., Thorp, S., Wetherell, J. L., & Golshan, S. (2008). A spiritually based group intervention for combat veterans with posttraumatic stress disorder: feasibility study. Journal of holistic nursing : official journal of the American Holistic Nurses' Association, 26(2), 109-16.

Bryant, R. A., & Friedman, M. (2001). Medication and non-medication treatments of post-traumatic stress disorder. Current Opinion in Psychiatry, 14(2), 119-123. doi:10.1097/00001504-200103000-00004

Campbell, M., Decker, K. P., Kruk, K., & Deaver, S. P. (2016). Art Therapy and Cognitive Processing Therapy for Combat-Related PTSD: A Randomized Controlled Trial. Art therapy : journal of the American Art Therapy Association, 33(4), 169-177.

Collie, Kate & Backos, Amy & Malchiodi, Cathy & Spiegel, David. (2006). Art Therapy for Combat-Related PTSD: Recommendations for Research and Practice. Art Therapy. 23. 157-164. 10.1080/07421656.2006.10129335.

Cukor, J., Spitalnick, J., Difede, J., Rizzo, A., & Rothbaum, B. O. (2009). Emerging treatments for PTSD. Clinical Psychology Review, 29(8), 715-726. doi:10.1016/j.cpr.2009.09.001

Daigh, J. D., Jr. (2018). Review of Pain Management Services in Veterans Health Administration Facilities(pp. 1-80, Rep. No. 16-00538-282). Office of Inspector General.

Davidson, J. (2017, August 07). Veterans' health-care gap creates 'greater risk' for opioid abuse. Retrieved from https://www.washingtonpost.com/news/powerpost/wp/2017/08/07/veterans-health-care-gap-creates-greater-risk-for-opioid-abuse/?noredirect=on&utm_term=.03fd1023c5f9

Jeffery, D.D, May, L., Luckey, B., Balison, B.M., Klette, K.L.; Use and Abuse of Prescribed Opioids, Central Nervous System Depressants, and Stimulants Among U.S. Active Duty Military Personnel in FY 2010, Military Medicine, Volume 179, Issue 10, 1 October 2014, Pages 1141–1148

Dworsky, M., Farmer, C. M., & Shen, M. (2018). Veterans' Health Insurance Coverage Under the Affordable Care Act and Implications of Repeal for the Department of Veterans Affairs. Rand health quarterly, 7(3), 5.

Edlund, M. J., Austen, M. A., Sullivan, M. D., Martin, B. C., Williams, J. S., Fortney, J. C., & Hudson, T. J. (2014). Patterns of opioid use for chronic noncancer pain in the Veterans Health Administration from 2009 to 2011. Pain, 155(11), 2337-43.

Federman, D. G., Poulin, L. M., Ruser, C. B., & Kravetz, J. D. (2017). Implementation of shared medical appointments to offer battlefield acupuncture efficiently to veterans with pain. Acupuncture in Medicine, 36(2), 124-126. doi:10.1136/acupmed-2016-011315

Gellad, W. F., Good, C. B., & Shulkin, D. J. (2017). Addressing the Opioid Epidemic in the United States. JAMA Internal Medicine, 177(5), 611. doi:10.1001/jamainternmed.2017.0147

Golub, A., Vazan, P., Bennett, A. S., & Liberty, H. J. (2013). Unmet need for treatment of substance use disorders and serious psychological distress among veterans: a nationwide analysis using the NSDUH. Military medicine, 178(1), 107–114. doi:10.7205/milmed-d-12-00131

Gros, D. F., Yoder, M., Tuerk, P. W., Lozano, B. E., & Acierno, R. (2011). Exposure Therapy for PTSD Delivered to Veterans via Telehealth: Predictors of Treatment Completion and Outcome and Comparison to Treatment Delivered in Person. Behavior Therapy,42(2), 276-283. doi:10.1016/j.beth.2010.07.005

Hoge CW, Auchterlonie JL, Milliken CS. Mental Health Problems, Use of Mental Health Services, and Attrition From Military Service After Returning From Deployment to Iraq or Afghanistan. JAMA.2006;295(9):1023–1032.

Jakupcak, M. , Wagner, A. , Paulson, A. , Varra, A. and McFall, M. (2010, July 07), Behavioral activation as a primary care-based treatment for PTSD and depression among returning veterans. J. Traum. Stress, 23: 491-495. doi:10.1002/jts.20543

Jones, M. R., Viswanath, O., Peck, J., Kaye, A. D., Gill, J. S., & Simopoulos, T. T. (2018). A Brief History of the Opioid Epidemic and Strategies for Pain Medicine. Pain and therapy, 7(1), 13-21.

Kesling, B. (2017, August 01). Veterans Using Private Doctors at Greater Risk for Opioid Abuse. Retrieved from https://www.wsj.com/articles/veterans-using-private-doctors-at-greater-risk-for-opioid-abuse-1501598780

King, A. P., Erickson, T. M., Giardino, N. D., Favorite, T., Rauch, S. A., Robinson, E., . . . Liberzon, I. (2013). A Pilot Study of Group Mindfulness-Based Cognitive Therapy (Mbct) For Combat Veterans with Posttraumatic Stress Disorder (Ptsd). Depression and Anxiety, 30(7), 638-645. doi:10.1002/da.22104

Krupnick, J. L., Green, B. L., Amdur, R., Alaoui, A., Belouali, A., Roberge, E., . . . Dutton, M. A. (2017). An Internet-based writing intervention for PTSD in veterans: A feasibility and pilot effectiveness trial. Psychological Trauma: Theory, Research, Practice, and Policy, 9(4), 461-470. doi.org/10.1037/tra0000176

Lehavot K., Katon J.G., Chen J.A., Fortney J.C., Simpson T.L., (2018) Post-traumatic Stress Disorder by Gender and Veteran Status. American Journal of Preventive Medicine, 54(1), e1-e9. doi.org/10.1016/j.amepre.2017.09.008

Miles, F. (2019, May 30). Substance abuse among veterans is getting worse. Retrieved from https://nypost.com/2019/05/30/substance-abuse-among-veterans-is-getting-worse/

Nelson, K. M., Starkebaum, G. A., & Reiber, G. E. (2007). Veterans using and uninsured veterans not using Veterans Affairs (VA) health care. Public health reports (Washington, D.C. : 1974), 122(1), 93-100.

O'Neel, D. (2019, January 16). I survived combat in Iraq and a suicide attempt at home. But many veterans aren't so lucky. Retrieved from https://www.usatoday.com/story/opinion/voices/2019/01/16/veteran-affairs-suicide-military-iraq-war-column/2580957002/

Prentice, J. C. and Pizer, S. D. (2007), Delayed Access to Health Care and Mortality. Health Services Research, 42: 644-662. doi:10.1111/j.1475-6773.2006.00626.x

Price, C. J., McBride, B., Hyerle, L., & Kivlahan, D. R. (2007). Mindful awareness in body-oriented therapy for female veterans with post-traumatic stress disorder taking prescription analgesics for chronic pain: a feasibility study. Alternative therapies in health and medicine, 13(6), 32-40.

Rothbaum, B. O., Hodges, L., Alarcon, R., Ready, D., Shahar, F., Graap, K., . . . Baltzell, D. (1999). Virtual reality exposure therapy for PTSD Vietnam veterans: A case study. Journal of Traumatic Stress, 12(2), 263-271. doi:10.1023/a:1024772308758

Seal KH, Shi Y, Cohen G, et al. Association of Mental Health Disorders with Prescription Opioids and High-Risk Opioid Use in US Veterans of Iraq and Afghanistan. JAMA. 2012;307(9):940–947. doi:10.1001/jama.2012.234

Schoenfeld AJ, Jiang W, Chaudhary MA, Scully RE, Koehlmoos T, Haider AH. Sustained Prescription Opioid Use Among Previously Opioid-Naive Patients Insured Through TRICARE (2006-2014). JAMA Surg.2017;152(12):1175–1176.

Shen, Y., Hendricks, A., Wang, F., Gardner, J., & Kazis, L. E. (2008). The impact of private insurance coverage on veterans' use of VA care: insurance and selection effects. Health services research, 43(1 Pt 1), 267-86.

Vickers, A. J., Cronin, A. M., Maschino, A. C., Lewith, G., MacPherson, H., Foster, N. E., Sherman, K. J., Witt, C. M., Linde, K., Acupuncture Trialists' Collaboration (2012). Acupuncture for chronic pain: individual patient data meta-analysis. Archives of internal medicine, 172(19), 1444-53.

Volkow, Nora D., et al. “Medication-Assisted Therapies - Tackling the Opioid-Overdose Epidemic | NEJM.” New England Journal of Medicine, 29 May 2014

Walker, C. F. (2018, April 30). In opioid crisis, VA moves to alternative treatment - The Boston Globe.

Wynn, G. H. (2015). Complementary and Alternative Medicine Approaches in the Treatment of PTSD. Current Psychiatry Reports, 17(8). doi:10.1007/s11920-015-0600-2

Appendix

Appendix A

N-MHSS STATISTICS

YEAR	FACILITIES INCLUDED IN SURVEY DATA	% OF TOTAL ELIGIBLE NATIONWIDE FACILITIES
2014	13,176	89.6%
2015	12,826	87.7%
2016	12,172	87%
2017	11,582	85%

N-MHSS QUESTIONS USED

A4. Which ONE category BEST describes this facility, at this location?
A9. Is this facility operated by: Mark one only.
A9a. Which public agency or department? Mark one only.
A11. Which of these mental health treatment approaches are offered at this facility, at this location?
A14. Does this facility offer a mental health treatment program or group designed exclusively for:

Appendix B

N-SSATS STATISTICS

YEAR	FACILITIES INCLUDED IN SURVEY DATA	% OF TOTAL ELIGIBLE NATIONWIDE FACILITIES
2014	14,152	92%
2015	13,873	89%
2016	14,399	90%
2017	13,583	87%

N-SSATS QUESTIONS USED

7. Is this facility operated by…

7a. Which Federal Government agency?

15a. Many facilities have clients in one or more of the following categories. For which client categories does this facility at this location offer a substance abuse treatment program or group specifically tailored for clients in that category? If this facility treats clients in any of these categories but does not have a specifically tailored program or group for them, do not mark the box for that category.