Creating Options for Veterans' Expedited Recovery

Final Report

January 24, 2020

COVER COMMISSION

Creating Options for Veterans' Expedited Recovery

Thomas (Jake) J. Leinenkugel
Chair

RADM Thomas (Tom) E. Beeman, PhD, U.S. Navy (Ret.)
Cochair

Col. Matthew (Matt) F. Amidon, U.S. Marine Corps Reserve

The Honorable Thomas E. Harvey, Esq.

Ltc. Wayne B. Jonas, MD, U.S. Army (Ret.)

LtCol Jamil S. Khan, U.S. Marine Corps (Ret.)

Matthew (Matt) J. Kuntz, Esq.

Shira Maguen, PhD

Maj. Michael (Mike) J. Potoczniak, PhD, U.S. Army Reserve

CAPT John (Jack) M. Rose, U.S. Navy (Ret.)

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In accordance with the Comprehensive Addiction and Recovery Act (CARA), the Creating Options for Veterans Expedited Recovery (COVER) Commission is pleased to provide the enclosed recommendations to the President of the United States, the United States Congress, and the Secretary of Veterans Affairs. Ten commissioners, who represent a variety of backgrounds, have come together to offer these recommendations without dissent. It is the commissioners' collective belief that these recommendations will guarantee our nation's veterans receive the mental health care they need—when and where they need it.

The COVER Commission's charge required far-reaching examination of the treatment models used by VA in treating veterans' mental health. Throughout its research and deliberation processes, the commission put the needs of veterans at the heart of its work. The commission strove to conduct a comprehensive, evidenced-based review of key treatment modalities; held public meetings; met with a broad range of organizations and clinical providers; made site visits to VA facilities in different regions; and, perhaps most importantly, directly engaged veterans throughout the nation using a variety of channels, including listening sessions and focus groups.

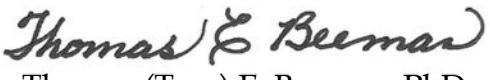
Commissioners agreed that a cross-cutting range of improvements are needed, but most importantly that the VA must transform its delivery model to one that is person-centered, relationship-based, and focused on veterans' whole health. Additionally, the COVER Commission recognizes the need for a substantial investment in continued mental health research. There is shared belief that many promising therapies exist, but there continues to be limited understanding of exactly what the optimal mix of treatments might be for any particular condition.

The COVER Commission acknowledges the many experts from VA, the Department of Defense, and the Department of Health and Human Services; state and local agencies; and veteran service organizations who offered tremendous assistance. The commission also thanks the staff—the dedicated team has contributed innumerable hours to the research and development of these recommendations. Without their expertise and experience the COVER Commission's work would have been impossible.

It is the commission's hope that continued focus on providing world class mental health care to veterans will not only enhance the services available, but reduce the stigma often associated with seeking care. The nation owes an unpayable debt to our veterans and must strive to support them in their times of need.

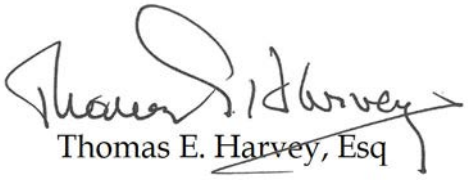
Respectfully submitted,

Thomas (Jake) J. Leinenkugel
Chair



Thomas (Tom) E. Beeman, PhD
Cochair

Matthew F. Amidon



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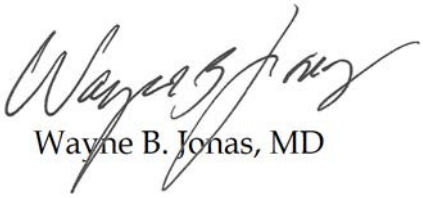
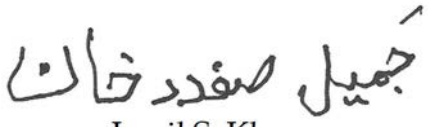
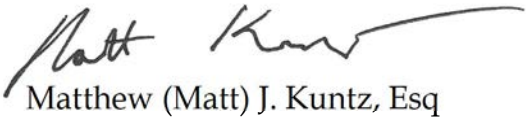


Wayne B. Jonas, MD



Jamil S. Khan



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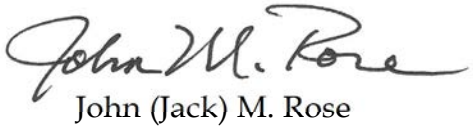

John (Jack) M. Rose

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A CALL FOR TRANSFORMATION

The COVER Commission was charged with examining VA mental health care, including exploring the merits of incorporating complementary and integrative health (CIH) approaches. This task could not be accomplished without looking at health care overall because mental and physical health are inextricably connected. Consequently, the commission chose to consider recommendations within the broad context of the VA health care system. Health care, as currently delivered, is not producing health (National Research Council & Committee on Population, 2013). Only 15 to 20% of health—be it for an individual or a population—comes from health care (Hood, Gennuso, Swain, & Catlin, 2016). The rest—nearly 80%—comes from other factors that are rarely addressed by the health care system. These are mental health and the behavioral and lifestyle choices that people make in their daily lives—choices about food, movement, sleep, stress, and substance use (McGinnis, Williams-Russo, & Knickman, 2002). Increasingly, it is the social and economic environment in which a person lives, as reflected by their ZIP Code, that influences this behavior and has a greater effect on health, mental health, and lifespan than physiology or genes (Roeder, 2014). The factors that enable or inhibit people's ability to engage in healthy behaviors also influence their ability to obtain medical care and pursue a meaningful life (Institute for Health Metrics and Evaluation, 2018).

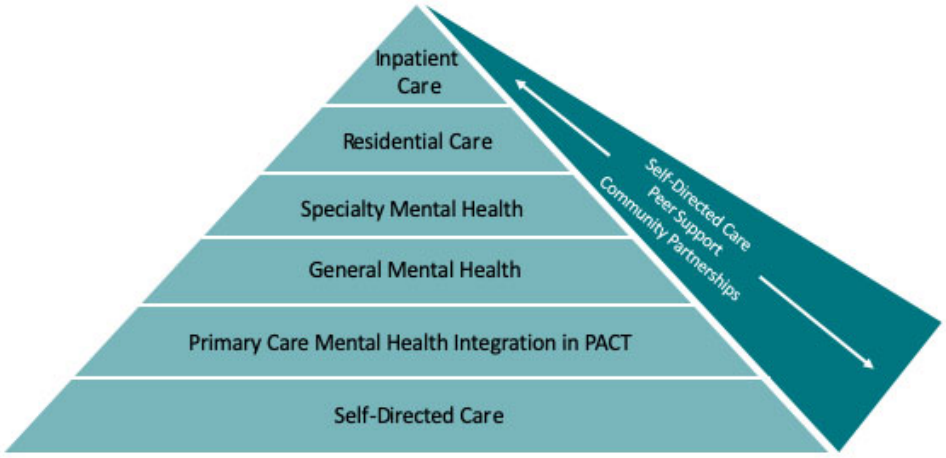
The result is a relentless rise in medical costs and the need for social and mental health services, a declining life expectancy, growing dissatisfaction with quality-of-life for patients, and burnout among providers (Basu et al., 2019; Highfill, 2016; Meyer, 2019; Waters & Graf, 2018; West, Dyrbye, & Shanafelt, 2018; Windover et al., 2018; Zack, Moriarty, Stroup, Ford, & Mokdad, 2004). As Warren Buffet once remarked, health care has become the *tapeworm* of the economy and a major contributor to the growing disparities in well-being (CNBC, 2018). To optimally care for veterans requires more than expanding the model currently in use. That model must be transformed to one that provides value by improving quality and outcomes and lowering cost. To achieve that goal, it is important to understand what is working and not working in VA now, and what and how the system needs transformation.

VA Mental Health Care

VA has one of the most extensive and effective mental health programs in the country. Suicide rates are lower for those who get their care within VA than outside VA, and services for post-traumatic stress disorder (PTSD), depression, traumatic brain injury recovery, and other mental health conditions are more extensive in VA than in the public-sector (Tanielian et al., 2008). The quality of VA mental health services is superior to that delivered in the public sector (RAND, 2011).

The over-arching model for mental health in VA is known as the continuum of care (COC) or sometimes called the levels of care or stepped care model. This model uses a pyramid approach in which inpatient services are at the top of the pyramid and less intensive mental health services step down to self-directed care, which is at the bottom of the pyramid. In addition, a parallel, graduated integration with self-directed care, peer support, and community services is shown across the range of the pyramid.

Figure 1. Mental Health Pyramid Model



The ideal implementation of the mental health COC model is elaborated in the Uniform Mental Health Services Handbook 1160.01 and describes the principles and processes needed for high-quality mental health care (VA, 2008). These principles include veteran-centric care, shared decision-making, stepped care, recovery focus, medical necessity, partnerships, least restrictive care, flexible delivery methods, team-based care, suicide prevention, and measurement-based care, among others. The COVER Commission found that many of these principles remain aspirational in VA and are not uniformly delivered (A. S. Pomerantz, communication with the commission, 2018).

Patient Aligned Care Teams

Primary care providers include family medicine, internal medicine, OB/GYN, nurse practitioners, and physician assistants. Primary care providers take care of the vast majority of patients with mental health issues in the veteran population, touching an estimated 95 to 98% of those with depression, PTSD, and alcohol and substance abuse, including the use of opioids (VHA Office of Primary Care, communication with the commission, 2018). Primary care is also a key player in suicide screening and prevention. Thus, primary care must be a major player in transforming VA care.

The patient aligned care team (PACT) is VA's version of the patient-centered medical home. Each PACT consists of a team lead with a provider, registered nurse, licensed vocational nurse, and clerk. An expanded team may include a mental health provider, clinical pharmacist, dietitian, or social worker. These teams are responsible for the population health of a certain number of patients, usually between 1200 and 2000. PACTs share several core goals and are structured to deliver person-centered care, relationship-based care, and value-based care. The effectiveness of PACTs' ability to deliver on such goals varies widely and requires a more concerted effort in the integration of mental health, behavioral health, lifestyle change services that are distinct from mental health services, and CIH practices. PACTs need to be fully integrated with both mental health and whole health.

Primary Care Mental Health Integration

Integration of mental health into primary care is the second level in the COC model above self-directed care and is delivered through the primary care mental health integration (PCMHI) model within PACTs (Carroll, communication with the commission, 2018). The value of primary care/mental health integration has been tested through a number of randomized controlled trials (RCTs) including IMPACT, RESPECT, BHL, TIDES, and others (Carroll, 2018). Key features of success in these programs are effective integration and coordination (Dundon, Dollar, Schohn, & Lantinga, 2011). Successful programs include shared goals, knowledge, and skills; clear roles of all team members; trust and timely communication among team members; all members practicing to the top of their training; access to a wide variety of services with flexibility in their delivery; efficiency in the coordination of services to address veteran needs in timely fashion; and optimism (Safford & Manning, 2012).

According to Dr. Andrew Pomeranz—a psychiatrist at White River Junction VA Medical Center who has spent his entire career seeking effective models of full integration of mental health care and primary care—integrative care is the care a patient experiences as the result of a team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach, to provide patient-centered care for a defined population. This care may address mental health and substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, and ineffective patterns of health care use (Peek, 2013; Pomerantz, 2018).

PCMHI requires collocated, collaborative care management; behavioral health coordinators; health-promotion and disease-prevention (e.g., whole health) program managers; and integration with the VA COC model for mental health. PCMHI provides a good foundation for building the VA Health Care Transformational Model recommended by the COVER Commission in Recommendation 3. Whole health integration brings into play several missing delivery components of PCMHI, including behavioral and lifestyle change support; social, emotional, and spiritual services that are distinct from formal mental health treatments; and CIH approaches.

Whole Health

The whole health approach to care is relatively new in VA and is aligned with Secretary of Veterans Affairs Robert Wilkie's VA modernization goal of health, well-being, and resilience for all veterans. Whole health provides a foundation for other VA modernization goals, including value-based care and enhanced access both within VA and in the community. Combined with the COC for mental health and the PCMHI models currently used by VA, whole health will be a key driver toward transforming VA health care.

Whole health engages veterans in their own health, well-being, and resilience enhancement by developing each veteran's mission, aspiration, and purpose (MAP) for health. The MAP links a veteran's motivation directly to the health care system and organizes that health system around what matters to the veteran. Thus, it transforms VA's health care approach from a patient-centered orientation (a medical-focused framework) to a person-centered orientation (a veteran-

focused framework). It then offers a series of educational and health coaching services that equips veterans to move toward their MAP goal by improving their health and well-being. Whole health links VA as a medical treatment system to this person-centered approach to track improvement and recovery as veterans engage in health promotion and self-healing through these newfound skills and resources.

Whole Health, Primary Care, and Mental Health Integration

VA has already created a process for the integration of whole health, the mental health COC, and the primary care models on several levels. These levels include self-care in the community; integrative health coaching; the optimum use of peer support; CIH treatments; and more intensive, condition-specific, multicomponent professional treatment (Carroll, 2018).

The COVER Commission learned about many exemplary integration models scattered throughout VA. Among those was the detailed mapping and integration of primary care to mental health and whole health at James A. Haley Veterans' Hospital in Tampa, FL (S. Paykel, communication with the commission, 2018). These joint services were also mapped against and integrated with other approaches including recreational and art therapy, rehabilitation, spiritual care, and social services. This approach is being applied to a variety of mental health and mental-health-associated conditions such as for pain management, opioid and substance use reduction, treatment-resistant depression, and traumatic brain injury recovery (S. Scott & J. Paykel, communication with commission, 2018; G. Catalano & R. Gironda, communication with the commission, 2018).

In addition to this program's integration across silos, one of the major reasons for success at Haley Veterans' Hospital was the enhanced hiring and distribution of health coaching to ensure all veterans in the system had a trusted and continuous relationship with someone who listened to their needs and held them accountable for their responsibilities in recovery. Haley Veterans' Hospital has hired five inpatient hospital coaches, 24 PACT coaches, and 24 additional whole health community coaches to develop and sustain these relationships and support the smooth interaction with individual veterans to address their diverse needs. The program is so successful that the facility is planning to add more of these health partners and coaches.

Other similarly designed exemplars were found in a variety of VA settings dealing with diverse populations. Examples included the 14-week THRIVE program for women's mental health care at the Tampa VA (James A. Haley Veterans' Hospital, 2016); the integrated mental health, community care, and self-care support services for the homeless, mentally ill veterans run by the state of Arizona (BeConnected, 2017); the integrative pain and mental health comorbid conditions management program developed by Dr. Michael Saenger at the Atlanta VA (Rodriguez, 2017); the whole person integrative mental health treatment programs for the severely mentally ill at the Greater Los Angeles VA; and the integrated mental health/primary care/whole health clinical programs at the Boston VA. The latter program has embedded these services fully into the electronic health record for routine use.

Each of these programs demonstrated a commitment to person-centered, relationship-based, recovery-focused care; however, each of these programs struggled to execute its models in a larger VA system that uses medically centered services and transactional approaches to care

rather than person-centered and relationship-based frameworks for documentation and payment of services. In addition, each of these integrated programs struggled to standardize and continuously improve its model so that it could be scaled and made accessible beyond the local delivery settings. For the latter to happen, a standardized, redesigned, and supportive central infrastructure across VA is required to make these transformative services available to all veterans.

Driving a Transformational Model of Health Care for All Veterans

The COVER Commission found that proactive, patient-driven care within an evidence-based and measurement-based system is both necessary and possible in VA health care. Such an approach can balance support for a life worth living (the goal of whole health) with disease management and risk reduction principles (as imbedded in mental health and primary care mental health integration). To enhance mental health services across VA and to reduce suicides, VA must reach into veterans' lives and the communities in which they live. This outreach and integration must cast a wider net of mental health, complementary and integrative services, and community and chaplain services, all of which have the capacity to enhance health and well-being outcomes and lower suicide rates among veterans.

The COVER Commission found that these care innovations varied tremendously across VA and are not available for all veterans. It is a lack of focus on delivering a consistent and widespread model transformation that has prevented the VA from actualizing its aspirations of good care for all veterans. Without this focus on integration and model transformation, VA continues to operate in multiple silos of care, each rolled out as a new program with new requirements on its providers and each hungry for more money and more employees. VA has enough resources to provide optimal care for all veterans if those resources are delivered more effectively and efficiently. VA will not be able to do so if it simply emulates the larger U.S. health care system, which is wasting money and losing value every year (Shrank, Rogstad, & Parekh, 2019). The VA health system, more than any other in the country, has the opportunity to lead the nation to a better model of health care. To do this, VA needs a more streamlined integrative, continuously innovating and improving infrastructure.

The COVER Commission found that VA has the leadership, motivation, processes, and infrastructure to make this transformation happen. In some ways, it already has. In recent decades, the quality and outcomes in VA health care have steadily improved across its system and have now surpassed those in the private sector, including in mental health (RAND, 2011; Watkins et al., 2011). In addition, several strategic initiatives are focused on cross-program service integration (Office of Strategic Integration, 2013). Secretary of Veterans Affairs Robert Wilkie and Executive in Charge Dr. Richard Stone presented an ambitious modernization plan for accelerating access, person-centeredness, and integration to produce health and well-being for all veterans. The VA Office of Discovery, Education, and Affiliate Networks works to stimulate new ideas and put the successful ones in place (Carolyn Clancy, MD, Deputy Under Secretary for Discovery, Education, and Affiliate Networks, Veterans Health Administration, presentation to the commission, October 25, 2019). VA needs to focus that innovation and improvement network on transforming its overall model of care delivery.

It is with this need to universally implement the transformation that is already appearing within the VA health care system in mind that the COVER Commission puts forth the recommendations contained in this report. Recognizing that any transformation efforts must address the concerns of key stakeholders, Recommendation 1 focuses on concerns expressed by veterans during focus groups conducted by the COVER Commission. Recommendation 2 focuses on research related to using CIH modalities as part of mental health treatment in support of the transformational model. Recommendation 3 specifically focuses on creating and implementing a transformational model throughout the VA health care enterprise. Recommendations 4 through 10 focus on specific issues within the VA mental health care system that need timely attention. VA has adopted the quadruple aim framework—enhanced population health, lower costs, improved quality, and improved satisfaction of both patient and provider—as its standard for shaping reform efforts. These recommendations should be implemented with an eye toward setting the groundwork for systemic transformational change. Below are the overarching recommendations:

- Recommendation 1: Address concerns expressed by veterans related to VA mental health care.
- Recommendation 2: Establish an ongoing research program focused on testing and implementation of promising adjunctive CIH modalities associated with positive mental health, functional outcomes, and wellness that support whole health and the VA Health Care Transformation Model.
- Recommendation 3: Transform the current VA health care delivery model into one that is person-centered, relationship-based, and recovery-focused and support this transformation with a payment system that is value-based and incentivized for continuous innovation and quality improvement.
- Recommendation 4: Implement a multipronged effort to improve the state of evidence regarding veterans' suicide, roll out proven interventions to those most at risk, and streamline VA's suicide-prevention message modeling for clarity and consistency with research.
- Recommendation 5: Provide universal access to effective care for treatment-resistant depression for all veterans in the VA mental health system.
- Recommendation 6: Expand VA's precision mental health efforts in partnership with the National Institute for Mental Health to more effectively diagnose and treat mental health conditions.
- Recommendation 7: Identify and rectify availability gaps for evidence-based psychotherapeutic interventions.
- Recommendation 8: Recognize and incentivize the roles of peer support specialists, behavioral health specialists, health coaches, and chaplains in mental health care in the Veterans Equitable Resource Allocation system.

- Recommendation 9: Engage with other federal agencies, as appropriate, to research the potential short- and long-term risks, as well as benefits, of medical cannabis and psychedelic drugs.

- Recommendation 10: Ensure that veterans can access mental health care by reviewing and updating transportation processes throughout the VA system.

Although the COVER Commission's recommendations are small in number, they are broad in reach. Implemented to the fullest extent possible, these recommendations would create a model that could be followed in all U.S. health care systems, both public- and private-sector, that would improve health, well-being, and quality of life, while saving money.

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RECOMMENDATIONS

> "Trauma is about trust….We have to have rapport with our provider….And it's very damaging to our own treatment to be confronted by a new provider constantly….This person doesn't understand the context. They don't know the stories….Continuity of care is a huge problem, even in what I consider to be a very good region."
>
> –Focus Group Participant

Recommendation 1: Address concerns expressed by veterans related to VA mental health care.

Problem

The COVER Commission's legislative mandate required the commission to conduct a patient-centered survey within each of the Veterans Integrated Service Networks (VISNs). Topics to be addressed included veterans' experiences with seeking mental health care from both VA and non-VA facilities; their perceptions regarding the available mental treatments, including those they believe are most effective; and experiences with complementary and integrative health (CIH) opportunities. Additionally, the legislation indicated the commission should consider the frequency with which VA prescribes medication to treat mental health issues and the relative effectiveness of VA's outreach efforts used to inform veterans about the mental health care available to them. Because of time and resource limitations, the commission determined that conducting a web-based survey was infeasible and instead decided to hold focus groups with veterans.

Background

General Information

The COVER Commission conducted a total of 16 focus groups. Ten in-person focus groups took place between August 19, 2019, and September 24, 2019. Locations included Cleveland, OH; Baltimore, MD; Chicago, IL; Atlanta, GA; Nashville, TN; Miami, FL; Philadelphia, PA; White River Junction, VT; Seattle, WA; Santa Rosa, CA, and San Francisco, CA. The commission had scheduled several other focus groups that were cancelled. None of the prospective participants showed for the focus groups in New Orleans, LA, and Denver, CO. The focus group scheduled for Canandaigua, NY, was cancelled because the facility was evacuated after a construction-related issue outside created concern about a possible gas leak. Focus groups in Richmond, VA, and Harlingen, TX, were cancelled due to transportation issues. In addition to the in-person focus groups, the commission conducted six virtual focus groups between August 16, 2019, and September 19, 2019. Two additional virtual focus groups had been scheduled but were cancelled due to inadequate participation. Because of time constraints, no cancelled focus

groups were rescheduled; however, any prospective participants for cancelled in-person sessions were invited to join one of the virtual focus groups.

Focus Group Sites

Commissioners chose the locations for in-person focus groups strategically. In an effort to recruit a diverse group of veterans experiencing care in a wide variety of settings, commissioners chose urban, suburban, and rural facilities. They also chose facilities with high- and low-quality ratings. The main goal of conducting virtual focus groups was to capture feedback from veterans in those VISNs not represented in the in-person focus groups. Originally, the commission scheduled four focus groups to accommodate this goal; one of these was cancelled due to lack of participants. Veterans who expressed interest in participating in a focus group but did not live near one of the locations where in-person focus groups occurred were also invited to join one of the virtual focus groups, regardless of where they lived. The commission scheduled four additional virtual focus groups after most of the in-person focus groups had occurred. All veterans who had expressed interest in participating in focus groups who had not yet participated, regardless of geographic location, received invitations to participate.

Participants

Participants for the commission's focus group study represented a convenience sample. Because of Health Insurance Portability and Accountability Act requirements, the commission could not access names and contact information of patients for direct recruitment outreach. Consequently, the commission used several social media approaches to recruit participants including posting on the commission's web page and social media accounts as well as sharing a post through the VA-wide blog. COVER Commission staff also solicited assistance from personnel at sites where in-person focus groups took place. Some participants joined the study through snowball recruiting—a methodology whereby participants are referred by others who have joined the study. Participants for the focus groups were volunteers and received no compensation for their involvement.

The commission provided each participant with a demographic survey to complete; however, some participants chose not to complete the survey. Below is summary demographic information for those participants who did participate in this aspect of data collection.

- Gender: 70% male, 28% female, 2% transgender
- Rank: 85% enlisted, 15% officer
- Service: 45% Army, 23% Navy, 19% Marine Corps, 13% Air Force
- Combat: 67% yes, 33% no
- Age: 3%, 26–35; 17%, 36–45; 29%, 46–55; 17%, 56–65; 31%, 66–75%; 3%, 76–85
- Marital Status: 46% married, 29% divorced, 21% single (never married), 3% widowed, 1% separated

- Education: 28% graduate degree, 22% bachelor's degree, 15% associate's degree, 22% some college, 8% high school diploma, 5% other
- Race: 71% White, 15% Black/African American; 4% American Indian/Alaska Native; 2% Asian, 2%Native Hawaiian, 2% two or more races, 4% other
- VA-Recognized Service-Connected Disability: 85% yes, 15% no
- Work Status: 32% disabled/unemployed, 28% retired, 14% full time, 7% unemployed/seeking work, 4%unemployed/not seeking work, 4% student
- Income: 12%, $20,000; 4%, $20,001–$30,000; 20%, $30,001–$40,000; 12%, $40,001–$50,000; 16%, $50,001–$60,000; 9%, $60,001–$75,000; 27%, >$75,000

Methodology

Sigma Health Consulting (Sigma), a contractor engaged by the COVER Commission to help with data collection and analysis, created a focus group protocol. Sigma conducted two pilot focus groups to test the guide and made subsequent revisions. In-person focus groups took place in private conference rooms at VA health care facilities. Virtual focus groups took place using Adobe Connect to facilitate video, coupled with conference phone call capability for optimal audio connection.

COVER Commission Chief Content Development Officer Wendy LaRue, PhD, served as primary researcher and conducted 11 of the focus groups, including eight in-person focus groups and three virtual focus groups. Sigma CEO Francis Murphy, MD, MPH, conducted three of the virtual focus groups. COVER Commission Chief Advisor and Staff Director Casin Spero conducted two of the in-person focus groups.

All focus group sessions were recorded and transcribed verbatim by a professional transcription service secured by Sigma. To protect the identity of the participants, only first names were used in the transcripts. Transcripts were uploaded into NVivo, a qualitative analysis support program, to be coded by theme. The commission used both deductive coding (establishing codes in advance) and inductive coding (establishing codes in the analysis process as trends in the data become apparent).

Four main coding themes, referred to as nodes, included Informing Veterans About Mental Health Care, Initial Experiences in Seeking Mental Health Care, Ongoing Experiences with Mental Health Care, and Quality of Mental Health Care. All other nodes fell under these four parent nodes. The coding process comprised two approaches. All transcripts were read from beginning to end with passages coded using established codes or codes added in the review process. Additionally, key word searches related to the various nodes were used as a secondary coding approach. After coding was complete, all nodes were reviewed and some were moved to different places in the coding hierarchy or collapsed into other nodes to better reflect patterns in the data.

Findings

Transition and Eligibility

Although DoD has worked to improve the transition process for military service members, room still exists for making transition from DoD to VA more seamless. Older veterans consistently expressed having inadequate information about their eligibility for VA medical care, as exemplified here:

- "I got discharged in 1967. Basically, they patted you on the ass and sent you home. …VA never educated me on anything."
- "When I got out in 2003, I was just kind of kicked out, like with no education. I didn't even know I qualified for VA services 'til a decade later."
- "I was told I was ineligible for care, and that turned out not to be true, because what I ended up doing was going to a Stand Down and there was a nurse there that said let me see your DD214, and she enrolled me immediately in VA, and she said you're totally eligible for care in VA…And so I had a wrong idea from the beginning that I wasn't even eligible."
- "When I got out in '91, nobody said anything about the VA to me. It took a civilian provider for me to find out about the VA."

The perception that only those who served in combat are eligible for VA care has kept some veterans from seeking VA mental health care, as illustrated by these examples:

- "Some people think because they didn't go to war that they are not eligible for the VA. The guys I worked with at the [Paralyzed Veterans of America] said, 'Yes, you had this happen. It says in your DD 214.' So, they helped me, and if they hadn't helped me, I wouldn't have known."
- "My father was a Vietnam veteran with the Navy, and he only spent 2 years in the Navy. He believes that he's not qualified for the VA…he doesn't think he spent enough time in the Service and that he's waited too long to sign up for veteran services."

Participants' experiences in addressing eligibility and rating issues with VA appeared to differ greatly. After receiving a post-traumatic stress disorder (PTSD) diagnosis, one participant turned to VA for assistance filing for a disability increase. He said the person who worked with him "was very helpful explaining to me how I could fill out the form, how best to word it so that I use the language that they're going to want used." Another veteran; however, hit road blocks in the eligibility process: "My doctor showed up 45 minutes late to my appointment … [then] she kept trying to steer the direction into blaming my parents, my upbringing, and saying that my PTSD wasn't from being sexually assaulted, and so I ended up having to call her supervisor after leaving that appointment and get a new doctor and get a new review, and when I got that new doctor and that new review, I had to travel two hours away."

Concern that certain actions could jeopardize eligibility and ratings deter some veterans from seeking care or from broaching certain topics with their providers. A participant noted that because moral injury is not included as a diagnosis in the American Psychological Association's *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*: *DSM-5*, he was concerned about addressing it with his therapist. "You have to have a pretty good relationship with your therapist to even bring this up because it sets up an argument for the VA that, 'Oh, well, you don't have PTSD. You have moral injury, and we don't compensate for that.' " Below are related examples:

- "A big, huge part of the success or lack of success of VA mental health care has to do with this issue between the [Veterans Health Administration] and [Disabled American Veterans], and the [Veterans Benefits Administration] going after veterans to reduce the benefits. And I know we want to believe that's not happening, but I see it."

- "The kind of unofficial word on a permanent and total rating is, 'We won't look at your file ever again, unless you make us.'"

Self-Advocacy Skills

Many focus group participants expressed having difficulty initiating care. Self-advocacy is essential for getting appropriate mental health care according to one veteran, "You have to make more of an effort," she said. "You know what I mean? It's more of like, it's more of a patient, in a sense of finding and actually seeking out the information. I mean, it's there, but it is definitely a diamond in the rough."

Perceived stigma is a key factor that keeps veterans from receiving mental health care, as illustrated by these examples:

- A veteran who is trying to help his father, a fellow veteran, to seek care indicated, "He believes that he's not qualified for the VA. That's his stigma.…I have informed him, but he's like, no, no, I will be all right. I don't qualify for that stuff."

- A veteran at a different facility who participated in the same virtual focus group, agreed. "I hear that we don't need to be at the VA because there's nothing wrong with us or that's for somebody who really needs it."

A number of veterans indicated that they only received mental health care at the point that their symptoms had devasting effects on their personal lives. The examples below show how much can be at stake for these veterans:

- "Things got worse. You know, getting into the mandated reporter type stuff. And it just finally fell apart. And my kids and whole family became collateral damage because of that."

- "My marriage was wrecked. My [ex]wife was actually allowed to take my kids to [another country] because of my PTSD and my mood swings and everything. So I lost my family, lost my home, lost my job. One followed right after the other. And it took me being right suicidal for me to actually go get help. I ran out of every other option.

Drinking, taking my anger out on people that probably didn't need it, everything. Until I couldn't function anymore. I was barely functional a year ago."

- Another veteran who had lost his family, home, and job indicated, "And like this PTSD stuff, when I told all my close friends, they wanted to know why it took so long. I said, well, you know, I think you all are going to think bad of me." In talking about veterans in general, he said, "I think a lot of these guys are probably in their own world, I guess, or their own little group of something, where they don't want to talk about anything, and that's going to be the hard part.…You have to go find them."

Focus group participants indicated that many homeless veterans end up in that predicament because they lack the self-advocacy skills needed to seek mental health care or to address the underlying issues tied to their mental health, and their symptoms make maintaining employment and relationships difficult. One focus group participant said she became homeless several times because her providers didn't ask about military sexual trauma (MST), and she was unable to initiate conversations about it. "For me, one of the biggest contributing factors to my recovery and kind of becoming stable again, because I had several rounds of homelessness in between discharge and the past couple of years but was not being treated appropriately for military sexual trauma, and my primary care providers didn't ask. My psychiatrist didn't ask." It was only when she met a provider who recognized the symptoms and specifically asked about military sexual trauma that the veteran began to get the care she needed. "I had a nurse who was a veteran who had military sexual trauma; essentially she was a peer. And the other person who made a huge advancement for me in recovery was someone [in a peer support program]. And those two people made the biggest difference in me getting the help I needed for my PTSD and MST. And now I'm more stable than I've been in years."

Family and Support Person Involvement

For many veterans, family members or other support persons were instrumental in their pursuit of mental health care.

- "My first experience is, one, I was afraid to come to the VA, because of the stigma—that the VA had. But I had a girlfriend kind of walk me through it, and get me in here."

- Another participant indicated that at one point he had actually written a paper for an undergraduate psychology class in which he argued that PTSD was a myth, despite having many known symptoms associated with the diagnosis, such as hypervigilance and nightmares. "I covered the emotional gauntlet of thinking it was a myth, to being full blown diagnosed. And that happened because of my second wife, which is also something very common for us. My second wife, who advised me to perhaps take the doctor up on some mental health care."

Veterans indicated that when fear of stigma attached to confronting PTSD or other emotional problems keeps veterans from pursuing mental health care, it is vital that their families have adequate information to help steer them to care.

- "VA has not done a good job of making your family members and dependents aware of mental health services that are provided," one veteran said. He indicated that if family were better educated in this regard, they might be able to persuade veterans to get care. "There has to be an educational level that has to be taken to the people who have influence over the veteran."

Although the role of family is vital in getting veterans the care they need, when veterans need mental health care, it does often come at a cost to their loved ones. One focus group participant suggested that mental health should be viewed from a public health perspective, with education being provided even at the high school level, so there is more general awareness of symptoms and comfort with speaking about concerns. He also noted VA should focus on "getting to the families, having family night, bringing in families to talk about this." When veterans are resistant to receiving care, he tells them, "Well, then you're not only denying it yourself, you're denying it to your family, your dependents, who are entitled, because they put up with you." A veteran from the same facility underscored the importance of providing support for families of veterans with mental health issues. "The family also suffers from PTSD and depression, and all of the other psychoses…The whole family suffers."

When veterans receive care for their mental health issues, the positive effect on their families can be dramatic. One veteran, before receiving care from VA was living in a van with his two teenage daughters. "They sheltered us. They treated me for my MST, schizophrenia, severe depression. And now those same 12-year-old and 14-year-old girls at the time have finished college with a master's degree. And that is a huge help that I received from the VA to help me mentally get my life together which, in turn, helped me to raise my children better."

Access to Mental Health Care

Access to appropriate mental health treatment is critical to veterans. As of December 2019, veterans currently have more than 11 million appointments scheduled, where 90.9% are scheduled for care within 30 days of the requested date compared to 9.1% that are scheduled after 30 days of the requested date. In October 2019, veterans had 15,433 referrals to a specialist for care needed immediately, of which 97.9% were resolved within 7 days and 99.7% were resolved within 30 days (VA, n.d. a).

Since October 2001, about 61% of Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn veterans have enrolled in VA health care (including both mental health and non-mental health services) – a higher rate compared to previous eras. About 140,000 new veterans become eligible for care each year, yet VA estimates approximately 40% never access any type of VA health care. Among the 1.7 million veterans who have a need for mental health treatment, 55% are not receiving any mental health services (National Academy of Sciences, 2018).

Veterans face a variety of factors that make initiating mental health care challenging for them. Veterans indicated that VA needs to do a better job at building awareness of mental health care options available to veterans. Focus group participants pointed out that advertising programs within a VA facility is not helpful for veterans who are not going there in the first place. They repeatedly suggested using public service announcements on radio and television to help

educate veterans about mental health care and help them recognize that they may be in need of it. Some other suggestions for getting information to veterans included using social media, having mental health community stand downs, holding mental health retreats, and offering resources fairs.

- "VA needs to invest in paid advertisements that get information out there."
- "You have so much out there, but we probably know 1/10th of what's out there, because it's not marketed."
- "I would also take this to the military posts. You know, commander's calls. Take it to the local schools, the DoD schools, saying it's okay, this is all right. …Get to the people who get to the veterans. Their families, and like you say, the national service organizations, and also their employers, and as well as, again, their commander's calls. There has to be an educational level that has to be taken to the people who have influence over the veteran."

Another major barrier to receiving mental health care is the belief that accepting care would preclude someone with a perceived greater need from receiving care. As veterans explained,

- "The biggest problem I had with mine is that I thought I was taking away from other veterans."
- "Yeah, he has PTSD, and I have PTSD, but his has to be worse because he's seen more. Therefore, I'm not entitled, or I shouldn't be using the resources."

For veterans who are receiving mental health care through VA, the hours during which most appointments occur are not conducive to easy access for veterans who work, yet application of the requirement to provide evening and weekend appointments is not being universally or consistently implemented. Several participants indicated their facility offered no evening appointments.

- "To my knowledge, it's always been 8:00 to 4:00 or whatever."
- "They do have some, but it's very few."
- "But I think it ends at like 6 o'clock. And they call that extended hours."
- "I can't afford not to work but… I live an hour away. So, I couldn't get an appointment that would have me here, you know, that I could make it here without having to take off work. So I've been getting treated at the vet center because I can be seen after 4:00. Like, I had to take a vacation day to come here."
- "And I know at my vet center they have evening hours for a lot of people."

Telehealth has been helpful for some veterans, especially those living in rural areas.

- "I haven't had trouble getting appointments, but I've had trouble getting there until they started the virtual care stuff that they did. I think that's probably one of the better things that they did, for me. Some people don't like it, but it's something that's worked very well for me."

- "I have seen my provider by telehealth once in a while if he's outside of the [area]. So, they do make that available."

Some have found telehealth challenging, as illustrated by these experiences:

- "I found that particular provider that I was dealing with on telehealth was an idiot. I was improperly medicated at the time and was very clearly, I feel, having a manic episode.…She had taken me off my medication for the mania, and she was like 'You seem fine to me,' and I was like 'You can see this much of me.…You can't see anything else of the fidgeting that's going on, and like the tics and all this stuff.' "

- "The bottom line, I myself find talking with someone face-to-face…or worst-case scenario, even over the phone, is far and above better than typing over telehealth, in my opinion."

- "Sometimes I can get in, it's spot on, I can get care and get an immediate response and they can go through, and sometimes I'm on the phone listening to the music 45 minutes later."

- "We have bad weather, and we have long roads, and stuff like that. And it would be just as easy, I think, to have one-on-one sessions with someone through telecare, as it is to make them come in because they live 49 miles away instead of the required 50."

In its research, the COVER Commission found that some veterans are using federally qualified health centers, critical access hospitals, rural health centers, tribal health centers, and Indian Health Services facilities for mental health, medication management, lab testing, dental care, and other services. These facilities could be a viable way to extended access without having to build and staff VA facilities.

Community-Based Care

For veterans who live far from VA facilities or who cannot access care through VA directly, community care can provide a vital opportunity. Unfortunately, for many veterans, the system is not as simple as receiving a referral for private-sector care, VA handling the payment, and VA and private-sector providers communicating seamlessly about their patients' needs and care.

- "We still are trying to figure out how the heck to go to a local doctor for basic care and services because that ability hasn't been rolled out effectively."

- "The VA will offer Choice if an appointment is more than 30 days out, and then there is this black hole, and I end up returning to the VA and getting an appointment later than I would have if I had just accepted the appointment that was a month out."

- "It is not, by no means, a smooth or seamless process."

Several veterans specifically expressed concern about the Mission Act.

- "The best care is here at the VA, it's not in the private sector."

- "I have concerns, more so to global concerns, about the Mission Act and the goal to increase the private-sector role in veterans' care and how that will impact the ability of the VA to meet the needs that they need to without additional funding, staff."

- "One thing the vets have to do is we have to speak up for ourselves because if we don't then we're just going to be at times lost in the shuffle."

- Delays in receiving care in the community, according to one veteran, are the result of VA providers failing to submit requests correctly. She said, "Either it was miscategorized, or some admin aspect was not done properly. To that end, I've noticed that the doctors on the team seem to be overwhelmed with the BS of having to go through a checklist and make computer entries during the course of an appointment, things that I think the nurse or even a medical admin type who was assigned to assist the doctor could take care."

In addition to dealing with administrative issues related to scheduling, some veterans indicated they were in debt collection because VA had not made timely payments to outside providers. Veterans also mentioned that problems with the approval process leave them in limbo for long periods of time during which they have been referred for care, but are waiting for the approval to actually receive it.

- "I had an experience using Veterans Choice. I had to fight, I had to call the media because they were trying to send me to a collection agency. They never sent my medical records back to the VA."

- "What they fail to realize is, there is no care available in the community. You know, we would say, yes, you can go, that's like telling someone, you can get anything in the store you want, well, the racks are empty. [Additionally] I have stuff going into collections because I was—I can't fill an appointment because my stuff wasn't, my thing didn't get approved so then I had to pay $75 for a cancellation fee because my…[referral] didn't get approved, but yet nobody knows on either end why it's not approved. So then here we are as veterans getting charged for care that we're not even getting."

Another concern about community-based care revolves around communication among providers that veterans consider essential in terms of continuity and coordination of care.

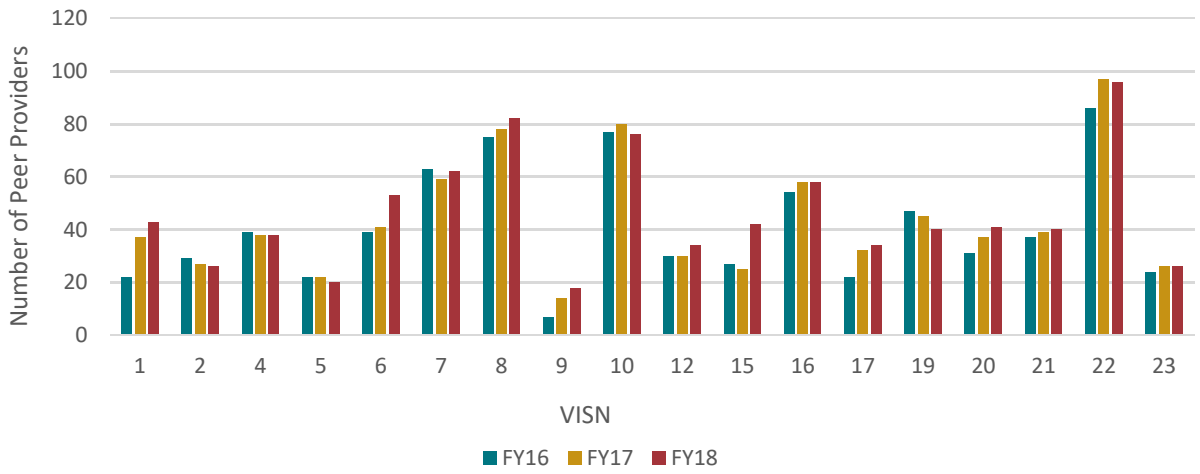
- "There is no formal mechanism for a choice provider to put their notes into the VA system, even though we're getting the new software system. …But anyhow, I think that continuity is critically important. I know that everybody that I work with [at a VA facility], specialist or primary, everything goes in [the electronic health record] so that they can all see what's going on, and I have a number of specialists between the cardiologist and the neurologist and the surgeons and the orthopedic guys."

- "Here [at VA] your medical records are integrated; everything is within here. So, somebody has a chronic illness or something like that, it—that's a problem if they're missing a piece of information and they can't treat them. Or they're getting treated the wrong way."

Peer Support

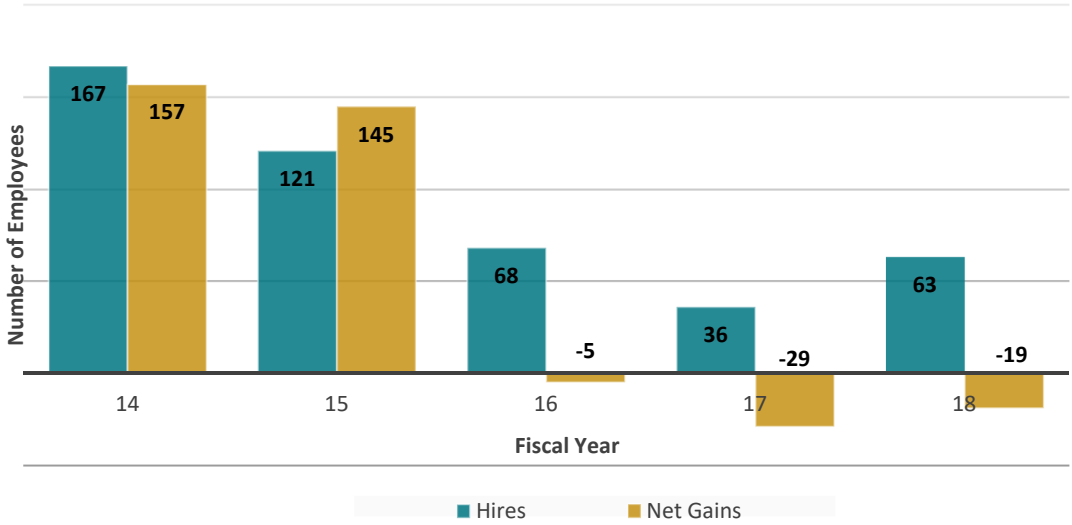
Peer support specialists at VA are staff members who are certified by a VA-approved or state-approved peer certification training provider. One route VA uses to recruit these individuals is to hire them as noncertified peer support apprentices and then provide training to achieve certification within a year of their appointment date (Dan O'Brien-Mazza, National Director, Peer Support Services, Office of Mental Health & Suicide Prevention, communication with the commission, September 26, 2019). VA employees in different occupations may apply for open peer support specialist or peer support apprentice positions if they meet the qualifications, codified in Pub. L. No. 110-387. For most VISNs, the number of peer providers—defined by SAMHSA (n.d.) as those who serve in roles such as certified peer specialist, peer support specialist, recovery coach—has remained at around the same number for the past 3 fiscal years, as seen in Figure 2.

Figure 2. Number of Peer Providers from 2016-2018



Office of Human Resources Management data (Cristina Byrne, Manager of the Data Analytics Team, VA Human Capital Management, communication with the commission, September 24, 2019) shows a low growth rate for peer support specialists as seen in Figure 3.

Figure 3. Number of Peer Support Hires and Net Gains for FY 2014-2018



The negative growth rate is a result of competing demands on mental health management to provide services across a wide continuum of care that also provides reimbursement through Veterans Equitable Resource Allocation (VERA) funding (Dan O'Brien-Mazza, communication with the commission, September 26, 2019). Because peer support specialist positions are not eligible for reimbursement by VERA, management prefers to hire other licensed mental health staff members whose positions bring funds into their facilities. Peer support is a growing evidence-based practice that adds value to recovery-oriented care by supporting veterans throughout their recovery process in a manner favored by veterans, Congress, and the White House. Budget conscious leadership sees existing funding resources diminishing rapidly as health care costs soar, and consequently, their default strategy is to hire staff members who will bring revenue into the system.

Potential solutions to address this problem would require legislation or an executive order to change the VERA reimbursement system (Dan O'Brien-Mazza, September 26, 2019). One approach would be to allow services delivered by peer support specialists to be counted in VERA. Another would be to fund these positions through long-term fenced funding that would not expire, protecting vacated positions from being left unfilled.

VISN 22 had the lowest ratio of peer providers by total mental health service users in FY 2017, so that one PSS supports approximately 1,482 veterans, as seen in Table 1. In FY 2017, the ratio of peer providers by total mental health service users ranged from 1,482 to 5,428, whereas in FY 2018, the range was 1,482 to 4,314, as shown in Table 2. As of September 2019, there were a total of 1,128 peer support specialists (Dan O'Brien-Mazza, September 26, 2019).

Table 1. Peer Provider Activity and VHA Utilization in FY 2017

VISN	Number of VAMCs	Number of Peer Providers	Total VA Service Users	Number of MH Service Users	Ratio of Peer Provider by Total VA Service Users	Ratio of Peer Provider by Total MH Service Users
1	7	37	246,131	68,099	6,652.19	1,840.51
2	7	27	287,998	81,080	10,666.59	3,002.96
4	8	38	285,089	70,155	7,502.34	1,846.18
5	4	22	203,519	58,088	9,250.86	2,640.36
6	7	41	368,799	112,018	8,995.10	2,732.15
7	5	59	430,662	134,865	7,299.36	2,285.85
8	7	78	576,393	159,758	7,389.65	2,048.18
9	2	14	269,882	75,986	19,277.29	5,427.57
10	10	80	485,019	127,266	6,062.74	1,590.83
12	6	30	276,556	70,093	9,218.53	2,336.43
15	6	25	237,402	62,712	9,496.08	2,508.48
16	6	58	408,727	121,556	7,047.02	2,095.79
17	5	32	386,544	121,276	12,079.50	3,789.88
19	5	45	298,033	78,174	6,622.96	1,737.20
20	6	37	290,782	72,132	7,858.97	1,949.51
21	6	39	340,262	93,219	8,724.67	2,390.23
22	8	97	473,219	143,794	4,878.55	1,482.41
23	7	26	313,858	65,024	12,071.46	2,500.92
n=18	**112**	**785**	**6,178,875**	**1,715,295**		

Table 2. Peer Provider Activity and VHA Use in FY 2018

VISN	Number of VAMCs	Number of Peer Providers	Total VA Service Users	Number of MH Service Users	Ratio of Peer Provider by Total VA Service Users	Ratio of Peer Provider by Total MH Service Users
1	8	43	246,196	68,250	5,725.49	1,587.21
2	7	26	285,150	81,203	10,967.31	3,123.19
4	8	38	292,051	72,207	7,685.55	1,900.18
5	4	20	206,083	59,946	10,304.15	2,997.30
6	7	53	378,627	115,182	7,143.91	2,173.25
7	5	62	439,612	140,702	7,090.52	2,269.39
8	7	82	582,315	163,838	7,101.40	1,998.02
9	3	18	272,421	77,652	15,134.50	4,314.00
10	10	76	490,472	128,986	6,453.58	1,697.18
12	7	34	274,700	70,746	8,079.41	2,080.76
15	6	42	239,276	62,258	5,697.05	1,482.33
16	7	58	412,713	123,091	7,115.74	2,122.26

VISN	Number of VAMCs	Number of Peer Providers	Total VA Service Users	Number of MH Service Users	Ratio of Peer Provider by Total VA Service Users	Ratio of Peer Provider by Total MH Service Users
17	6	34	398,007	126,581	11,706.09	3,722.97
19	5	40	303,862	80,095	7,596.55	2,002.38
20	7	41	298,758	73,400	7,286.78	1,790.24
21	6	40	344,642	93,449	8,616.05	2,336.23
22	8	96	481,047	147,913	5,010.91	1,540.76
23	7	26	315,924	65,997	12,150.92	2,538.35
n=18	**118**	**829**	**6,261,856**	**1,751,496**		

VA's ability to hire and retain peer support providers is of particular interest, given that peer guidance can be pivotal in veterans' process of seeking care. Focus group participants frequently talked about the role peers play in the mental health recovery process, yet, at a number of facilities, veterans were unaware of the peer support specialist role.

- A veteran who participated in a virtual focus group said of peer support specialists, "I didn't know we had them. No, I've never even heard of a peer support specialist."
- One veteran in the virtual focus group found peer support in an outside group. "I joined a multiservice disabled veteran hockey team. And when I was able to go out there, and I skated with people between the ages of like 22 and 75, when you get that mind of multiservice, multigeneration veteran thing happening, you find out some answers, and quickly, because those people know things."
- "Nothing is more powerful and more therapeutic than veterans helping veterans. And the VA needs to recognize that and, in my opinion, increase the peer support help that could be offered, because the more peer support you have, the better chance you have of getting new services." He suggested that all patients coming in to VA mental health care should be assigned a sponsor, in a manner similar to how sponsors are assigned in 12-step recovery programs, such as Alcoholics Anonymous.
- "I'm more stable…through peer-to-peer, you know, support."
- "It definitely helps to have those peers in there, the peer supports, because you're engaging on a peer level and start asking, you know, screening questions with a peer, and that way, you're engaging on a more personal level, not a clinical level necessarily."

Complementary and Integrative Health

Participants in the COVER Commission's focus groups received a survey regarding their participation in and interest in complementary and integrative care options. A total of 45 respondents chose to complete the survey. The survey document, in addition to asking which CIH treatments veterans had used, asked for the frequency of use. Because the responses

did not reflect a uniform unit of measure, they could not be easily tallied, and therefore are not reflected in Table 3.

Table 3. Focus Group CIH Survey Results

Treatment	# of Respondents Using or Have Used	# of Respondents Interested
Acupressure	3	10
Acupuncture	19	18
Alexander Technique		3
Animal Assisted Therapy (AAT)	3	11
Art Therapy	8	10
Biofeedback	2	6
Chiropractic Care	10	11
Clinical Hypnosis	1	7
Cranial Electrotherapy Stimulation (CES)		6
Dance Therapy	1	6
Drama Therapy	1	5
Emotional Freedom Technique (EFT)		4
Equine Therapy	5	12
Guided Imagery	8	4
Healing Touch	1	6
Hyperbaric Oxygen Therapy (HBOT)		6
Massage Therapy	4	22
Meditation – Mantra	2	3
Meditation – Mindfulness	15	9
Meditation – Mindfulness Based Stress Reduction	15	7
Meditation – Other	6	4
Music Therapy	10	14
Qi Gong	2	3
Reflexology	1	8
Reiki		6
Repetitive Transcranial Magnetic Stimulation (rTMS)		2
Spiritual Care	13	13
Tai Chi	4	17
Therapeutic Outdoor Recreation	4	10
Therapeutic Touch	1	5
Yoga	12	15
Write-In: Aqua Therapy	2	
Write-In: Ketamine Infusion Therapy (recommend offering)		1
Write-In: Aroma Therapy (recommend offering)		1

The survey included a section in which participants could write open-ended comments. The list below includes verbatim comments provided.

- "Peer support services are needed."
- "Need more Peer Support providers and [Licensed Professional Counselors]."
- "Total income $1150 per month. No funds for anything."
- "Art/music closed after 8 months; interns were not rehired. Group walks (therapeutic outdoor recreation) ceased after facilitator had no time. Yoga needs a referral."
- "I pay for these services. They are not offered via the local VA (rural)."
- "I see a number of these therapies being almost cost-prohibitive. One would have to weigh the amount of money the VA programs/departments have, to IF and/or HOW OFTEN any such therapies could be utilized."
- "How can we show an interest in techniques we haven't been exposed to or aren't versed in? Is there a ranking of the effectiveness and what is involved in each of treatment services?"
- "The only alternative or complementary therapy I've ever received through the VA was art therapy … and chiropractic …. All others were accessed on my own through the community."
- "I currently see a therapist who uses CBT as the primary modality. I also use physical activity such as hiking, gardening, etc. in addition to music as a way to relax."
- "Our natural world holds tremendous healing power for mental health => nature, animals, earth connection, etc. Would recommend more opportunities through VA."
- "It is not about how many programs the VA offers. It is about how they are accessed and delivered. I no longer seek any treatment from the VA, other than primary care due to failures in accessing treatment prior. Too frustrating, too many delays, too many steps. But would love to be able to have service covered locally and where I want to go."
- "I would love to access alternative forms of therapy but my income is very limited at this time. I know that the suggested therapies have worked for many others."
- "I would like to see more help from patient advocate's office and the same with social workers. (direct help) FYI: I am currently very satisfied with all of the professionals in my health care team."
- "Do not privatize the VA system."
- "[Acceptance and Commitment Therapy] would be good to offer."

- "I have asked repeatedly for access to alternative interventions and the only thing I was sent to was the acupuncture for pain mgmt., which unfortunately triggered by mast cell disorder … we didn't know. I have wanted desperately to participate in equine therapy, outdoor rec, gardening, art therapy or massage therapies (and for pain mgmt and lymph draining neuromuscular, I have done out of pocket)."

CIH was one of the main categories addressed in the focus groups. Table 4 shows the modalities that appeared in the transcripts, the number of focus groups for which a given modality was mentioned, and the total of references assigned to the respective node.

Table 4. Data Codes for CIH Modalities

Node Title	Files	References
Physical Exercise	10	26
Yoga	13	26
Outdoor Recreation	10	23
Acupuncture	11	22
Meditation	8	22
Chiropractic	6	16
Service Dog	3	11
Art Therapy	5	9
Equine Therapy	6	9
Tai Chi	6	8
Music Therapy	5	7
Massage	3	5
Aquatic Therapy	2	3
Cannabis	3	3

Physical exercise was one of the two CIH modality most frequently coded in the focus group transcripts. Veterans who offered opinions about physical exercise, universally identified it as helpful in improving their mental health.

- "My outside-the-VA experience has been many of them were great. Yoga, tai chi, exercise, flexibility, pretty much any kind of exercise, nonsedentary movement-based program coupled with nutrition has been more helpful than any of the myriad of pills they attempted to put me on over 10 years."

- "You've got to get exercise into any mental health treatment. There's got to be that physical side, whether it's yoga, whether it's a gym."

Participants in rural areas indicated they had limited or no access to CIH options at their VA facility. "I am a member of a gym, and I go to yoga and PiYo, and I try to physically keep in shape." He indicated that he could benefit even more from physical exercise if veterans could work with VA physical therapists to get information about exercises that would be best for them to prevent injury.

The potential mental health benefits of exercise have long been addressed in the literature (see, for example, Taylor, Sallis, & Needle, 1985), and far outnumber the potential negative psychological effects of physical exercise on mental health. Despite the widely acknowledged health benefits of exercise, VA sports and exercise programs serve a total of about 15,000 individuals—a small fraction of the total veteran population receiving VA health care.

Of the physical exercise programs that are made available to that small group of veterans, none of these programs are designed to specifically facilitate or provide physical exercise as a mental health intervention. Although individual facilities may offer exercise opportunities outside formal programs, there is wide variation in what is available at each VA medical center. The programs with the greatest reach (those that fall under rehabilitation and prosthetic services) are not exercise programs per se, but rather treatments with a physical component that are used primarily for treating physical issues. About half of VA facilities included in the Weight Management Care report indicated they have exercise programs and exercise facilities; however, many veterans do not live in close proximity to a VA facility with these offerings.

The limited availability of and participation in institutional exercise programs indicate that they may not be the best way to broadly engage veterans in exercise programming. A model that would have a greater reach would be one similar to United Healthcare's Renew Active fitness plan, which is basically a gym membership model, provided to more than a million of its 4.8 million Medicare Advantage members. Renew Active memberships also include access to yoga, pilates, and tai chi which are also CIH modalities valued by veterans. Other Medicare plans use the Silver Sneakers plan to incentivize physical exercise among their members. Silver Sneakers members can access more than 16,000 health care facilities across the country.

Providing gym memberships would provide a means for widespread encouragement of physical exercise for veterans and could potentially offer both physical and mental health benefits. This is an approach that focus group participants identified as desirable.

- "It would be fantastic if the VA had the ability to… provide for coverage for gym memberships. I mean, it would cost less for a gym membership for an entire year for a veteran than it would for one primary care appointment with a blood draw. And the preventative medicine aspects of exercise are, you know, well studied now."

- Another participant in the same focus group added, "Yes, I would say that, too."

A participant explained that in her geographic area the vet center has partnerships to offer CIH programs to combat veterans, but "there's a whole group of veterans like me who never served in combat who can't access those things." She said there are an abundance of yoga teachers, exercise centers, and alternative and complementary therapy providers in her area, and she has suggested that VA should partner with these providers to provide classes for veterans with no out-of-pocket expenses, but to no avail. "So I am able to do it on my own, and I find it really helpful. It reduces my anxiety, and especially exercise. I have to do it every day. Without that, I really feel like I'm starting to panic and have anxiety attacks again. So, I think many people could really benefit from these programs."

Several focus group participants mentioned that the YMCA in their area had a memorandum of understanding with the local VA facility to allow veterans to take advantage of various programs, and they identified the opportunity to use YMCA facilities as a positive. A veteran who had been homeless several times mentioned that YMCA access in her city not only afforded her an opportunity to exercise, but also an opportunity to shower, which she said was a major boost to her sense of well-being.

- "The [YMCA] in our city is kind of into the VA, and they offer a whole bunch of recreation things for vets."

- "They had exercise programs that they created in coordination with the [YMCA], which then have been made a model nationally."

Flexibility in the type of facility VA-funded gym memberships could support, is important to some veterans, including one who said he found long-distance swimming particularly helpful. "The only time I've ever been able to really get into myself is when I do long-distance swimming," he said. "Pay for my pool. Pay for me to get into the pool because the prices have gotten to the point where I can't afford it anymore. Because once I get in there…you just get into yourself and you don't have anything else." He said he found swimming in particular a helpful form of physical exercise "because it's something that is very repetitive, very soothing."

Yoga and meditation were among the most frequently coded nodes for the focus groups. Although some veterans indicated that after attending yoga briefly, they decided it did not appeal to them, most of the veterans who mentioned yoga and meditation indicated that these practices help them in their pursuit of improved mental health.

- "I work hard at these various methods of trying to get focused. And I do disengage from the world for a while to remove the clutter. It's just—it gets too cluttered for me. And then I find myself spinning a little bit. So, I've found that to be extremely helpful for myself."

Though veterans often access these modalities outside VA, several veterans indicated they preferred accessing them at their VA facility because instructors and other participants understand the limitations veterans may have.

- "It's adaptable, like doing it here at the VA…you know, they know everybody has injuries and things like that."

- "Here, you know the yoga is not going to be all hardcore, because it's veterans, a lot of who are disabled.…It doesn't feel as daunting just to walk in there, because you know they're not going to be like sweating and doing all this crazy stuff like in the outside world. It's adapted to veterans."

- "It's adapted to people with broken parts."

Outdoor recreation is popular among veterans, who often access related programs through outside organizations, such as veterans service organizations, rather than directly through VA.

In addition to providing stress relief, veterans indicated the recreational activities provide an ideal opportunity for veterans to share information about their care with each other and learn about approaches that they might not otherwise know to inquire about with their providers.

- "It's so much easier in getting with these veteran groups because they reach out and try and find you. With the VA, they just said, oh, there's recreational therapy over there. If you want to know more, go over there. And most people really don't even take the time to walk over there and find out."

- "We not only meet once a week, we do things outside, with ourselves. We'll go to different places.…Whoever wants to, goes. We have a fishing tournament. There's a lot that our group does, that it's just our group doing it."

- "I understand that this is an urban area, but this VA has the second largest budget, third largest budget in the world, and they don't think about the recreational part for a veteran to relieve stress."

Veterans who receive acupuncture and chiropractic care frequently do so through their VA facilities' pain clinics. Participants indicated that receiving these CIH treatments helps alleviate pain, helps reduce or eliminate the need for medication, and in turn contributes to improved mental health. One focus group participant said, "I've done chiropractic care, but that's for my back and my pain and stuff. But of course, if you can reduce pain, then your mental health is a little bit better."

Several participants talked about the referral process as being a hinderance to their ability to get chiropractic care on a consistent basis.

- "The key factor in the chiropractic care is the fact that…the VA only gives me a referral for six visits, and then I have to go back to my primary care manager to get another referral to see my chiropractor again because they can't even handle the workload of people in the actual chiropractic clinic.… Plus, they really don't want to keep doing it. They expect you to be healed, when it's supposed to be—from what I understand—chiropractic care is more of a maintenance thing."

- "[Chiropractic] care is really backed up. And the maintenance, it's a problem."

- "And so they're pushing for us to do all these other things, groups and acupuncture and things to get us off these medications, but yet you're not approving them, you're not giving us the care. And it's annoying."

Military Sexual Trauma

MST continues to be a concern for both men and women, and the effects of sexual trauma, particularly when it was covered up, were prominent topics in the focus groups.

- One veteran described struggling more than a decade to get help because of a cover up of MST. "After serving for 5 years, I was sexually assaulted on my last deployment. And when I went to report it, I was covered up with an [other than honorable] discharge."

Five years after his discharge, he eventually received care through VA as a charity case, but said he was treated poorly because of his discharge status, and it was difficult for him to explain the situation. "It was due to the whole cover up by the command…and the fact that it is excruciatingly difficult to tell people in a southern state that you are a male that was sexually assaulted by another male."

- A female veteran said she was sexually assaulted twice in the military and providers never warned her that she might someday have PTSD related to those events. "Then about 10 years after I retired, which is about 30 years after the first assault, I started having severe panic attacks." Her husband was still in the military at that time, and she was receiving care through DoD's TRICARE program. One of her providers referred her to VA, where her first encounter was not positive. "They sent me to a psychiatrist who basically said, oh, that was a long time ago. And don't worry about it, and don't come back." After moving to a different geographic area, she accessed VA care and found a provider who was "much more attuned to what PTSD was like."

- A male focus group participant underscored the importance of providing women with group therapy for MST that is separate from groups offered for men. "A big thing with women too is, and I really, my heart goes out to them, is there is a lot of sexual abuse in the military. And they don't feel comfortable talking about being raped or something else in front of a bunch of males. And that's really important that they have that."

Stigma around rape culture can deter veterans from seeking care.

- "Being a male rape victim was a huge stigma for me. That stigma cost me my family relationships. I haven't heard from my father in 6 years. So considering my family wouldn't even accept my story, I didn't trust the VA would even give me…the time of day, and really, they didn't at first." In contrast to this veteran's experience, another veteran emphasized the importance of having VA care as an option because providers are more likely to understand situations that are unique to military life and how they play out in veterans' mental health.

- One focus group participant, who first received care in the private sector and later received care from VA providers indicated, "There's a lot of stuff that I hid in the background in my mind that the VA was able to break it out. Because like MSTs, you know, and PTSD that I kind of held back in the civilian hospital. I didn't tell them about that. But until I came here, and I started talking, and they had some more questions that they asked many other vets, and I started digging deep, and I started seeing it. Okay man, I kind of put that on a back burner."

- A female participant said she saw improvements in dealing with women who were military sexual trauma survivors such as women's care teams that include primary care, gynecologists, and MST coordinators on them. "My only concern is that we have male patients that have had MST that are not being addressed, and I think that's something that we need to be screening more across the board," she explained. "And that was where I was bringing up my concern about having more peers and more in primary care for screening stuff, because it's easier to open up about certain things."

Continuity and Quality

Turnover of providers and VA's inability to fill vacant positions undermines the quality of veterans' care. Many focus group participants indicated that one of the positive aspects of receiving their mental health care within a VA facility was that the providers were used to working with veterans and attuned to their particular issues. The turnover issues, however, undermines the quality of VA mental health care, veterans indicate, because they feel like they are constantly starting over.

- "One of the biggest things was that doctors come and they leave. They come in and they leave.…It's so bad that you just feel like you're starting over and over and over."
- "You know, during active duty, when I moved from Fort Hood to Fort Drum or to Fort Campbell, every single time, I had to change my provider. But I didn't expect that when I retired and settled down here in Arizona. It's just—it is the same thing over and over again."
- "They keep changing [providers], so … at least the same [group members] are there."
- "You don't have somebody on your side. You'll just get an appointment to see a provider so that you can get started with a treatment. And if that treatment doesn't work, you have to make another appointment, and you see a different provider. So you're getting all kinds of different people involved in this, and you don't have…an advocate on your side, a primary caregiver on the mental health side. … I mean, I've had six different ones because they keep retiring or moving on me, but on the mental health side, you don't have even one primary caregiver."
- "I recently transferred from North Carolina 2 years ago. And I got here, I had a provider in mental health. She took a promotion, and that was a year and a half ago and I haven't got a provider since."
- "Every time I go, I get [a provider], but oops, I'm a be leaving you. So why would I go and sit down with new people every week? It's aggravating. It's very aggravating."
- "The appointment wasn't coming, and they kept saying, well we have walk-ins. So, I did walk-ins for about the first 2 months. And the walk-ins were, I don't know, they were like surface work. Like okay, you're not going to see me next week, but come on, let's talk. And I didn't feel comfortable. Right, right, right, keep on saying it over and over to a different provider."
- "And trauma is about trust. Several people have said that, you know, well, we have to have rapport with, you know, with our treatment provider. Absolutely we do. And it's very damaging to our own treatment to be confronted by a new provider constantly. You know, oh here we go again. This person doesn't understand the context. They don't know the stories. You know the silver lining is, we become very efficient at telling our stories. But, continuity of care is a huge, huge problem, even in what I consider to be a very good region."

Communication

Several veterans, at various locations, noted that communication was a problem among nonmedical staff at VA facilities. For some of these focus group participants, the types of communication problems they identified either were in response to symptoms of their mental health issues or became triggers for symptoms. Some described cycles of poor communication in which inappropriate responses to symptoms triggered more and intensified symptoms. Below are some examples:

- "If you go to my VA where I live, you see that employees are what they call VA'd. They get in the system, and then they stop working and they hide in their cubicle and they won't answer their phones and you see them on their cell phone on Facebook all the time.…So nothing happens. A veteran has to commit suicide or carry a gun in if they want action."

- "One of the things that really outstood to me—and I have PTSD, and you shouldn't be doing this to people that have PTSD—they had two appointments, phone appointments with me and they blew both of them off, and then all of a sudden, that was my fault. So when I called back to make another appointment on the phone with them, they said I had an attitude. And I wasn't doing anything I wasn't supposed to be doing. I was trying to tell them maybe they should make the appointment, and then maybe they'll be able to keep it. When you go out of your way to get help and then they're not available to help you, and the notification of they're not going to be there is never there. I, you know, waited around for the phone call. One was an hour and a half, and that was the second time. And that's when I called them. And then all of a sudden, you know, I have an attitude, so. And that happens all the time."

- "I called patient advocate. And the comment to me, that wasn't their job. They need to read the description of their job. If you're having a problem, call patient advocate. That's in the handbook that's put out by the VA—not by me, not by any other veteran."

- "They get oriented on a thing. They get in a thing, and they already prejudge you. She's saying, she's echoing what I'm saying about how they already have it in their mind about something. Oh, you must be on drugs, what are you taking? Well, I'm not taking anything. Or you're babbling, I don't understand you. Because I have a medical condition that makes me have cognitive trouble talking, right? When I get the vascular flares, it interferes. I have double vision; I've got a bunch of problems that go on. So, I mean, they're not drug-induced, but it's all, like [the other participant] said, they already have their mind, oh, you don't have a medical problem, nothing to see here, move on. You need to calm down. You need to stop being so anxious. Maybe you need to take a pill. I'm like, no, I know what's in my body and I know what's in my mind.

  "I have peripheral neuropathy in my arm now because I was cuffed and everything. All because they wouldn't let me present my First Responder card. All because they didn't know I have a disability. Even though they said are you a veteran, and I showed my ID card, one of the things you really need to do is when you have service-connected disabled veterans, it says on our ID card, service-connected.

"So, everybody in VA-land knows that means we have a disability, right? It doesn't say what kind, but we have one or more disabilities if it says service-connected. So right there, you're under [Americans with Disabilities Act (ADA) regulations]. I feel like people, the cops, the first responders, and the other people that work with you front up are not dealing with you under ADA accommodation. And I carry—I wear two medical alert bracelets for life-threatening anaphylaxis and allergies, and I carry a wallet card and one of my alerts says see wallet card. And I have a First Responder card so that if I have a communication problem with them, they're not to misconstrue it as me being like on street drugs or something like that.

"But they didn't listen, they didn't look at my card. They did a takedown on me, dragged me to the emergency room, I was assaulted, and I've been hospitalized twice with internal injuries and internal bleeding because of how excessive use of force, three-on-one males traumatizing me in the parking lot, 5:00 a.m. in the morning. And he said that's what you get for calling the hotline. I'm going to do this to you all night and keep dragging you back into the emergency room so you can see another doctor. If you leave, I'm going to drag you back again. And if you leave, we're going to keep doing it to you. Yeah. So whatever the training is, they need to be trained on ADA, dealing with violence against women a little differently, dealing with people who have disabilities. There needs to be—you need to ramp up whatever the hotline and whatever the VA campus police are doing. Because having a disability doesn't mean you're a criminal."

Medication

Although many participants talked about how being prescribed medications helped them transition from being in crisis to being able to address their mental health challenges, some veterans expressed concerns about psychiatric medications. These concerns generally revolved around getting refills in a timely manner, concern about undesired effects or ineffectiveness of medication, and being pressured to take medication.

- "I've had some antidepressants, and I've taken them and weaned off them and am doing quite well now."
- "I do all this stuff, and as long as I'm on my medication, it's a fine day. Now, you want to know if everything's working, take me off the medication, you won't like it."
- "In pharmaceuticals, mental health medication in particular, little hiccups can be devastating. So with things like, oh, well, my medication took two weeks to come this time instead of one week meant that I went five days with nothing. And quitting cold turkey on these meds is really serious."
- "I live a long way away from my VA. There's no going and getting, you know, in between meds or anything. If they don't come, they don't come. I've actually spread them out for over two weeks."

- "I prefer not to use medication. My next door neighbor, best friend, retired Marine has taken so much medication on so many different levels that his—they had to stop them for a while because his liver was shutting down. And so, I am really against medication. But when I bring that up to a provider, they act like they don't know what to do then."
- "They're giving me medication, and I don't like this medication, and I don't want to take the medication. I don't want to take any psychotropic medications. But they're forcing me to take it."
- "I was put on antidepressants that have as a major side effect suicidal ideation. I was very resistant to taking any sort of medication., but I was very interested in talk therapy, so I hooked up with a licensed clinical social worker."
- "I found out early on that I could not take the medicine. It made me feel more outside of myself than I did without it. So, I sought community support groups and therapy in the community. I went to the vet center…whatever I could do."
- "It was my experience here the first thing they wanted to do is put everybody I know that came here to the VA…ended up on medication."
- "I have treatment-resistant depression. I've been on 30 different kinds of meds over the past 30 years.

Conclusions

Transition and Eligibility

Congress needs to make it easier for veterans to receive care. Additionally, DoD and VA need to continue to work together to ensure that those separating from military service understand the care to which they are entitled and the process for getting that care. They also need to educate separating service members about the signs and symptoms of various mental health conditions to help them recognize when they might need mental health care. A focus group participant suggested the response should be, "All right, you're instantly in the system instead of having to sit there waiting for multiple years for the care that you need and not being able to recognize the fact that you need the help or afraid to reach out and go hey. We shouldn't have to do that. We fought. It's all well and good, but the VA should do, okay, you're done, let's see what we can do for you right now. Instantly get you in the system the moment you sign out."

Self-Advocacy Skills

Throughout the focus groups, respondents commented on the lack of familiarity with some VA services such as the availability of peer support specialists. In addition to ensuring veterans are equipped with information on eligibility and the accessing of care from an administrative standpoint, VA needs to train veterans in the skills and knowledge needed to advocate for their own mental health care. Health coaches would be a vital asset in developing skills associated with mental health care provider engagement and would improve the efficiency and quality of veterans' access to care. Additionally, public service announcements, online education

resources, and other outreach efforts can prepare veterans to be more proactive in seeking the types of care they believe would be most beneficial to their long-term health.

Family and Support Person Involvement

VA needs to conduct training for providers that focuses on the importance of family involvement in veteran care and that addresses clinically appropriate ways of involving families because, as one focus group participant said, "To help a veteran, is to help everybody who loves that veteran. You know, because if I've got PTSD then everybody who's attached to me is suffering from PTSD in some way."

Additionally, VA needs to provide training to family members, so they can help veterans navigate the VA mental health care system. The National Alliance for Mental Illness (NAMI) Homefront program is an evidence-based program that could assist VA in reaching veterans' families and providing necessary training. This program is an adaptation of NAMI's Family-to-Family program. More than 2,500 family members and friends have participated in the program, either in person or online. A recent study indicated that participants showed significant improvement after participating in the program, regardless of whether participation was in person or online (Haselden et al., 2019). Adoption of the Improve Well-Being for Veterans Act would help in providing grants to support programs such as NAMI Homefront. Secretary of Veterans Affairs Robert Wilke wrote recently, "To make progress, the government needs to reach far beyond its walls and work with as many partners as we can" (Wilke, 2019). He explained:

> *The Improve Well-Being for Veterans Act would allow the VA to support each of these current or potential partners, and get veterans the help they need more quickly than ever before. It would do so by allowing the VA to offer direct grants to these organizations and letting these groups use these resources to tailor aid to the veterans in their communities. And it would allow the VA to make informed decisions about grant funding without adding new, unneeded layers of bureaucracy.* (Wilke, 2019)

Access to Mental Health Care

Improving access to mental health care starts with removing barriers to getting care. Veteran focus group participants offered suggestions for how VA could make it easier for veterans to get care.

- "The providers need to be more forthcoming of what's available."
- "You want to get out to the people, because people that most likely – they're homeless. Why don't you get a darned donut truck with coffee pots on it, go down to the homeless centers, and you'll find a lot of your vets.… Give them donuts and coffee. Give them something, and while you're passing it out, you know…you know, give us literature, so we can hand it to them."
- "So I think there has to be some marketing here, and it has to be done with a certain age group in mind."

VA needs to ensure that veterans have adequate access to mental health care by expanding availability of evening and weekend care, committing to robust use of telehealth, and facilitating easy access to other federally-funded health care facilities. The requirement to provide evening and weekend appointments needs to be met in ways that are in the true spirit of the requirement, rather the minimum way in which a facility can assert that it has met the requirement. The process for attaining same-day and walk-in appointments and the availability of such appointments needs to be consistent across VA. Additionally, VA needs to examine the variability in mental health staffing across the enterprise and work to provide consistent availability of providers in all VA mental health facilities. To complement in-person care, VA needs to create a robust telehealth system that takes mental health care to veterans.

Rural veterans should have seamless access to care provided at federal qualified health centers, critical access hospitals, rural health centers, tribal health centers, and Indian health services. Making care in these types of federally funded facilities easy for veterans to access would expand the pool of care options available to improve veteran care. As Secretary of Veterans Affairs Robert Wilkie (2019) noted,

> *To make progress, the government needs to reach far beyond its walls and work with as many partners as we can. We need to work with veteran service organizations, caregivers and nonprofits at the state and local level who know these veterans, and know their stories. This isn't about building up an army of federal workers; this is about finding ways to reach out to veterans in the communities where they live and work, through people and groups who know the most about what these veterans are going through and understand better than anyone when they might be at risk of hurting themselves.*

Based on feedback from veterans and VA mental health providers during COVER Commission site visits, there is a gap in coordination of care for high-risk veterans. VA has a large number of residential rehabilitation treatment programs (RRTPs) for PTSD, substance use disorders, and homelessness distributed throughout the enterprise, that are providing critical care for some of the most vulnerable veterans. Feedback from veterans and providers was that RRTPs are exceptionally difficult to access and veterans frequently get sent to community care despite RRTP beds being available in neighboring VA facilities.

The feedback from providers and veterans is concerning. In some instances, health care systems with RRTP beds, funded by VISN funds, were not allowing other health care systems within the same VISN to refer veterans due to reasons that were unclear. Furthermore, the feedback included stories of RRTPs applying more stringent admissions criteria for veterans from outside the system, which delayed care for veterans. This issue was particularly acute in the Bay Pines and Palo Alto systems. VA recently released the RRTP handbook in 2019, which has increased uniformity in the admissions process; however, it does not address needs to create and staff a national bed control system that would allow providers to refer veterans to a centralized admissions process. Based on processes defined in VA Directive 1162.02, the system would place referrals in the next available bed closest to their home of record.

Community-Based Care

Veterans reported favorable experiences with VA providers that are specially trained to understand their military experiences. They value care coordination among their care providers within VA. Veterans who split their care between VA and the private sector indicated they had difficulty coordinating their care and would like their private-sector providers and VA providers to be able to communicate directly with each other. VA needs to improve coordination of care among VA and community providers by creating a secure messaging platform to allow for real-time communication.

Peer Support

VA needs to optimize the role of peer support specialist and maximize the effects of the peer support specialist program on veterans' mental health. Veteran focus group participants indicated that they feel most comfortable seeking guidance about mental health issues from other veterans. To optimize the presence of peer providers VA needs to ensure adequate availability of peer support specialists by rectifying the turnover issues related to the role. In addressing the turnover issue, VA also needs to consider potential burnout of peer support specialists and afford them services to mitigate the stresses that cause burnout.

Veteran focus group participants expressed that the main appeal of working with providers who have military service experience is their understanding of the military vernacular and of military life. They did not indicate a strong preference for peers who are recovering from mental health issues. With that in mind, it seems prudent that VA consider expanding its cadre of peer providers by adding a new position—behavioral health technician. This position exists within the DoD health care system and could provide a pipeline for bringing highly trained and skilled individuals into the VA mental health care system. Although these individuals may not necessarily have mental health issues themselves, they have extensive experience working with service members who do and have been service members themselves.

The role of the peer support specialist needs to be standardized enterprisewide. VA needs to use peer support specialists to help veterans understand the mental health services available to them. To help maximize the benefit of peer support specialists, VA should enhance the identification of peer support specialists in VA facilities and educate veterans on the role these providers play, so veterans can take full advantage of the services these individuals provide. To further enhance the program, VA should mandate use of coding that will ensure the time peer support specialists dedicate to the care of fellow veterans is accurately documented. Furthermore, to ensure availability of peer support specialists across the enterprise, they should be designated as a core component of a behavioral health interdisciplinary program. Veterans expressed that when they have an advocate who understands their experience, and when they understand the options available to them, they are better able to navigate the VA mental health care system and receive the care they need. For further discussion of this topic, see Recommendation 8.

Complimentary and Integrative Health

Currently, gym memberships of any sort are specifically excluded from the VA medical benefits package by regulation, and VA cannot provide gym memberships to veterans (38 CFR 17.38,

VA Medical Benefits Package)—either individually or via contract without a regulatory change. Although the VA regulation implements 38 U.S.C. § 1710, Eligibility for Hospital, Nursing Home, and Domiciliary Care, the statute does not restrict or prohibit provision of gym memberships, so no statutory changes would be required. VA should amend 38 CFR 17.38 to remove the restriction on providing gym memberships and create a program for providing mental health patients with vouchers to be used for gym memberships or memberships at facilities such as yoga, pilates, or tai chi studios.

VA also needs to offer uniform availability to CIH modalities and educate veterans about the options available, so they can make informed decisions about their care.

Military Sexual Trauma

Because of the stigma attached to sex crimes and a history of military cover up, veterans say it can be extremely difficult to talk about their experiences. One focus group participant said she had to change providers because her first mental health provider was not sensitive to the fact that it was hard for her to talk about MST. "She was very focused on military sexual trauma and was very negative about my use of a service dog, so I quit seeing her really quickly." Providers need training to help ensure they are equipped to address military sexual trauma in ways that are mindful of the unique power issues that characterize sexual crimes committed in military settings.

Continuity and Quality

Using health care coaches would ensure a comprehensive view of all the care services that a veteran is receiving. As outlined in other recommendations, there are promising treatment modalities available today, but it is difficult to determine exactly what the most effective mix of treatments is in individual situations. A health coach would act as a strong advocate for a veteran, helping providers to offer a finely tuned array of services that suit an individual veteran's needs.

Communication

VA should continue to engage veterans through the use of both traditional and emerging communication channels, including public announcements, social media, community engagement, and other methods deemed valuable. Communication efforts should focus on the availability of services, methods for determining eligibility for care, and developing self-advocacy skills in clinical environments.

Medication

To help ensure veterans use medication optimally, VA should create a fail-safe mechanism to ensure veterans can get emergency medication at nearby facilities when needed. Additionally, VA should work with veterans to devise treatment plans that take into account veteran concerns and preferences as appropriate as discussed in Recommendation 3 and to address concerns about treatment-resistant depression as discussed in Recommendation 5.

Implementation

Legislative Branch

Overarching

- Allow VA to use patient feedback to improve and enhance mental health services in a manner consistent with the private sector by granting relief from the Paperwork Reduction Act for that purpose.

Transition and Eligibility

- Simplify the eligibility criteria and ensure that all separating service members are provided tools for a smooth transition from DoD to VA.

Self-Advocacy Skills

- There are no statutory changes required for this subrecommendation.

Family and Support Person Involvement

- Adopt the Improve Well-Being for Veterans Act to help provide grants to support programs such as NAMI Homefront.

Access to Mental Health Care

- There are no statutory changes required for this subrecommendation.

Community-Based Care

- There are no statutory changes required for this subrecommendation.

Peer Support

- Ensure funding is earmarked specifically for the continued development of peer support specialists.

Complementary and Integrative Health

- Ensure that VA offers an exercise benefit package that is the equivalent of those offered through Medicare Advantage plans by providing veterans receiving mental health treatment with vouchers to pay for facility memberships focused on physical exercise or mindfulness.

Military Sexual Trauma

- There are no statutory changes required for this subrecommendation.

Continuity and Quality

- There are no statutory changes required for this subrecommendation.

Communication

- There are no statutory changes required for this subrecommendation.

Medication

- See Implementation sections for Recommendation 3 and Recommendation 5.

Executive Branch

Overarching

- Use patient feedback to improve and enhance mental health services in a manner consistent with the private sector.

Transition and Eligibility

- Address barriers that contribute to eligibility difficulties in VA. VA should create an online eligibility portal, similar to the VA claims portal, that will allow veterans to upload eligibility documents and track eligibility status.
- Work with DoD and DHS to automatically register eligible combat veterans and recently discharged active duty service members.
- Continue to implement the January 2018 Executive Order aimed at helping remove barriers to ensuring transitioning service members get needed VA treatment during their first year after separation.
- Collect data related to the newly implemented Solid Start program of proactively contacting veterans in their first year after separating to let them know about VA resources and the effects of their policy on key mental health care indicators.

Self-Advocacy Skills

- Train veterans in skills and knowledge needed to advocate for their own mental health care by providing all veterans with an opportunity for an orientation to all mental health services available to them, to include CIH options.
- Examine the process for initiating mental health care and identify issues that may create barriers to their ability to advocate for and initiate mental health care.

Family and Support Person Involvement

- Conduct training for providers on the importance of family involvement in veteran care and that addresses clinically appropriate ways of involving families.
- Provide training to family members, so they can help veterans navigate the VA mental health care system by providing access to NAMI's evidence-based Homefront program.

Access to Mental Health Care

- Collect information on current staffing ratios for outpatient mental health, identify facilities with staffing below the recommended ratio, and create a suspense for addressing such shortages.
- Require that a sufficient number of mental health appointments take place after 6 p.m. or on Saturday and staff accordingly.
- Adopt standard processes for attaining same-day and walk-in appointments and require that facilities staff in a manner that supports reasonable access to both types of appointments for addressing veterans' urgent mental health needs.
- Establish staffing protocols to address the issue of variability in mental health staffing across the enterprise to provide consistent availability of providers in all VA mental health facilities.
- Create a robust telehealth system that takes mental health care to veterans.
- Provide rural veterans seamless access to care at Federally Qualified Health Centers (FQHCs), Critical Access Hospitals, Rural Health Centers, Tribal Health Centers, and Indian Health Services. In FQHCs frequently used by veterans, VA should designate a licensed VA provider and a peer support specialist to assist veterans with connecting with the local VA system for any co-managed care needs.
- Require VA to implement and staff an RRTP national bed control system to allow for a centralized and streamlined admissions process adhering to VA Directive 1162.02, published on July 15, 2019. The bed control system should be visible on the VA intranet, allowing clinicians to see bed availability across a geographic region.

Community-Based Care

- Modify the limitations on the number of visits per referral and the referral process itself to prevent care gaps when veterans receive private-sector care.
- Eliminate situations for which veterans are being taken to collection because of payment issues.
- Improve coordination of care among VA and community providers by creating a secure messaging platform to allow for real-time communication.

Peer Support

- Establish peer support specialists as a necessary component to a behavioral health interdisciplinary program team.
- Use peer support specialists to increase knowledge within the network of veterans about the various mental health treatment options available.

- Improve veteran understanding of the type of assistance peer support specialist provide and enhance their identification within the clinic.

Complementary and Integrative Health

- Amend 38 CFR 17.38 to remove the restriction on providing gym memberships and create a program for providing mental health patients with vouchers to be used for gym memberships or memberships at facilities such as yoga, pilates, or tai chi studios.

Military Sexual Trauma

- Include inquiring about MST as part of the routine screening questions asked of veterans at the beginning of physical and mental health appointments.

- Develop and provide training for providers on MST that focuses on key issues such as how the military power structure contributes to post-MST mental health issues and recovery and how stigma associated with male-on-male MST inhibits survivors from addressing related mental health issues.

Continuity and Quality

- Address concerns about continuity of care and organizational continuity by implementing a provider compensation model that facilitates recruitment and incentivizes continued employment.

Communication

- Provide training to gatekeepers within the VA mental health care system to help them better understand behaviors that might be symptoms of particular diagnoses and to help them communicate with veterans.

- Engage veterans through the use of both traditional and emerging communication channels, including public announcements, social media, community engagement, and other methods deemed valuable and track the effectiveness of various engagement methods to identify those that are most effective.

- Focus communication efforts on highlighting the availability of services, elucidating the methods for determining eligibility for care, and developing self-advocacy skills in clinical environments.

Medication

- Assess availability of care for treatment-resistant depression across the enterprise, and create and implement a plan for ensuring all veterans have access to this type of care.

- See Implementation sections for Recommendation 3 and Recommendation 5.

> "When I was doing yoga here, it helped me with my sleep at night. Like when I'd lay in bed and I'd wake up, like now my first instinct instead of, 'Oh, I should drink a beer,'…I'm like, 'Oh, I should do my breathing exercises.' You know, it's an application of what you learn here to help you in your daily life."
>
> –Focus Group Participant

Recommendation 2: Establish an ongoing research program focused on testing and implementation of promising adjunctive CIH modalities associated with positive mental health, functional outcomes, and wellness that support whole health and the VA Health Care Transformation Model.

Problem

Current VA policy requires use of evidence-based practices in treating mental health issues. Interest in including complementary and integrative health (CIH) modalities in mental health treatment is increasing, so it is important to understand what evidence base already exists for using CIH to treat key mental health issues, particularly as adjunctive treatment, and what areas require additional study.

Background

The National Center for Complementary and Integrative Health defines complementary health approaches as combining nonmainstream health and mental health practices together with conventional medicine. The goal of CIH is to bring together conventional and complementary care approaches in a coordinated way that emphasizes holistic, patient-focused health care and wellness.

The COVER Commission conducted eight evidence-based reviews that focused on the relative benefits CIH interventions to treat individuals with various mental health conditions. VA's Evidence Synthesis Program (ESP) and its National Center for PTSD provided medical librarians and search services for these reviews. The reviews covered multiple CIH interventions for suicide behaviors and the following mental health conditions: post-traumatic stress disorder (PTSD), major depressive disorder (MDD), alcohol use disorder (AUD), opioid use disorder (OUD), Generalized Anxiety Disorder (GAD), bipolar disorder (BD), and insomnia disorder. These conditions were identified by the Comprehensive Addiction Recovery Act legislation (Pub. L. No. 114-198, sec. 931) or by the COVER Commission commissioners as priority conditions to explore in these evidence-based reviews. More information on the scope and methods that guided the completion of these reviews can be found in the protocol.

Findings

Based on the COVER Commission's evidenced-based reviews regarding use of CIH modalities to treat PTSD, MDD, AUD, OUD, GAD, BD, and insomnia disorder, there are either no or few randomized controlled-trial (RCT) research studies related to the efficacy of using CIH modalities in treating these disorders. Below is discussion of the current evidence base as identified using the methodology described above.

Post-Traumatic Stress Disorder

The evidence base included 17 publications (five systematic reviews [SRs] with 49 randomized-control trials [RCTs], plus 12 additional RCTs that met inclusion criteria and addressed one of the following interventions: acupuncture, accelerated resolution therapy [ART], equine therapy, healing touch, meditation, relaxation therapy, transcranial magnetic stimulation [TMS], and yoga). The literature searches did not identify any publications meeting inclusion criteria for the following interventions: art therapy, cannabinoids, chiropractic care, hyperbaric oxygen therapy (HBOT), massage therapy, music therapy, tai chi, therapeutic touch, or training and care of service dogs.

Literature searches conducted by the National Center for PTSD identified 1,630 citations (after duplicates were removed) that potentially addressed the CIH interventions of interest for treating PTSD. Of those, 1,334 were excluded through title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to the study inclusion publication date, or not a full-length article).

This process netted a total of 296 full-length articles for review. Of those, 134 were excluded due to having the wrong patient population (38 studies), the wrong study design (35 studies), the wrong intervention (31 studies), fewer than 20 patients (12 studies), duplicates (11 studies), wrong outcomes (four studies), and more recent and/or comprehensive systematic review available (three studies). An additional 117 studies were excluded during data abstraction. This review included 17 studies reviewed for PTSD.

The evidence suggests that adding acupuncture, ART, equine therapy, exercise, healing touch, meditation, TMS, or yoga to treatment as usual (TAU) is more effective in reducing symptoms of PTSD compared with TAU alone in adults with PTSD. In most studies, TAU included medication therapy to treat PTSD or related symptoms, such as depression, pain or sleep problems. TAU in some studies also included some form of supportive therapy that is not a trauma-focused, evidence-based treatment. The strength of evidence supporting the findings for change in symptoms of PTSD was low for most of the interventions evaluated. However, the strength of evidence was moderate for meditation as the pooled findings for this intervention were more consistent (less evidence of heterogeneity) than observed for other interventions assessed. Acupuncture, ART, exercise, healing touch, and meditation also reduced depression symptoms compared to TAU alone. Exercise and TMS were the only interventions found to be more beneficial than TAU alone in reducing anxiety.

Fewer studies included in the evidence base for this report evaluated the efficacy of adding a CIH intervention to a specific drug or psychotherapy. Three RCTs included in a systematic review by Grant et al. (2018) assessed the addition of acupuncture to paroxetine, and findings

indicate adding acupuncture led to more symptom improvement than paroxetine alone. Findings for one other study in this same review indicated that adding acupuncture to cognitive behavior therapy (CBT) was more effective in reducing symptoms of PTSD than CBT alone. However, the findings of one RCT assessing the efficacy of relaxation therapy suggest that there is no difference between relaxation therapy and Eye Movement Desensitization and Reprocessing in improving symptoms of PTSD, depression, or anxiety or improving quality of life (Carletto, 2018). Findings from this same RCT indicated that CBT was more effective than relaxation therapy in reducing symptoms of PTSD and anxiety. The strength of evidence for the findings from these studies ranged from low to very low.

The strength of evidence for the CIH interventions assessed in this report ranged primarily from low to very low. In general, the strength of evidence was affected by methodological limitations of the studies. The primary limitations were lack of clarity about the randomization process; lack of blinding of patients, treating clinicians, and outcome assessors; and attrition. The strength of evidence was also limited for many of the interventions due to the small number of studies addressing the intervention, small sample sizes, and limited follow-up times. Additionally, variations in the structure and delivery of some of the CIH interventions affected the strength of evidence by causing unexplained heterogeneity in the pooled findings for the intervention.

Opioid Use Disorder

The evidence base included five publications (one SR with nine RCTs, plus four additional RCTs) that met inclusion criteria and addressed acupuncture or exercise therapy. The literature searches did not identify any publications meeting inclusion criteria for the following interventions: ART, art therapy, cannabinoids, chiropractic care, equine therapy, healing touch, HBOT, massage therapy, meditation, music therapy, relaxation therapy, tai chi, therapeutic touch, TMS, training and care of service dogs, or yoga.

Extensive literature searches identified 3,149 citations (after duplicates were removed) potentially addressing the CIH or other interventions of interest for treating OUD. Of those, 3,023 were excluded based on title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to study inclusion publication date, or not a full-length article).

A total of 126 full-length articles were retrieved for review. Of those, 87 were excluded for having the wrong intervention (36 studies), the wrong study design (32 studies), the wrong patient population (12 studies), fewer than 20 patients (10 studies), duplicates (one studies), and wrong setting (one study). Thirty-nine full-length articles were further reviewed for inclusion. Of those, 32 potentially addressed AUD and were discussed in the related review, and two were excluded. Five publications were included in the systematic review for OUD.

Evidence for acupuncture in treating OUD was mixed and varied depending on the control condition. Acupuncture led to greater reduction in opioid cravings when compared to no treatment. However, no difference in cravings was observed between acupuncture (with or without methadone maintenance therapy [MMT]) and sham acupuncture or medication alone. Evidence suggests that acupuncture led to a greater reduction in symptoms of depression when

compared to no treatment or sham acupuncture. No difference in depression or in other psychophysiological outcomes, including sleep, anxiety, or pain, was observed between acupuncture and medication alone (including MMT). Acupuncture plus MMT significantly reduced daily consumption of methadone compared to sham acupuncture plus MMT. No reduction in methadone consumption was observed between acupuncture plus MMT and MMT alone. Few studies reported adverse events. Among the studies that did, most adverse events were mild and related to acupoint discomfort (e.g., slight bleeding, tingling).

The findings of evidence for exercise added to the treatment of individuals with OUD suggest that exercise does not reduce substance use compared to medication maintenance for OUD. However, exercise may help improve physical function among adults with OUD receiving mediation maintenance.

In general, the strength of evidence for acupuncture and exercise was rated low to very low primarily due to limitations in the methodological quality of the studies (lack of blinding, attrition), small number of studies, small sample sizes, lack of precision surrounding the estimated effect sizes, and limited follow-up.

Alcohol Use Disorder

The evidence base included 12 publications (three SRs with 21 RCTs, plus nine additional RCTs) that met inclusion criteria and addressed acupuncture, cannabinoids, exercise, meditation, music therapy, relaxation therapy, and TMS. The literature searches did not identify any publications meeting inclusion criteria for the following interventions: ART, art therapy, chiropractic care, equine therapy, healing touch, HBOT, massage therapy, tai chi, therapeutic touch, training and care of service dogs, or yoga.

Literature searches conducted by ESP identified 3,149 citations (after duplicates were removed) potentially addressing the CIH or other interventions of interest for the treatment of AUD. Of those, 3,023 were excluded based on title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to study inclusion publication date, or not a full-length article).

A total of 126 full-length articles were retrieved for review. Of those, 87 were excluded due to having the wrong intervention (36 studies), the wrong study design (32 studies), the wrong patient population (12 studies), fewer than 20 patients (10 studies), duplicates (one study), and wrong setting (one study). Thirty-nine full-length articles were further reviewed for inclusion. Of those, 29 potentially addressed AUD and are discussed elsewhere, and five were excluded. For this review 12 publications were included.

Limited evidence suggests that acupuncture plus medication leads to improved overall psychological symptoms and symptoms of anxiety compared to sham acupuncture plus medication or medication alone. Limited evidence also suggests that exercise added to the treatment of individuals with AUD may improve symptoms of depression. Additionally, evidence suggests that meditation used in the context of mindfulness-based relapse prevention reduces cravings, post-intervention alcohol or drug consumption, and perceived stress.

No differences were observed between acupuncture plus medication and sham acupuncture (with or without medication) in reducing cravings for alcohol or alcohol consumption after treatment. The findings of one study suggest that disulfiram is more effective than acupuncture alone in reducing immediate (< 8 weeks) symptoms of alcohol withdrawal symptoms. Limited evidence also found no statistically significant difference between Rimonabant (a cannabinoid receptor) and placebo in relapse to any drinking or to heavy drinking. Of the patients receiving Rimonabant, 41.5% relapsed to drinking, and 47.0% of patients receiving placebo relapsed. Similarly, adding exercise, music therapy, or TMS to the treatment of adults with AUD did not significantly improve alcohol-related outcomes compared to controls. Evidence from one RCT suggests that CBT modified to treat adults with co-occurring alcohol dependence and anxiety may reduce the rate of relapse and general symptoms of anxiety compared to relaxation therapy among adults undergoing residential treatment for AUD.

Few studies included information about adverse events. Three studies had sections regarding adverse events associated with acupuncture. Of those, one study found no difference in rate of adverse events, one study reported no adverse events, and one study reported that two patients in the acupuncture group fainted and eight patients in the disulfiram group experienced temporary nausea. The authors of the single study reporting on the use of Rimonabant in the treatment of AUD indicated that the overall safety and tolerance of Rimonabant was good with rates of reported adverse events similar to reports for the placebo group.

The strength of evidence for the CIH and other interventions assessed in this section for use in the treatment of adults with AUD was rated low to very low due to the evidence base for most outcomes consisting of a single study with methodological limitations that generally included lack of clarity about the randomization process; not blinding patients, providers, or outcome assessors; and high attrition. The evidence was further limited by imprecision of the findings and to the relatively short duration of treatment with either no or limited follow-up times. For treatments such as TMS or Rimonabant, this limitation prevented a more comprehensive assessment of adverse events.

Major Depressive Disorder

The evidence base included 16 publications (five SRs with 181 RCTs, plus 11 additional RCTs) that met inclusion criteria and addressed one of the following interventions: acupuncture, creative art therapies, exercise, meditation, music therapy, tai chi, TMS, and yoga. The literature searches did not identify any publications meeting inclusion criteria for the following interventions: ART, cannabinoids, chiropractic care, equine therapy, healing touch, HBOT, massage therapy, relaxation therapy, therapeutic touch, or training and care of service dogs.

Literature searches identified 7,241 citations (after duplicates were removed) potentially addressing the CIH interventions of interest for treatment of MDD. Of those, 6,893 were excluded based on title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to study inclusion publication date, or not a full-length article).

A total of 348 full-length articles were retrieved for review. Of those, 107 were excluded due to having the wrong patient population (27 studies), the wrong study design (26 studies), the

wrong intervention (24 studies), wrong outcomes (13 studies), duplicates (four studies), prior to 2008 (three studies), conference abstracts (three studies, which comprised all studies that included a systematic review), fewer than 20 patients (two studies), more recent and/or comprehensive systematic review available (two studies), wrong comparator (two studies), and protocol (one study). An additional 81 studies were excluded during data abstraction. The MDD systematic review included 26 studies. The evidence suggests that adding art therapy, exercise, meditation, music therapy, or yoga to TAU is more effective in reducing symptoms of depression compared with TAU alone in adults with MDD. One systematic review (k=2) indicated that art therapy in the form of dance movement therapy compared to TAU, provided evidence of reduced depression, but not at a level of statistical significance.

Several studies included in the evidence base evaluated the efficacy of adding a CIH intervention or other nonpharmacologic approaches to a specific drug. Eleven RCTs included in a systematic review by Smith et al. (2018) assessed the addition of acupuncture to different modes of pharmacotherapy and found that the addition of either manual or electro acupuncture with selective serotonin reuptake inhibitors (SSRIs), or manual acupuncture with tricyclic antidepressants (TCAs), led to more symptom improvement than pharmacotherapy alone. Tai chi added to escitalopram for partial responders was more effective in improving depression response and remission rates when compared to a health education program added to escitalopram. Meditation added to pharmacotherapy for individuals with inadequate response to medication alone improved clinician and self-reported depression symptoms as well as anxiety compared to the waitlist and medication group. TMS added to paroxetine improved depression response and remission rates compared to sham TMS added to paroxetine. Both higher- and lower-intensity aerobic exercise as an adjunct to sertraline showed improvement in depressive symptoms compared to sertraline alone.

The findings from 64 RCTs indicated that acupuncture reduced depression severity when compared to TAU, waitlist, no treatment, or control acupuncture (invasive or noninvasive sham). Acupuncture alone compared to medication alone may reduce depression severity, however, it is important to note that there is substantial variation due to different modes of acupuncture and pharmacotherapy examined in the included studies. Five RCTs suggest that electro-acupuncture compared to SSRIs improved depressive symptoms; however, 16 RCTs show no significant difference when comparing manual acupuncture to SSRIs. Neither electro nor manual acupuncture showed significant difference when compared to TCAs, heterocyclic antidepressants, or other antidepressants.

One three-armed RCT (Yeung et al., 2017) indicated that tai chi was more effective than either an education or waitlist control in treatment response, and found better remission rates compared to waitlist; however, Yeung et al. (2012) found no significant difference between tai chi and a waitlist control group. This finding may be due to the small sample size. Both meditation and yoga improved symptoms of depression when compared to a psychoeducation control group; however, yoga compared to TAU or other active control did not reach statistical significance. TMS for patients with treatment-resistant depression, given either alone or as an adjunct to medication, yielded greater improvement in overall symptoms of depression and achieved remission compared to patients who received sham TMS.

The strength of evidence supporting the findings for change in depressive symptoms was low or very low for most of the interventions evaluated. However, the strength of evidence was low to moderate for TMS as the pooled findings for this intervention were more consistent (less evidence of heterogeneity) than observed for other interventions assessed.

The strength of evidence for the CIH and other interventions assessed ranged primarily from low to very low. In general, the strength of evidence was affected by methodological limitations of the studies. The primary limitations were lack of clarity about the randomization process; lack of blinding of patients, treating clinicians, and outcome assessors; and attrition. The strength of evidence was also limited for many of the interventions due to the small number of studies addressing the intervention, small sample sizes, and limited follow-up times. Additionally, variations in the structure and delivery of some of the CIH and other interventions affected the overall strength of evidence by causing unexplained heterogeneity in the pooled findings for the intervention.

Generalized Anxiety Disorder

The evidence base included 10 publications (all RCTs) that met inclusion criteria and addressed one of the following interventions: exercise, massage, relaxation therapy techniques, and TMS. The literature searches did not identify any publications meeting inclusion criteria for the following interventions: ART, acupuncture, art therapy, cannabinoids, chiropractic care, equine therapy, healing touch, HBOT, meditation therapy, music therapy, tai chi, therapeutic touch, training and care of service dogs, or yoga.

Literature searches identified 1,413 citations (after duplicates were removed) potentially addressing the CIH interventions of interest for the treatment of GAD. Of those, 1,293 were excluded based on title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to study inclusion publication date, or not a full-length article).

A total of 118 full-length articles were retrieved for review. Of those, 104 were excluded due to having the wrong patient population (66 studies), the wrong study design (21 studies), the wrong intervention (11 studies), fewer than 20 patients (three studies), more recent/comprehensive systematic review available (two studies), and wrong outcomes (one study). An additional four studies were excluded during data abstraction.

The findings suggest that massage therapy as monotherapy significantly improved clinician-rated symptoms of anxiety and depression immediately following treatment compared to an active control of light touch. Studies of exercise as an adjunct to pharmacotherapy suggest that adjunctive exercise improves worry symptoms, quality of life, and sleep symptoms among patients diagnosed with GAD. More specifically, resistance exercise training (RET) statistically significantly reduced feelings of anxiety-tension and the frequency and intensity of irritability. While not reaching statistical significance, both RET and aerobic exercise training (AET) also improved trait anxiety, concentration, depressive symptoms, fatigue, vigor, and the intensity of pain with effects being larger for RET compared to AET, albeit not significantly so. Studies indicated unilateral active repetitive transcranial magnetic stimulation (rTMS) (delivered at any frequency) as an adjunctive treatment statistically significantly reduces symptoms of anxiety,

worry, and depression compared to sham rTMS. Response and remission rates were also greater for patients in the active treatment group. Some adverse events for rTMS were found with facial twitching as the most commonly reported among patients receiving active rTMS, followed by some form of pain (including neck pain, pain at stimulation site, facial pain, or toothache), a pin prick sensation, headache, or dizziness. One patient experienced a serious adverse event, a generalized tonic-clonic seizure during the 20th rTMS treatment; however, the patient did fully recover and was able to complete the study.

RCTs demonstrated that applied relaxation (AR), which includes psychoeducation and tension awareness, tension-release training, relaxation by recall and by counting, and condition relaxation, is as efficacious as cognitive behavioral therapy (Dugas et al., 2010), acceptance-based behavioral therapy (Hayes-Skelton, Roemer, & Orsosillo, 2013), and worry exposure (Hoyer et al., 2009) in treating GAD. The Dugas et al. study showed that CBT led to continued improvement over the 2 years following the end of treatment compared to AR. These treatments are comparably credible and acceptable to participants. Conrad, Isaac, and Roth (2008) compared AR with waitlist controls and demonstrated that AR significantly improves symptoms of anxiety and worry compared to the waitlist, but this pattern of improvement does not apply to symptoms of depression. Janbozorgi, Zahirodin, Norri, Ghafarsamar, and Shams (2009) compared relaxation therapy with controls and demonstrated relaxation therapy leads to significant improvement in symptoms of anxiety, worry and depression compared to the control group. Overall, the studies looked at the following outcomes: symptoms of anxiety, worry, depression, emotional stability, somatic symptoms, cognitive symptoms, clinical global improvement, quality of life, functional status, and patient satisfaction. These AR studies had many study limitations related to risk of bias (RoB) that limited the strength of evidence such as lack of proper randomization, different populations, therapist bias, measurement differences, and generalizability issues. The overall strength of evidence varied from moderate (Conrad et al., 2008; Hayes-Skelton et al., 2013; Hoyer et al., 2009) to low (Dugas et al., 2010) to very low (Janbozorgi et al., 2009). The findings of these five RCTs showed that relaxation therapy techniques may lead to an improvement in symptoms of anxiety, worry, depression, emotional stability, stress, ego strength, feeling of security, and personality resulting in an improvement in quality of life and functional status in patients with generalized anxiety disorders. Because the most discriminative somatic symptom of GAD, compared to other anxiety disorders is muscle tension, muscle relaxation therapy proves to be an effective treatment option for symptom reduction in GAD patients. No harms or adverse events were reported for the relaxation treatment.

Bipolar Disorder

The studies in this evidence-based review included individuals with a diagnosis of Bipolar I and II but excluded individuals with unipolar depression. The overall evidence base included nine publications (all RCTs) that met inclusion criteria and addressed one of the following interventions: meditation and TMS. The literature searches did not identify any publications meeting inclusion criteria for the following interventions: acupuncture, ART, cannabinoids, art therapy, chiropractic care, equine therapy, exercise, healing touch, HBOT, massage therapy, music therapy, relaxation training, tai chi, therapeutic touch, training and caring for service dogs, or yoga.

Literature searches identified 578 citations (after duplicates were removed) potentially addressing the CIH interventions of interest for the treatment of BD. Of those, 512 were excluded based on title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to study inclusion publication date, or not a full-length article).

A total of 66 full-length articles were retrieved for review. Of those, 49 were excluded due to having the wrong study design (17 studies), fewer than 20 patients (13 studies), the wrong comparator (seven studies), the wrong patient population (six studies), the wrong intervention (two studies), wrong outcomes (two studies), and not written in English (two studies). An additional eight studies were excluded during data abstraction. A total of nine studies were included in the systematic review for BD.

Overall, there is no significant evidence to support using rTMS, transcranial direct current stimulation (tDCS), nor meditation/mindfulness therapy as adjuncts to TAU for treating the depressive phase of BD.

For mindfulness meditation, the evidence-based reviews of the literature identified 1 RCT that met criteria and assessed the use of meditation in the treatment of adults with BD. The study by Perich, Manicavasagar, Mitchell, and Ball (2013) assessed the effect of the quantity of mindfulness meditation practice on the psychiatric symptoms of adults following an 8-week course of mindfulness-based cognitive therapy (MBCT). MBCT is a manualized group psychotherapy that combines the practices of mindfulness meditation with cognitive therapy. The patients attended 8 weekly group sessions and were expected to do homework assignments as well as have daily formal meditation practices. This study followed patients for 12 months and assessed whether the self-reported frequency (dose) of meditation practice during the follow-up period affected depression, mania, or anxiety. Using the Cochrane tool, the RoB of Perich et al. (2013) was identified as *Some Concerns* due to lack of participant blinding, outcome measurement, and imprecision due to small sample size. The findings from Perich et al. (2013) are insufficient to recommend for or against mindfulness meditation-based intervention as a stand-alone, self-administered adjunctive therapy to medication. At 12 months follow-up, the number of days practicing mindfulness meditation was significantly inversely correlated with clinician-determined depression scores in individuals who practiced mindfulness meditation once a day at least 3 or more times/week showing a significant improvement in clinician-determined depression. For patients treated with MBCT and pharmacotherapy, those who meditated more frequently during treatment had lower scores for depression. The overall strength of evidence for increased frequency of mindfulness meditation as part of a MBCT therapy was very low to low.

Searches of the literature on transcranial stimulation identified for the treatment of adults with BD identified one RCT that met criteria and assessed the use of direct cranial stimulation and seven RCTs on the use of rTMS.

The searches identified one RCT using tDCS by Sampaio et al. (2018) that met criteria for inclusion. The researchers conducted a randomized, sham-controlled, double-blind trial involving 59 adult outpatients with Type I or II BD in a major depressive episode who were on

a stable pharmacologic regimen. Participants were randomized to 10 daily 30-minute, 2-mA, anodal-left and cathodal-right prefrontal sessions of active or sham tDCS on weekdays and then one session biweekly until week 6. Hamilton Depression Rating Scale (HDRS)-17 scores were measured at baseline and at 2, 4, and 6 weeks. The investigators found that the cumulative response rates were higher in the active vs sham groups, but changes in remission rates were not significant. Adverse events, including treatment-emergent affective switches, were similar between groups, except for localized skin redness that was higher in the active group. The authors reported the active tDCS treatment did not result in an increase in hypomanic or manic episodes.

The literature search identified an additional seven RCTs on TMS that met inclusion criteria for the systematic review. Fitzgerald et al. (2016) studied 49 patients with BD and a current episode of treatment resistant depression by DSM-IV criteria. The RCT, evaluated the therapeutic efficacy of quetiapine plus sequential bilateral rTMS versus quetiapine alone in a two-arm randomized parallel design trial of active sequential bilateral stimulation versus sham treatment. They found no significant difference in mean reduction of depression scores or response rates.

Hu et al. (2016), performed a randomized trial in 38 BD II depressed patients. They randomly assigned patients to three arms: left high frequency (12 patients), right low frequency (12 patients), and sham treatment (12 patients). Patients were evaluated at baseline and weekly for 4 weeks. All groups showed a decrease in HDRS-17, and Montgomery–Åsberg Depression Rating Scale score over the study period but did not differ among the three groups. This result indicated that active rTMS combined with quetiapine was not superior to quetiapine alone in improving depressive symptoms in patients with BD.

Myczkowski et al. (2018) studied 43 patients diagnosed with BD I or II according to DSM-IV criteria. Participants were randomized to receive 20 sessions of active (55 trains, 18 Hz, 120% resting motor threshold intensity) or sham rTMS. At baseline, 4 weeks, and 8 weeks, patients were tested with a battery of 20 neuropsychological assessments. Cognitive improvement was shown in all domains. It occurred in all intervention groups and was independent of depression improvement. No correlations with depression (baseline or during treatment) and cognitive improvement was found.

Praharaj, Ram, and Arora (2009) performed a prospective, hospital-based, single-blind randomized trial to evaluate the efficacy of adjunctive right prefrontal high-frequency suprathreshold rTMS compared to sham treatment in 41 BD patients with mania (by ICD-10). All patients were receiving similar pharmacotherapy treatment as selected by the treatment team. The investigators found that rTMS was well-tolerated and that the mania remission rate was higher for the active rTMS patients (100%) compared to sham treatment (65%, p=0.003). One of the active rTMS patients developed depression during the study while none of the sham patients developed clinical depression. The most common adverse events were transient pain, headache, or dizziness.

Rohan et al. (2014), performed a double-blind, sham-controlled trial to evaluate the effects of left front medial TMS in stable depressed patients with either BD (41 patients) or MDD

(22 patients). Subjects received a single, 20-minute treatment. Change in mood was assessed immediately afterward using a visual analog scale (VAS), the 17-item Hamilton Depression Rating Scale (HDRS-17), and the Positive and Negative Affect Schedule Scales. Participants experienced nonsignificant improvement in mood, as measured by the VAS and the HDRS-17, following low field magnetic stimulation treatment as compared to sham treatment for BD. It is important to note that the outcome differences were not statistically significant in primary analyses of results on BD alone and were only significant in secondary analyses combining data across both diagnostic groups (BD and MDD).

Tavares et al. (2017) conducted a randomized sham-controlled trial to evaluate the efficacy and safety of deep TMS (dTMS) in 50 treatment-resistant bipolar patients on stable pharmacotherapy. Patients received 20 sessions of active or sham dTMS over the left dorsolateral prefrontal cortex (H1-coil, 55 18 Hz 2 s 120% MT trains). The primary outcome was changes in the 17-item HDRS from baseline to endpoint (week 4). Secondary outcomes included changes from baseline to the end of the follow-up phase (week 8), and response and remission rates. Out of 50 patients, 43 finished the trial. There were two and five dropouts respectively in the sham and active groups. Active dTMS was found to produce a greater reduction in depression than sham at treatment end point but not at follow-up. Remission rates were not statistically different. No treatment-emergent mania switch episodes were observed.

Yang et al. (2019) conducted an RCT on 52 participants with BD to evaluate the efficacy of rTMS. Participants randomized to active rTMS received high-speed magnetic stimulation for 10 consecutive days for a total of 25,000 stimuli applied over the left dorsolateral prefrontal cortex at 110% of the motor threshold. The sham group received corresponding sham stimulation. Clinical manifestations and cognitive functions were assessed using a modified 24-item HDRS, the Young Mania Rating Scale (YMRS), and the MATRICS Consensus Cognitive Battery (MCCB). After 10 days of treatment, the active rTMS group had improved scores on the Wechsler Memory Scale-III Spatial Span, and the MCCB Category Fluency subtest, without intolerable adverse effects. No significant differences in HDRS or YMRS scores were found between active and sham groups. The study was limited by lack of follow-up after the intervention.

The findings from this evidence-based review suggest that there is insufficient evidence to determine whether rTMS offered as an adjunctive therapy is effective for the treatment of the mania or depression symptoms in patients with BD. It is important to note that the rTMS study methodology varied by frequency of stimulation (Hz), location and laterality of stimulation, intensity of stimulation, and duration of treatment. The small number of patients treated and the inconsistent rTMS methodology make evaluation of the study results challenging. Further research is needed.

Suicidal Behavior

The overall evidence base for using CIH for treating patients with risk of suicide included three RCTs that met inclusion criteria and addressed the following interventions: exercise, relaxation training, and TMS. The literature searches did not identify any publications meeting inclusion criteria for the following interventions: acupuncture, ART, cannabinoids, creative art therapy,

chiropractic care, equine therapy, healing touch, HBOT, massage therapy, meditation, music therapy, tai chi, therapeutic touch, training and caring for service dogs, or yoga.

Literature searches conducted by ESP identified 7,241 citations (after duplicates were removed) potentially addressing the CIH or other interventions of interest for the treatment of individuals at risk of suicide or for the treatment of MDD. Of those, 6,893 were excluded based on title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to study inclusion publication date, or not a full-length article).

A total of 348 full-length articles were retrieved for review. Of those, 107 were excluded due to having the wrong patient population (27 studies), the wrong study design (26 studies), the wrong intervention (24 studies), wrong outcomes (13 studies), duplicates (four studies), all studies included in systematic review were published prior to 2008 (three studies), conference abstracts (three studies), fewer than 20 patients (two studies), more recent and/or comprehensive systematic review available (two studies), wrong comparator (two studies), and protocol (one study). An additional 102 studies were excluded during data abstraction.

Five publications were included in the systematic review for risk of suicide. Evidence from one RCT suggests that both relaxation training and brief dialectical behavioral therapy significantly reduced suicidal ideation and symptoms of depression and anxiety with no significant differences between interventions. The findings of the RCTs on high-frequency TMS suggest that it is feasible and safe among inpatients admitted for suicidal crisis. Suicidal ideation and symptoms of depression and PTSD were significantly reduced for both patients who received active and sham rTMS with no significant difference between groups. Bilateral TMS was found to be more effective in reducing and/or resolving suicidal ideation than sham TMS. Adverse events were minimal, with no differences in type or severity between active or sham rTMS. Headache was the most frequently reported event. Evidence from one RCT suggests that exercise as an adjunct to CBT led to significantly greater improvements in suicidal ideation and depression compared to CBT alone.

The strength of evidence for relaxation training was rated very low and TMS was rated low to very low due to limitations in the methodological quality of the studies (lack of blinding, attrition), small number of studies, small sample sizes, lack of precision surrounding the estimated effect sizes, and limited follow-up. The strength of evidence for exercise was rated low due primarily to limitations in the methodological quality of the study (lack of blinding, attrition), small number of studies, small sample size, and lack of follow-up.

Insomnia Disorder

The evidence base included 23 publications (five SRs with 69 RCTs, plus 18 additional RCTs) that met inclusion criteria and addressed one of the following interventions: acupuncture, cannabinoids, exercise, massage therapy, meditation, yoga, music, tai chi, relaxation therapy, and TMS. The literature searches did not identify any publications meeting inclusion criteria for the following interventions: ART, art therapy, chiropractic care, equine therapy, healing touch, HBOT, or training and care of service dogs.

Literature searches identified 969 citations (after duplicates were removed) potentially addressing the CIH interventions of interest for the treatment of insomnia disorder. Of those, 800 were excluded based on title and abstract review for clearly not meeting inclusion criteria (e.g., not pertinent to the topic, not published in English, published prior to study inclusion publication date, or not a full-length article).

A total of 169 full-length articles were retrieved for review. Of the 169 articles retrieved for full text review, 85 were excluded due to having the wrong patient population (49 studies), the wrong study design (24 studies), wrong comparator (four studies), fewer than 20 patients (two studies), more recent/comprehensive systematic reviews available (two studies), wrong outcomes (two studies); or were not written in the English language (two studies). The systematic review included 23 peer reviewed articles for insomnia disorder.

The evidence suggests that acupuncture, massage, relaxation therapy techniques, tai chi, yoga, meditation, and exercise either as monotherapy or added to TAU are all more effective in reducing symptoms of insomnia compared with sham and passive control treatments in adults with insomnia disorder. The evidence from one study suggests that TMS was more effective in reducing insomnia symptoms, relapse rates, and recurrence rates when compared to both medication (estazolam) and psychotherapy (CBT). In most studies, TAU included medication therapy to treat insomnia symptoms or sleep hygiene education. Acupuncture, TMS, meditation, and music therapy were found to be effective in improving sleep parameters (e.g., sleep quality, sleep onset latency, total sleep time). Meditation led to more improvement in sleep parameters when compared to inactive controls and was about as effective as active controls. Yoga was comparable to passive stretching and waitlist control in improving sleep patterns as well as symptoms of anxiety and depression. Overall, the interventions were not found to be more effective than controls in reducing symptoms of anxiety or depression in those diagnosed with insomnia disorder. It is unclear whether cannabinoids are effective in improving insomnia severity or sleep quality. Most of the included studies did not report on adverse events; however, some information on adverse events was available for acupuncture, cannabinoids, and relaxation therapy techniques. Acupuncture interventions only resulted in a few mild adverse events including redness and slight pain at the acupoint sites. The most frequently reported adverse events related to cannabinoids included dry mouth, nausea, and somnolence. Finally, the study on relaxation therapy techniques (Duman, 2018) found no physical or psychological adverse events among participants.

Conclusions

Based on comprehensive evidence-based reviews of CIH and other modalities, further research is needed to solidify the strength of evidence of these modalities for each of the eight mental health conditions. It is important to note and leverage existing evidence-based synthesis reviews conducted by VA that fall outside the scope of this work but are critically related and were therefore used in making recommendations (e.g., reviews of pain management programs and CIH). Although the COVER Commission examined eight mental health conditions, there are many others that could be considered when examining the evidence for CIH treatments, such as schizophrenia, other serious mental illnesses, and anxiety disorders such as obsessive-compulsive disorder. Although the commission was limited in the scope of the conditions it

could consider, research should continue in these areas with respect to CIH modalities. Conclusions related to each diagnostic category are reported below.

Post-Traumatic Stress Disorder

VA should fund/conduct research related to CIH treatment interventions and PTSD, particularly multisite trials. There were no randomized, controlled-trials research studies for PTSD outcomes with the following modalities: art therapy, cannabinoids (RCT conducted but never published), chiropractic care, HBOT (two RCTS containing small percentage of PTSD patients but PTSD subgroups were not separately analyzed), massage therapy, music therapy, tai chi, and service dogs. The following modalities had low strength of evidence with respect to PTSD outcomes due to methodological and study design issues so further studies may be required: ART, acupuncture, equine therapy, exercise, healing touch, relaxation therapy, and TMS.

To mirror how treatment is generally provided in clinics, VA should fund/conduct research studying CIH modalities as an adjunct treatment to evidence-based PTSD psychotherapies and medications. For example, acupuncture could be studied as an adjunctive treatment to standard PTSD clinical care (i.e., PTSD psychotherapy plus acupuncture).

Including structured or manualized forms of meditation as routinely available adjunctive treatment interventions for PTSD, such as mindfulness-based stress reduction or mantra meditation, could be helpful based on existing evidence.

Opioid Use Disorder

Based on the reviews, VA should fund/conduct research related to CIH treatment interventions and OUD, particularly multisite trials. There were no randomized, controlled trials research studies for OUD outcomes with the following modalities: ART, art therapy, cannabinoids, chiropractic care, equine therapy, healing touch, HBOT, massage therapy, meditation, music therapy, tai chi, relaxation therapy, service dogs, TMS, and yoga. Exercise and some acupuncture studies had low strength of evidence with respect to OUD outcomes due to methodological and study design issues so further studies may be required. Acupuncture with OUD had moderate evidence with reducing depression but not any of the OUD-specific outcomes (e.g., cravings, methadone consumption).

VA should fund/conduct more research with OUD patients to ensure prevention of overdose (e.g., naloxone and CIH modalities). VA also should leverage pain management research that exists and conduct studies with these modalities that include patients with OUD. For example, although yoga has shown to be helpful with pain management, there are no studies that focus on yoga and OUD. Finally, VA should conduct studies with medication-assisted treatment (e.g., Naltrexone and Suboxone) and CIH modalities, building on the services VA is already delivering.

Alcohol Use Disorder

VA should fund/conduct studies related to CIH treatment interventions and AUD, particularly multisite trials, as well as studies that focus on AUD prevention using CIH modalities, given the public health issue of alcohol use among veterans. VA should also build on the services it is

already delivering by conducting research on medication-assisted treatment for alcohol use and CIH modalities. There were no randomized, controlled-trials research studies for AUD outcomes with the following modalities: ART, art therapy, chiropractic care, equine therapy, healing touch, HBOT, massage therapy, therapeutic touch, yoga, tai chi, and service dogs. Acupuncture, cannabinoids, exercise, meditation, music therapy, relaxation therapy, and TMS studies had low strength of evidence with respect to AUD outcomes due to methodological and study design issues, so further studies may be required. There is some limited evidence to suggest that meditation used in the context of mindfulness-based relapse prevention reduces cravings, postintervention alcohol or drug consumption, and perceived stress.

Major Depressive Disorder

VA should fund/conduct research related to CIH treatment interventions and depression, particularly multisite trials. There were no randomized, controlled trials research for depression outcomes with the following modalities: ART, cannabinoids, chiropractic care, equine therapy, healing touch, HBOT, massage therapy, relaxation therapy, training and care of service dogs, and therapeutic touch. Creative arts, exercise, meditation, music, tai chi, and yoga had some positive results, yet low strength of evidence with respect to depression outcomes due to methodological and study design issues, so further studies may be required. Acupuncture and rTMS used for those with depression had moderate evidence of reducing some depression-related outcomes. Further pragmatic trials with CIH modalities are needed given that those with depression are often receiving concurrent evidence-based treatments.

Generalized Anxiety Disorder

VA should fund/conduct research related to CIH treatment interventions and GAD, particularly multisite trials, as well as studies that take a transdiagnostic approach with respect to anxiety, thereby including symptoms with shared variance across CIH modality studies. There were no randomized, controlled-trials research studies for GAD outcomes with the following modalities: ART, acupuncture, art therapy, cannabinoids, chiropractic care, equine therapy, healing touch, HBOT, meditation, music therapy, tai chi, service dogs, therapeutic touch, and yoga. Exercise, massage, relaxation therapy, and rTMS studies had some promising results, yet low strength of evidence with respect to GAD outcomes due to methodological and study design issues so further studies may be required.

Bipolar Disorder

VA should fund/conduct research related to CIH treatment interventions and BD, particularly multisite trials. There was no randomized, controlled trials research for BD outcomes with the following modalities: ART, acupuncture, art therapy, cannabinoids, chiropractic care, equine therapy, exercise, healing touch, HBOT, massage, music therapy, relaxation, tai chi, service dogs, therapeutic touch, and yoga. Meditation studies had some promising results, yet low strength of evidence with respect to BD outcomes due to methodological and study design issues, so further studies may be required. Some rTMS studies used in those with BD had moderate evidence of reducing some BD-related outcomes.

Suicidal Behavior

VA should fund/conduct research related to CIH treatment interventions and suicide risk, particularly multisite trials. VA should fund/conduct research studying CIH modalities as an adjunct treatment to evidence-based psychotherapies for suicide risk and medications, because these trials would mirror how treatment is generally provided in clinics. For example, TMS could be studied as an adjunctive treatment to CBT. There was no randomized, controlled trials research for suicide risk outcomes with the following modalities: ART, acupuncture, art therapy, cannabinoids, chiropractic care, equine therapy, healing touch, HBOT, massage therapy, meditation, music therapy, tai chi, therapeutic touch, service dogs, and yoga. The following modalities had low strength of evidence with respect to suicidal ideation outcomes due to methodological and study design issues so further studies may be required: exercise (outdoor therapy), relaxation training, and TMS. Exercise was examined in conjunction with CBT vs. CBT alone, and demonstrated potentially promising results yet further research is needed. Bilateral TMS seemed most promising for suicidal ideation, but further study is needed.

Insomnia Disorder

VA should fund/conduct research related to CIH treatment interventions and insomnia, particularly multisite trials. There was no randomized, controlled trials research for insomnia outcomes with the following modalities: ART, art therapy, chiropractic care, equine therapy, healing touch, HBOT, and service dogs. Cannabinoids, exercise, massage, relaxation, rTMS and yoga, studies had some promising results, yet low strength of evidence with respect to insomnia outcomes due to methodological and study design issues, so further studies may be required. Some acupuncture, meditation, music therapy, tai chi and yoga studies used in those with insomnia had moderate evidence of reducing some insomnia-related outcomes.

Implementation

Legislative Branch

- Require VA to conduct research on use of CIH modalities related to PTSD, OUD, AUD, MDD, GAD, BD, suicidal behavior, and insomnia disorder. In addition, require VA to conduct formal searches on CIH modalities related to other important mental health conditions not conducted by the COVER Commission such as schizophrenia, other serious mental illnesses, and other anxiety disorders, because these conditions are also important to consider.

- Require that results of CIH studies are made accessible to providers and patients so that they can be easily disseminated and can lead to shared decision making (e.g., by creating decision support tools or patient-facing pamphlets with consolidated information or online trainings for providers interested in learning about the efficacy of CIH for mental health conditions).

Executive Branch

- Provide assistance with oversight and implementation research on use of CIH modalities related to PTSD, OUD, AUD, MDD, GAD, BD, suicidal behavior, and

insomnia disorder (and other relevant mental health disorders) by involving VA federal advisory committees, including the Special Medical Advisory Group, National Research Advisory Council, Advisory Committee on the Readjustment of Veterans, and Advisory Committee Management Office. These groups should address CIH research needs for veterans.

- Establish a collaborative VA and DoD oversight committee that would lead to joint funded research and ultimately development of a center for integrative health research (e.g., warrior care mental health collaborative).
- Create grant mechanisms that support CIH research in mental health that fund large-scale, pragmatic research in veteran health care systems that are modeled after the Pain Management Collaboratory and are jointly supported by NIH, DoD, and VA.
- Fund and conduct studies of CIH modalities used as an adjunct treatment to evidence-based psychotherapies and medications to mirror how treatment is generally provided in clinics.
- Fund and conduct studies that include veterans with military sexual trauma (MST) exposure to address the paucity of studies involving individuals with MST and use of CIH modalities.
- Fund and conduct implementation science studies that focus on how to best integrate CIH modalities in current standard practice in mental health and primary care using multisite trials when possible.
- Prioritize modalities for studies that can positively affect multiple comorbidities simultaneously and have a track record of safety.
- Ensure that all studies include adequate representation of women (at least 20%) and racial/ethnic minorities, and when appropriate for the research topic, over sample key demographic subgroups to ensure that these groups are adequately represented in research.
- Address barriers (such as logistical barriers, systemic barriers, and stigma) to conducting CIH research to accelerate information that can be gleaned from these studies.
- Establish a committee of veterans to provide ongoing feedback on VA-funded research on CIH. The purpose of this committee would be to assure that VA research is developed and funded as informed by veteran preference and needs. The committee should include a diverse group of veterans who represent current populations and offer sufficient representation across gender, race/ethnicity, and age.
- Examine mental health and functional outcomes of residential programs and intensive outpatient programs that integrate mental health plus a combination of CIH modalities compared to similar mental health programs that do not have a CIH component.

- Fund studies of whole health implementation that specifically examine mental health and functional outcomes.

- Request and fund a consensus study by the National Academy of Medicine on salutogenesis models of research. The study should develop a framework for setting priorities and optimizing methodologies focused on building resilience, enhancing health promotion, improving function, and fostering well-being, rather than using a pathogenic (disease treatment) model. The study should explore the rationale, approaches, priority process and ways to enhance funding of studies on how veterans can better enhance their existing resilience capacity, ability to enhance well-being, and tap inherent healing and recovery processes of veterans.

- Conduct trials leveraging remote technology, given that many of these CIH modalities require the interventions multiple times a week and in-person trials may not be pragmatic for those with busy schedules or in rural areas.

> "The whole health initiative is kind of that integration with everybody on board and then getting everybody kind of educated and connected on that. I like that idea."
>
> –Focus Group Participant

Recommendation 3: Transform the current VA health care delivery model into one that is person-centered, relationship-based, and recovery-focused and support this transformation with a payment system that is value-based and incentivized for continuous innovation and quality improvement.

Problem

Research indicates that treatment produces better outcomes when patients are involved in setting priorities for their care, yet VA lacks a systematic protocol for ensuring that veterans' care focuses on what matters most to them. For treating acute disease and saving lives, VA's current disease-oriented model of care is stellar and VA should not abandon it. For the management of chronic and complex disease, however, this approach is failing and a recovery-focused model should replace it (Jonas, Chez, Smith, & Sakallaris, 2014).

Currently, VA health care requires numerous transactional processes that drive volume over value and consume appointment times that could be spent on providers building relationships with their patients as a foundation for optimal care.

Health care in the United States was built on and still largely operates using a fee-for-service, pills-and-procedure payment system that encourages high volumes of treatment delivered at late stages of disease, with expensive approaches (Shrank, Rogstad, & Parekh, 2019). This reality exists even in fully capitated systems, such as the VA and DoD health care systems, which use relative value units (RVUs) to track and cover workload even though they pay for the entire cost of care over a lifetime. Value-based models that use overall outcomes as the basis of payment, however, have been shown to lower costs, improve health, and enhance quality when properly applied (Centers for Medicare & Medicaid Services, 2019c). VA needs to shift to a total value-based method for covering services with value measured by using the quadruple aim framework.

The accelerating changes in science, technology, and the health care delivery environment require flexible continuous transformation processes that encourage and support innovation and sustained improvement. Although VA has processes in place for innovation and improvement, they are not sufficiently focused on transformation nor uniformly applied. There is no question that over the last 2 decades, VA health care has improved. VA delivers better

quality care, on average, than private-sector systems for most outcomes and on many quality measures. The COVER Commission reviewed all studies comparing quality and outcomes in VA to the private sector. Of the 295 outcomes comparisons found, 171 (57.9%) outcomes were better in VA than the private sector; 75 (25.4%) outcomes were better in the private sector compared to VA; and 49 (16.6%) outcomes showed no difference between VA and the private sector. In the crucial areas of access and wait times, VA lagged the private sector in 2014, but by 2017, VA surpassed the private sector in all except a few specialty services. The relative outcomes in mental health, behavior change, and complementary and integrative health (CIH), however, are poorly measured both in and out of VA. The quality of care and outcomes varies considerably across VA (RAND, 2011). Improvement based on leading indicators requires more robust and continuous leadership training and support. To shift from the current model of care to a person-centered, relationship-based, and recovery-focused model, these processes for transformation need to be enhanced and focused specifically on changing the model throughout VA.

Background

Person-Centered Care

Almost 2 decades ago in 2001, the then Institute of Medicine, now the National Academy of Medicine (NAM), issued a landmark study called *Crossing the Quality Chasm (*Institute of Medicine, 2001). That study indicated that the most important component in quality health care delivery was making the patient the source of control, while embedded in a continuous healing relationship. In other words, care should be person-centered (Wolfe, 2001). This recommendation, and other recommendations before and after, created continuing momentum within health care called patient-centered care, such as the Patient Centered Medical Home.

Two other trends have reinforced the importance of this recommendation. First, is the ongoing data collection and examples in quality improvement circles showing the effect taking such a patient-centered approach has on the quadruple aim (Bodenheimer & Sinsky, 2014; Feeley, 2017). The COVER Commission saw examples of these trends during visits to the Institute for Healthcare Improvement and other organizations. The key value is in asking the patient *what matters* and not just *what's the matter* (Barry & Edgman–Levitan, 2012; Bisognano, 2019).

Another trend is the emerging science of behavior change. It is now known that 60 to 70% of chronic illness is linked to lifestyle and behavior or social needs and the social determinants of health (Centers for Disease Control and Prevention, 2019; Kindig, Booske & Remington, 2010; Robert Wood Johnson Foundation, 2016). Most health care professionals are neither trained nor see it as their responsibility to implement the science of behavior change. Although mental health problems can exacerbate challenges in behavior change, facilitation of behavior is needed by all individuals, whether they have a mental health diagnosis or not. Success in behavior change requires taking into account the core motivations of individuals—what matters— and the behaviors that are meaningful and feasible in their lives. Mental health and behavioral therapists address some of this science through techniques such as motivational interviewing, but this approach alone is inadequate for successful, long-term behavior change (National Institutes of Health, n.d.). To fill this gap, a number of other approaches have emerged. These approaches include group visits as a key behavior change driver and a new discipline called

health coaching as a key specialty in health care delivery that specifically focuses on behavior change support (Geller et al., 1999; National Board for Health & Wellness Coaching, n.d.).

The complexity of navigating an increasingly specialized and fragmented health care system requires a different type of enhanced care coordination than in the past (Health, 2017). Health care navigators (often involving peer specialists) can facilitate access to existing services and personalize them to the specific needs of individual veterans at their point and time of care. These enhanced coordination services may include specialist and appointment management, pharmacy coordination, access to mental health services, behavior change support, nonpharmacological (CIH) approaches, and assistance in addressing basic social and physical needs. This coordination must be done by people whom the veteran trusts and who take responsibility for helping them. These individuals must be able to successfully navigate VA and community health care systems for and with veterans and have the authority to those services at their fingertips. The COVER Commission found that there was confusion regarding terms, job descriptions, and pay rates for these roles across VA. New health peer partner positions and skill sets were being created (health coaches, coordinators, specialists, and navigators). These positions should provide the *glue* of trust and relationships for veterans. These positions (including their roles in trust building and relation maintenance) need clear job descriptions, careful selection and training, and proper placement within VA health care teams in sufficient numbers to deliver caring relationships with veterans.

Relationship-Based Care

Health care in the United States, both inside and outside VA, is largely transactional (Marmot, 2005). An individual who does not feel well comes in to see a doctor and gets a diagnosis and a treatment, which is expected to resolve the problem. This approach works well for certain types of conditions such as infectious disease or when surgical interventions and limited specialized interventions are needed or in acute emergencies.

Chronic diseases, however, including most conditions in mental health, require a different approach. These diseases are long term, complex, and multifactorial. They require getting at underlying causes and managing them using multiple tools over a long period. Chronic conditions require a different type of interaction in which patients, providers, and their teams develop a long-term partnership through which they work together to heal or manage the condition. This approach requires deep and trusted relationships among patients, providers, and their teams. Most chronic diseases seen in primary care as well as most mental health conditions require this type of approach (Partners, n.d.).

Relationship-based models must take into consideration the whole person, not just the condition at hand. Adhering to this model means assessing environmental context, the behaviors of individuals and those around them, social and emotional issues, and the mental and spiritual aspects of the individuals. Relationship-based models are based on a solid foundation of trust and authentic communication with mutual responsibility and accountability from all parties (The Playbook, 2019). They are relational not transactional.

Starfield, Shi, and Macinko (2005) defined and measured the characteristics of relationship-based models as continuous, comprehensive, and coordinated. They found this type of care

consistently delivered better outcomes and improved satisfaction at lower costs—all components of the quadruple aim.

More recently, a team from the Stanford Primary Care Research Center examined the top 5% of all primary care practices in the country that met the quadruple aim. The team found that continuous, coordinated, and trusting relationships were the key to their high-quality health care (Peterson Center on Healthcare, 2013; Stanford Medicine Clinical Excellence Research Center, n.d.).

For decades, VA has employed a variety of positions designed to maintain trusted relationships with veterans. These positions include care navigators and care coordinators in primary care, peer specialists in mental health care, and more recently health coaches or health partners in whole health. The COVER Commission found, however, that the number, type, use, and effectiveness of these positions varies considerably across VA such that individual veterans do not often have a deep, trusted partner with the authority and capacity to hear their needs, communicate clearly, and hold them accountable for their part in the healing journey. There is no consistent cross-VA position description, hiring and training process, and authority given to any one particular person responsible for each individual veteran.

Recovery-Focused Care

Modern medicine uses a treatment-based approach that focuses on finding the pathology or pathogenesis and then intervening in ways to remove the disease or interfere with the disease or symptom processes. This approach is successful when a specific cause can be found, such as an infectious disease, when a lesion is identified such as in cancer, or when an anatomical correction is needed. It is especially useful and dramatic when a life-threatening process is stopped. Once corrected, however, the recovery and healing processes are largely left unaddressed. This treatment model is especially good at saving lives, which has resulted in increased longevity, aging, and chronic diseases in the countries and populations that have access to it. Six in 10 Americans have a least one chronic condition and four in 10 have two or more (Centers for Disease Control and Prevention, 2019).

It has now been widely documented that the full implementation of this pathogenic, disease-focused approach contributes only 15 to 20% to the health and well-being of a population. This situation occurs because, for most chronic conditions, such as obesity, cardiovascular disease, diabetes, and mental health conditions, the underlying determinants of healing lie outside of these treatments (Dzau, McClellan & McGinnis, 2016; McGinnis, Willian-Russo & Knickman, 2002). The vast majority of health determinants come from behavior and lifestyle factors such as nutrition, activity, substance use, high stress, and the social determinants of health as such as food, housing, safety, and the lack of other basic needs. (Farhun, 2015; Marmot, 2005; Robert Wood Johnson Foundation, 2016). A more effective model for the management of chronic conditions requires a recovery-focused model that provides *health-generating*, approaches (Jonas et al., 2014).

To fully implement a recovery-focused model, VA will need to address the issues associated with current referral processes, third-party coordination processes, and policies that create gaps

in care (i.e., new mandate that limits the number of appointments per referral for mental health visits, substance use treatment restrictions, and chiropractic and acupuncture treatments).

Value-Based Payment for Care

It has been widely documented that health care costs in United States are out of control and unsustainable (Waters & Graf, 2018). Despite these rising costs, the population's health outcomes for most chronic diseases are declining and health disparities are worsening (Institute of Medicine of the National Academies, 2013). Satisfaction with health care delivery has worsened and burn out is rampant among health care providers (National Academies of Sciences, Engineering, and Medicine, 2019). Several analyses have concluded that nearly a trillion dollars of the $3.5 trillion spent on health care every year is wasted on administrative controls, coordination inefficiencies, and ineffective therapies (Shrank, Rodstad, & Parekh, 2019). Value is defined as outcomes, plus quality, plus experience over costs and has been declining steadily. Although several factors contribute to this decline in value, the root cause is a fee-for-service payment system that supports the outdated medical-centered, disease-focused, transactional-based model of care. The payment system that accompanies this model drives high volumes and encourages the coverage of drugs and procedures for each condition instead of paying for the outcomes from its services (McGinnis, Stuckhardt, Saunders, & Smith, 2013). This volume-based payment model dominates VA health care also.

To change this situation the Department of Health and Human Services (HHS), the Center for Medicaid and Medicaid Services, various states, self-insured employers, and other payers have been moving toward value-based payment approaches (Centers for Medicare & Medicaid Services, 2019). These approaches aim to pay for care of whole persons and populations and are determined by improved health outcomes and quality, rather than the number and type of care episodes. Using various methods such as bundled payments, per-patient per-month charges or capitated costs, the underlying goal of these approaches is to pay for outcomes and quality, while reducing total costs of care (PricewaterhouseCooper [PwC], 2016; The Playbook, 2019). As a capitated system, VA has an opportunity to be a leader in creating value-based payment models and should move toward such an approach. This change would allow for other elements of the VA Health Care Transformation Model—person-centered, relationship-based, and recovery-focused care—to be more easily implemented.

Whole Health Care

VA is ideally positioned to lead the way in transforming to a new model of care for veterans and the country. It has been moving toward a model of whole person care for decades. As described in the introduction to these recommendations, multiple systems are in place on which such a transformation can be built. The mental health continuum of care (COC) model already links mental health care to primary care, community care, and self-care (A. S. Pomerantz, 2019). Patient aligned care teams (PACTs) provide patient-centered primary care that includes behavioral and many CIH practices. Specific efforts and integration of mental health and primary care occurs in the primary care mental health integration programs around VA in which mental health is embedded into PACTs (A. S. Pomerantz, 2019). Integration with community care is being enhanced by the Office of Community Care and rollout of the MISSION Act (M. Upton, communication with commission, 2019). Movement toward value-based payment is occurring, and systems for innovation and continuous improvement are in

place (VHA Office of Discovery, Education and Affiliate Networks, communication with commission, 2019). The most recent and transformative addition to VA for whole-person integrative care is the whole health veteran support system. Thus, with the addition of whole health, the practices and services needed for a full VA Health Care Transformation Model are in place.

Whole health is focused on shifting from a disease-management system to a system designed to empower and equip veterans to take charge of their health, healing, and well-being—and so is key in the VA Health Care Transformation Model recommended by the commission. In this future VA model, self-care becomes the cornerstone of the system and clinical treatment encounters become a much smaller part of the equation. VA has been driving this transformation and has developed an implementation strategy for whole health across the enterprise. In facilities where this approach has been piloted, veterans dealing with chronic pain and mental health issues are experiencing reduction in both symptoms and pharmaceutical use, and improvement in their sense of well-being (Kligler, communication with the commission, 2018). The whole health system shifts care from a system designed around points of medical care treating disease (transactions), to one that is based in relationships across time and addresses the physical, emotional, and social well-being of the person. It actively incorporates health partners, self-care, and CIH treatment approaches that are filling gaps in mental health, pain and substance abuse treatment, and suicide prevention (VA, n.d. c).

Continuous Innovation and Improvement

Health care is complex and getting increasingly more so. Growing knowledge and advances in technology and treatments increase the complexity and coordination of health care delivery. A strong societal tendency exists to add on treatments without removing others, feeding a desire for new technologies and the latest drugs. The growing challenges in health care financing and administration are also increasing chaos and waste. It is now estimated that nearly $1 trillion dollars a year are wasted by the health care system (Shrank, Rogstad, & Parekh, 2019). Health care leaders today need to not only be experts in managing people, systems, products, and outcomes, but need a robust improvement infrastructure to simply keep up with change.

Continuous improvement is not enough. All systems have approaches that become obsolete and require removal. New forces from both inside and outside health care demand continuous innovation even to the point of periodic entire-system redesign and cultural transformation. Both health care generally, and VA health care particularly, are at such a time (Jonas et al., 2019).

Innovation, continuous improvement, and cultural transformation require enlightened leadership from the top but cannot be implemented from the top. Indeed, attempts to fix cultural problems from the top often result in increased inefficiencies and additional difficulties (Mukamel, Haeder, & Weimer, 2014). The best innovations arise from those providing *on the ground* care when supported by infrastructures that allow them to create, test, fail, adjust, succeed, and spread. Leaders must spend as much time simplifying and removing processes as they do inventing and adding new ones (Bisognano, communication with the commission, 2019). And they need freedom and flexibility from bureaucratic rules that prevent developing and testing innovations.

The COVER Commission spent considerable time examining VA's innovation and improvement systems. It received briefings from those developing and tracking performance metrics at VA using the Strategic Analytics for Improvement and Learning (SAIL) system and the continuous improvement program called Modeling to Learn (Clifford, 2019; Lemke et al., 2017).

The commission then observed innovations on the ground at multiple VA facilities and heard the challenges some providers and leaders had in implementing those innovations. The Secretary of Veterans Affairs and Executive in Charge briefed the commission on the current VA modernization plan, and the Deputy Under Secretary for Discovery, Education and Affiliate Networks briefed the commission on the innovation network currently developed and operating at VA (VA Office of Discovery, Education and Affiliate Networks, 2019). In addition, the commission met with improvement leaders outside VA, most notably the Institute for Healthcare Improvement, which provides education, training, and process improvement for healthcare systems around the world. The commission also conducted a comprehensive analysis of current studies comparing VA quality and outcomes to private-sector health care systems.

Findings

Person-Centered Care

VA should shift from an episodic, medical-centered model to a model of care that is centered on what is most important to each veteran. All veterans should have a comprehensive and personalized health plan used as the central organizing focus for all their care, no matter where they are seen in the system—mental health, primary care, or specialty clinics. Although clinical encounters should still engage in disease diagnosis and treatment, no treatment plan should be implemented without first determining how it will affect the veteran's life and goals. This approach means building all VA health services, including those contracted for outside of VA, around *what matters* to the health and well-being of each individual veteran. Treatment plans that cannot be reconciled with the veteran's personal health plan (PHP) should be avoided or reconsidered, and time should be spent with the veteran to develop that alignment.

Relationship-Based Care

The COVER Commission found examples of relationship-based models both inside and outside VA. High-functioning PACTs consistently use relationship-based models despite the transactional nature of the VA delivery structure. Presentations from the Southcentral Foundation in Alaska demonstrated that a relationship-based model continuously improved outcomes, controlled costs, and enhanced satisfaction for two decades in areas with some of the worst population health outcomes in the nation, including with veterans. Mental health professionals, social workers, health coaches, and complementary medicine providers are embedded in SCF care units across the system. This was a client owned, nonprofit system.

An example of a for-profit system based on relationships is the Iora system of care. The Iora system has a unique model in which units of care for up to 1600 patients consist of one provider, two nurses, a mental health provider, and up to 10 health coaches who develop deep

relationships with specific patients to help them navigate their own personal, social, and medical health care challenges. These health coaches are similar to peer specialists and health navigators within VA but have enhanced training and capacity to work with medical providers, allowing them to integrate a patient's diverse needs into routine health care. The system has demonstrated continuously improving outcomes, lower costs, high satisfaction for patients, and joy in work for the providers (Iora Health, n.d.). In other words, this system achieves the quadruple aim.

The most effective health care models have shifted to relationship-based team approaches, for which members of the care team take personal responsibility for the success of patients' improvement and patients are held accountable for their engagement in health behaviors and treatment plans. Good relationships require trust; trust requires caring; caring leads to hope; hope leads to engagement; engagement leads to self-care; and self-care leads to improved health, better satisfaction, and lower costs. Most importantly, an alert and caring community is the best preventive for suicide. Thus, VA should organize its health delivery system on a solid foundation of trusted, caring, and empathic relationships.

As part of the VA Health Care Transformation Model, the COVER Commission recommends that the role of peer health partners, often individuals who are veterans themselves, should be more thoroughly developed and have the responsibility for relationship-building with veterans.

Recovery-Focused Care

Mental health has partially adopted recovery-focused approaches. Most drugs are used continuously to control pathogenic processes for many mental health conditions such as selective serotonin reuptake inhibitors for depression. These drugs often produce side effects and require long-term application. These drugs also do not correct the underlying root causes of the conditions. More recently hallucinogenic drugs are being tested to induce a deeper therapeutic shift in patients and might provide longer-term recovery (American Psychological Association, 2018). Other approaches in mental health use recovery-based models such as cognitive behavioral therapy and its variants and prolonged exposure therapy for post-traumatic stress disorder (PTSD). Recovery-based approaches are generally safer and more likely to have long-term and lasting effects.

The COVER Commission found that other approaches outside of traditional mental health circles have increasing evidence for improving mental health conditions. These include physical exercise, dietary approaches, mind-body approaches such as yoga and mindfulness, complementary approaches such as acupuncture and massage, sleep therapy, and social support and integration (Gordon, 2009; Lake & Spiegel, 2007). Although not part of its charge, the commission reviewed the latest clinical trials in several of these areas.

As with many mental health treatments, such as psychotherapy, the complex nature of CIH interventions poses challenges for rigorous research. Dr. David Shurtleff, deputy director of the National Center for Complementary and Integrative Health at the National Institutes of Health, spoke to the COVER Commission about development of pragmatic research methods that allow for a rigorous evaluation of whole-person, recovery-focused interventions often found in CIH.

Collectively called PRISM, these approaches should be adopted by, and developed for VA CIH research.

Evidence is now emerging that behavioral and lifestyle approaches can not only prevent the progression of chronic disease but can also reverse many established conditions when applied intensively enough. The commission was shown data on the recovery from chronic pain, PTSD, and other health conditions with intensive outpatient treatment approaches (James A. Haley Veterans' Hospital, 2016; National Intrepid Center of Excellence, n.d.; Rothbaum, n.d.). New disciplines, such as functional medicine and lifestyle medicine, have emerged to train providers in these approaches (The Institute for Functional Medicine, n.d.; Institute of Lifestyle Medicine, n.d.).

Development of a recovery-based model requires implementation of new types of outcome measures that are not disease specific. These measures would focus on global health, well-being, resilience, and quality of life. Such measures are in development by several organizations including RAND, ReThink Health, and the Well Being in the Nation (WIN) network (100 Million Healthier Lives, n.d.). Recently NAM convened a workshop to review these measures for consideration in Healthy People 2030 (NASEM, 2019b). VA is also working on well-being metrics, and the commission received a briefing on this topic by researcher Dawne Vogt of the National Center for PTSD in Boston, who is developing a 10-item well-being measure specifically for veterans (Vogt et al., 2019). In addition, the commission was briefed on a new patient-reported outcome quality metric, called the Person-Centered Primary Care Measure (PCPCM), which may better capture quality of care in the VA Health Care Transformation Model recommended in this report (Etz et al., 2019).

Value-Based Payment for Care

Commissioners examined a number of studies on value-based payment, including those described by NAM, Kaiser Permanente, the Partners Whole Person Model, the Health Quality Partners Network Model of advanced preventive care, and a review of chronic disease payment models by the NEJM Catalyst expert advisory group's Care Redesign Study (Compton-Phillips & Weil, 2019; Masterson, 2017; McGinnis, Stuckhardt, Saunders & Smith, 2013; The Playbook, 2019; The Washington Post, 2013). The commission also reviewed major NAM reports on population health with an emphasis on those dealing with mental health, CIH, substance and opioid use, caring for social needs, and suicide prevention (Institute of Medicine, 2005; NASEM, 2018; NASEM, 2017; NASEM, 2018b; NASEM, 2018c). The commission visited health care organizations using value-based payment systems that include mental health and CIH approaches, such as Geisinger Health System, Dell Medical School, Catalyst Health Network, Humana's Bold Goal, and UCI Integrative Health Institute. The commission also conducted a detailed internet analysis of mental health, behavioral health, and CIH services of 25 of the top 100 hospitals named in the IBM Watson Health Analytics Top Hospitals® ranking system (IBM Watson Health, 2019).

About half of all systems the COVER Commission examined were moving toward a value-based model and incorporating mental health and CIH modalities into their care (Compton-Phillips & Weil, 2019; PwC, 2016). These value-based payment systems did not use a transactional approach for payment. Instead, they bundled care in a way that allowed providers

and their teams to spend more time with patients, enhance patient relationships, and use top-of-team skills. Continuous improvement was determined by using value-based outcomes (usually quadruple aim metrics) with rapid performance feedback and incentives for improvement through variable pay. Improved outcomes, lower-costs, and enhanced satisfaction were found using this approach to payment. Innovative contracting mechanisms for payers were often developed with reduced overall costs from lower hospitalizations and emergency department visits, by preventing disease, and by reducing use of specialist care and expensive medications (Compton-Phillips & Weil, 2019; PwC, 2016).

Whole Health Care

The whole health model consists of three components:

- The Pathway (to empower): In a partnership with peers, veterans and their families explore their mission, aspiration, and purpose, and begin their overarching PHP based on what matters most to them in their life.

- Well-being Programs (to equip): With a focus on self-care, skill building, and support, these programs are not diagnosis- or disease-based but support the PHP of each individual veteran. Services include proactive, CIH approaches such as stress reduction, yoga, tai chi, mindfulness, nutrition, acupuncture, and health coaching.

- Whole Health Clinical Care (to treat): In VA, the community, or both, clinicians are trained in whole health and are a seamless part of the veterans' team, guided by their individual PHPs.

The whole health approach improves access for veterans by providing another avenue of care, reducing the burden on limited primary care and mental health resources. Most importantly, the whole health model is designed to address overall health and well-being, including the often-unseen pain and suffering of veterans—the so-called *invisible wounds of war* (T. W. Gaudet, K. Reddy, A. M. Whitehead, communication with commission, 2018).

The commission found that whole health aligned with the VA modernization plan in several ways. The systemwide implementation of whole health directly supports the Secretary Wilke's modernization plan priority of engaging veteran's in lifelong health, well-being, and resilience. It also contributes to several other priorities including improving access to care, reducing unwarranted variation across integrated clinical and operational service lines, developing responsive shared services, modernizing the electronic health record, and transforming financial management systems.

According to data pulled from the MCAO Outpatient, Discharge, Event Capture, and Pharmacy Cubes using the Whole Health Time in Program function (James Marzolof, communication with the commission, January 3, 2019), the 133,476 veterans who entered the whole health cohort in fiscal year 2018 and 2019 were followed as 24 distinct month cohorts from October 2017 to September 2019. During this time, the group showed a cost reduction from baseline in all service categories ranging from 12% to 24% except for pharmaceuticals, which increased 5.3%. During this period, pharmaceutical costs increased 9.4% for the total veteran population. The

net overall reduction was 20% or $4,845 per capita. These effects are preliminary in that they do not account for any care received in the community and the community experience or for the total number of whole health participants to date. The Office of Patient Centered Care and Cultural Transformation has the ability to realize this cost benefit for VA if it is integrated into the overall VA Health Care Transformation Model recommended by the COVER Commission and if it is given the flexibility and resources to lead a systemwide implementation of the whole health model at every VA health care facility.

Continuing Innovation and Improvement

VA has an extensive research and evaluation infrastructure and a tracking system for quality across its vast system called SAIL. SAIL is used for tracking quality, access, and satisfaction. SAIL allows local and regional health care directors to examine their quality metrics and compare themselves to others across the system. It also allows leaders at the top to get an enterprise-level view of performance and quality in the face of shifting needs. Many clinical outcomes and mental health metrics are not yet fully integrated into the SAIL system although integration is currently in process (Smith, 2019).

VA has extensive support structures for helping hospital and health care leaders use these metrics for quality improvement. This support includes mental health quality improvement officers that visit health systems and assist them in solving local problems (The Office of Systems Redesign and Improvement, n.d.). The SAIL system is not fully integrated with the metrics needed to manage the quadruple aim. Costs, provider well-being, and many clinical outcomes data are kept in separate systems, which makes it more difficult to look at the total effect of any new policies or system changes. VA has been moving toward a more comprehensive integration of its quality measurement systems.

The COVER Commission analyzed all published studies to date that directly compared VA and private-sector delivery systems. This analysis showed that of the 295 outcomes reported in these studies 171 (57.9%) of the outcomes were superior in VA compared to the private sector, and 75 (25.4%) were superior in the public sector. The remaining were equal in both systems. The superiority of VA performance appears to be especially true in mental health care, although the data were more limited in these areas. A huge variability in quality was found across VA. The commission found examples of some of the best and some of the worst health care delivery available in the country.

VA has substantially improved its performance over the last decade. For example, wait times were longer or equivalent to those in the private sector for many services in 2014, but by 2017 they were shorter than in the private sector for all but a few specialty services (Penn et al., 2019). Thus, VA has effective improvement processes in place on which it can build to support enhanced innovation and model transformation. What is especially needed are approaches for eliminating ineffective and obsolete practices. There is marked tendency to simply add on new programs to VA, which risks creating more complexity and inefficiencies. This *add on* tendency comes not only from inside VA but also from congressional actions and oversight committees. Commission members heard and saw repeatedly how challenging it is for some of the most effective innovations in VA to take hold because of bureaucratic and regulatory items (real and perceived) that restricted those innovations from being tested and disseminated.

VA does make an extensive investment in innovation and improvement and has robust approaches for research and evaluation.

All innovations are not equal, however, especially when health care transformation is needed. In open innovation challenges, there is a tendency that new and flashy technologies solving narrow problems get the most attention, while more mundane and broad practice innovations in patient care delivery take a backseat (Jacob, 2014). It is these later types of innovations that need emphasis if VA is to transform to a model of health care delivery that is person-centered, relationship-based, and recovery-focused. The spread of best practices requires support for that spread including elimination (called *exnovation*) of old and obsolete practices, better integration of existing services across silos, and adjustment of bureaucratic and regulatory constraints in the system that inadvertently prevent adoption of new approaches. Simplification, clear language, flexible delivery, and robust measurement of effects are required for continuous innovation and improvement to occur effectively (Martin & Mate, 2018).

As more services are outsourced to the private sector for veterans, there is major risk that they will receive poorer quality of care and have worse outcomes than if they had received their care in VA. The costs of care are skyrocketing and the outcomes are declining in health care in the United States (IOM, 2013). Poor quality services and obsolete care models waste money and harm patients. Thus, the same type of transformation in care models and continuous innovation and improvement need to be required in private-sector care of veterans, not just within VA. VA needs to assure that the same or higher quality standards and transparency are part of all contracting for care in the private sector.

Conclusions

The VA Health Care Transformation Model

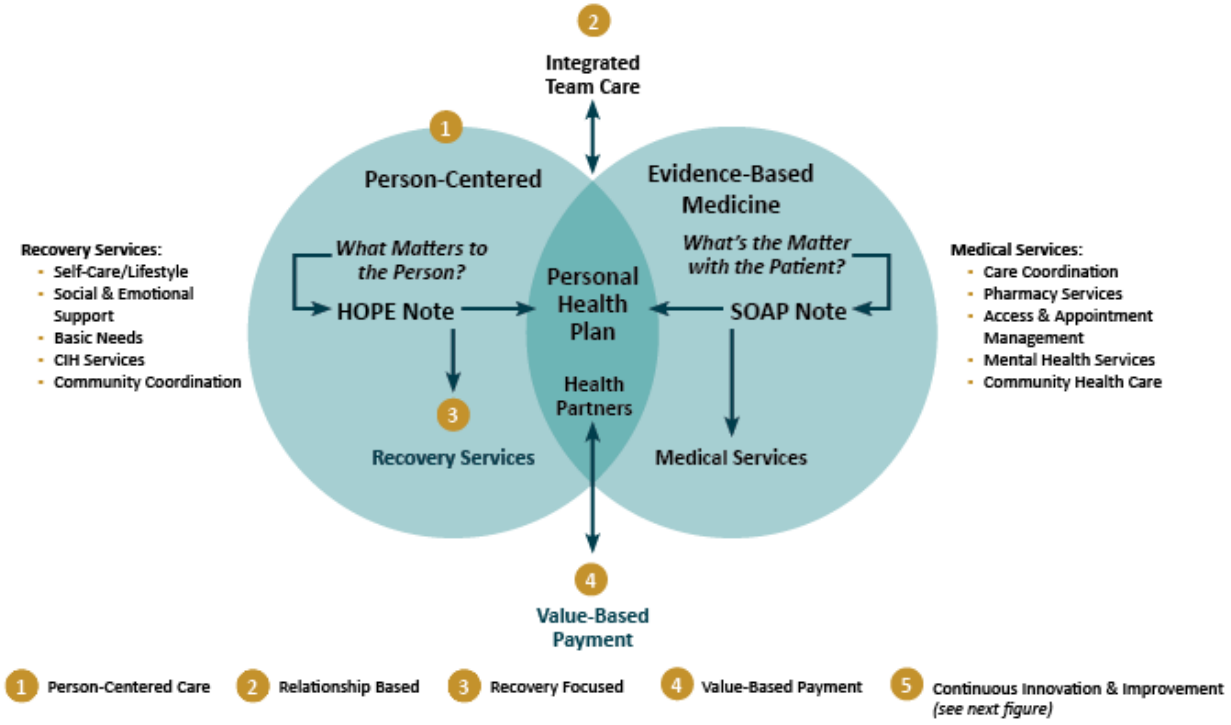
The overarching recommendation of the COVER Commission is for VA to transform its health care delivery system to one that is person-centered, relationship-based, and recovery-focused and to support this transformation with a payment system that is value-based and incentivized for continuous innovation and quality improvement. Figure 4 shows the recommended model, which the commission has termed *The VA Health Care Transformation Model*. This model is an integration of two existing models already embedded in VA. VA health care (like the nation's health care in general) is dominated by reductionistic, evidence-based, and medical-centric processes (right side of Figure 4). This approach has many benefits but is losing value as a method for managing chronic disease. VA needs a more wholistic, person-centered approach in which veterans are placed at the center of care and services that promote health, well-being, recovery, and resilience (left side of Figure 4). The key to this transformation is to ask veterans *what matters* in their lives and then orient VA health care services to help veterans advance toward those goals. The mechanisms to initiate this shift are already present in many VA programs, but these programs are not coordinated or aligned around this central mission. The VA Health Care Transformation Model shows how to establish that alignment.

To drive the transformation of VA health care, VA should build on its current innovation and improvement systems by creating a continuous innovation and improvement center and

network that is focused solely on transforming veteran care into the VA Health Care Transformation Model focusing on the following key actions:

- Transition VA's Veterans Equitable Resource Allocation (VERA) system from a fee-for-service funding model to a per-patient model of funding with financial incentives for improving population health and person-centered metrics.
- Fully fund and integrate the whole health implementation plan into mental health, primary care, and specialty care throughout VA.
- Incentivize VA health care leaders and providers with both fixed payment and variable bonus processes to engage in continuous improvement with incentives for improving population-based and person-centered metrics.
- Create a continuous innovation and improvement center and network specifically focused on driving the VA Health Care Transformation Model.
- Integrate VA's existing metrics systems (e.g., SAIL, VERA, Patent Experience Office) into a unified system that tracks quality, performance, and value based on the quadruple aim framework.

Figure 4. VA Health Care Transformation Model



The Model in Practice

This model is consistent with major health systems both in VA and in the private sector that are moving toward a whole person model of care. In this whole person model, VA will work with every veteran to create a PHP. The PHP's central feature is mapping the veteran's mission, aspiration, and purpose (MAP) in life and aligning all health care, self-care support, and community services to that plan. This process assures that care is person-centered.

A trusted team, led by a trained health coach, should help implement the veteran's PHP by coordinating and integrating the veteran's mental health services, behavioral change and self-care support, and CIH approaches. These services are intended not just for treatment of disease but to enhance recovery, promote health and wellness, and build resilience within the veteran. The outcome of these services and its relationship to the veteran's PHP will be recorded to drive continuous innovation and improvement in both the veteran's individual care and VA system as a whole through a continuous innovation and improvement center and network.

Details on how to make this transformation happen are described in the implementation sections below. The recommended model starts by having VA work with veterans to create a PHP, the central feature of which is their MAP in life. This effort assures that their care is person-centered (item 1 in Figure 4). Then a trusted team, led by a trained peer partner or health coach, helps to implement the veteran's PHP by coordinating and integrating the veteran's mental health services, behavioral change and self-care support, and CIH approaches (item 2 in Figure 4). These services are intended not just for the treatment of disease but to enhance recovery, promote health and wellness, and build resilience with the veteran (item 3 in Figure 4). The subsections below discuss conclusions related to the core components of the VA Health Care Transformation Model.

Person-Centered Care

A PHP should be developed with every veteran by soliciting *what matters* most in life to the veteran—often called their MAP for living. The PHP should then identify where they are in their life on their physical, mental, and overall wellness levels. The PHP should be referred to in every encounter by VA staff, regardless of specialty, to assure that what matters to veterans is aligned with health care services that support and advance their goals.

A standard set of health care implementation tools (organized in a PHP toolkit) should be used across all care teams so that what matters to the veteran can be integrated into health care delivery services in a clear, continuous, and consistent way. A universally used well-being outcome metric should be developed and incorporated into the PHP for this tracking. A description of the minimum set of tools for the PHP toolkit is included in the Executive Branch subsection of the Implementation section below.

The PHP should be embedded into the electronic health record (EHR) in a seamless and easy-to-use way that is accessible to veterans and any person on their health care team. This practice should allow all team members to easily visualize, track, and adjust the care plan if their well-being outcomes decline or do not progress.

Health delivery technologies (including the EHR, telehealth, apps, and tracking tools) used for VA and community services should be organized to successfully advance veterans' PHP and their health and well-being.

Relationship-Based Care

VA needs to redesign and expand the peer support specialist position and other positions that build trusting relationships, so they can flexibly address a wide array of specific needs for each veteran. Care specialists should access services for veterans that integrate chronic disease management, mental health, health coaching, and behavior change, and link to community services for social needs. A ratio of one care support specialist of this type for every 200 veterans is ideal.

Caring is often best delivered by team members who match the diverse ethnic, racial, educational, and gender expressions of the patients. There are thousands of active duty military personnel who get discharged every year with the characteristics and desire to fill these positions. These former service members often understand and can communicate effectively with other veterans and many want jobs that allow them to give back to fellow veterans.

The most successful delivery of high-quality care at lower costs is done by supporting relationships and caring as a central pathway. Achieving this goal requires time, skills, and people to develop those trusted relationships with patients, team members, providers, and in the community. People delivering these skills and services should have sufficient compensation to be effective and know their skills and time are respected.

The electronic health record should be structured to optimize, deliver, document, and track care encounters and continuously highlight what matters to the veteran. Quality assessment tools for VA should use patient-reported outcomes that reflect caring and relationships such as the PCPCM.

Recovery-Focused Care

For the prevention and treatment of chronic and complex conditions, VA should shift from a pathogenic model to a recovery-focused model of care that taps into veterans' inherent healing capacity. The goal of a recovery model is to provide every veteran with the tools and support needed to build resilience, enhance recovery, and improve their health and well-being. This approach requires addressing veterans' mental, behavioral, and social determinants of health; streamlining access to mental health services; providing behavior and lifestyle change support; and tapping into community services for social needs.

A recovery model requires assessment of the mental, behavioral, social, spiritual, and environmental health determinants of each veteran and integration of those determinants into their health care plan and services. A minimal set of factors should be evaluated at each encounter and in all specialties, especially those involving primary care and mental health.

A new type of health care coordination should be developed that makes it seamless and clear who is responsible for working with each veteran. The positions and processes in this redesign would incorporate the current services of navigators, health coaches, peer support specialists,

medical assistants, and other allied health positions to improve coordination and clarify responsibility across the COC.

Because most activities and services needed to enhance healing lie outside of the traditional medical treatment environment, VA cannot provide optimal access to all veterans, without sufficient community coordination. Thus, contracting criteria for community services need to be consistent with a recovery model.

Access to recovery services should be easy and available through multiple pathways including self-referral, peer and family referral, primary care and specialty clinics, and through outreach to all veterans by community health workers, health coaches, and peer-to-peer support. Peer specialists with enhanced skills and authority for outreach to veterans and expertise in the provision of group educational services should be expanded.

Value-Based Payment for Care

Value-based payment models that cover and coordinate support for the health needs of the whole veteran should be the basis for determining costs and compensation in VA and in civilian systems that care for veterans. VA should shift to a payment system based on outcomes and efficiency. The goal should be elimination Current Procedural Terminology (CPT) and International Classification of Disease (ICD) coding as a basis for payment. Payment instead should be based on achieving the quadruple aim—enhanced population health, lower costs, improved quality, and improved satisfaction of both patient and provider.

Health care has become specialized and complex. This complexity results in increasingly fragmented silos that seek to maintain their share of revenue. This situation results in massive inefficiencies, poorer outcomes, and wasted resources. These costs can be mitigated and offset if teams incorporate specific processes for integrating mental and behavioral health, chronic disease management, referral management, and pharmacy management into their systems. VA should pay for effective coordination in these areas.

Proactively addressing risk of chronic disease with personal, preventive, and public health outreach, routine and destigmatized mental health care, and community support for social needs reduces costs and improves population outcomes. Health care systems both in VA and in community care should share risk for, and capture savings from, these improved population health outcomes.

It is estimated that 60% to 70% of chronic disease costs are linked to key behaviors—substance abuse, diet, movement, sleep, and stress. Effective behavior change requires skills in motivational interviewing, behavioral medicine, health coaching, behavioral technologies, and group education approaches. VA should pay for and contract for these types of services.

The VA health care system needs safer and more effective nondrug and CIH approaches for treatment, especially in mental health and primary care, and for pain management and substance use disorders. VA should invest in more research and more delivery of these approaches for veterans.

Whole Health Care

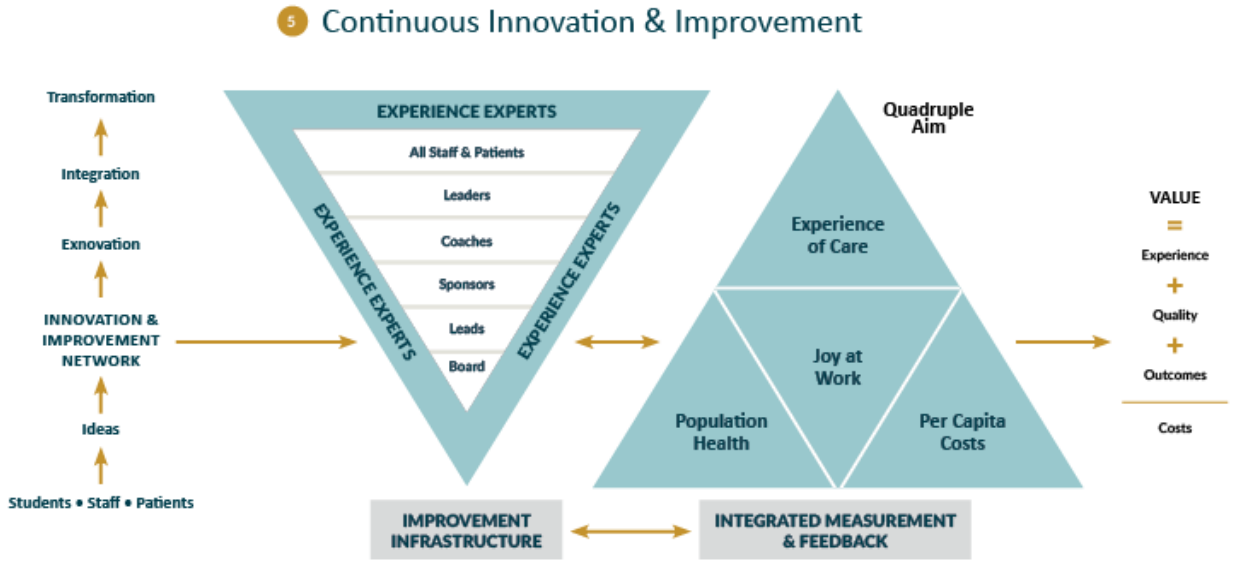
Congress and VA should fully fund and staff the rollout of the whole health implementation plan across VA and assure it is aligned to support the VA Health Care Transformation Model. VA should expand the current educational efforts for whole health and CIH approaches to all leaders, providers, staff, patients, and families in VA so that a full understanding of its role in the VA Health Care Transformation Model is understood. To prevent depression and burnout and enhance employees' ability to heal, VA should provide education and training in self-care and mental health support for all providers and staff in VA. VA should hire, train, and deploy whole health partners (WHPs) at a minimum ratio of 1 WHP for every 200 veterans. Finally, VA should conduct a formal evaluation whole health rollout and its effect on components of the quadruple aim, including cost offset and return on investment.

Continuing Innovation and Improvement

Optimal care of veterans both inside and outside of VA requires continuous innovation and quality improvement that rapidly adjusts care for the veterans using person-centered, relationship-based, and recovery focused metrics. Measurement of quality for wellness-based outcomes, mental and behavioral health services, and CIH practices are poorly developed or applied. Congress should instruct VA, HHS, and DoD to evaluate and develop methodologies for measuring whole-person and wellness-based outcomes for determining care quality for all veterans.

To drive this transformation, VA should build on its current innovation and improvement systems by creating a continuous innovation and improvement center and network that is focused solely on transforming veteran care into the VA Health Care Transformation Model. Figure 5 illustrates the components and processes for driving this transformation.

Figure 5. Process for Creating an Environment of Continuous Innovation and Improvement



The innovation and improvement center and network should be supported by the Secretary of Veterans Affairs and be the driver of the transformation. The first task is integrating VA's existing metrics systems (e.g., SAIL, VERA, Patient Experience Office) into a unified system that tracks quality, performance and value based on the quadruple aim framework (right side of Figure 5). Next, VA should enhance the current quality improvement capacity across VA by using the Institute for Healthcare Improvement's reverse quality pyramid structure (center part of Figure 5). Finally, VA should create an innovation and improvement center, building on VA's current innovation networks and specifically driving transformation. It should draw ideas and innovations from the field, supports their testing and improvement, and then delivers them into quality improvement structures at each VA location for adaptation, delivery, and spread (left side of Figure 5). In this continuous innovation and improvement model, health care leaders and providers in VA are incentivized with both fixed-payment and variable-bonus processes to engage in continuous improvement. An essential feature in this improvement model is unburdening and accelerating local improvement processes (left side of Figure 5).

All health care systems taking care of veterans need to invest in continuous innovation and improvement processes focused on care model transformation. These processes should be problem-focused, seek practical solutions, incorporate continuous measurement, use rapid plan-do-study-act (PDSA) cycles, invest in and test disruptive innovations, be fully accountable, and be allowed to capture and reinvest the savings they produce back into their own organization. Without investment in continuous innovation toward care model transformation, health care costs will continue to escalate, and health outcomes will continue to decline.

Core metrics of improvement should be guided by the quadruple aim—improvement in clinical outcomes, improvement in patient and provider satisfaction, reductions in total per capita costs—and enhanced health equity in the population of veterans served. Most systems evaluate some of these aims but not all and not in an integrated fashion. VA quality and outcome measurement systems need to be integrated and tracked together so that ineffective or obsolete processes can be eliminated, and the effect of the VA Health Care Transformation Model can be thoroughly evaluated and measured.

As VA expands its services to community organizations, it should require private-sector organizations have the same innovation and quality improvement processes needed for care transformation recommended by the COVER Commission.

Implementation

Legislative Branch

Person-Centered Care

- Require VA to implement a PHP toolkit enterprisewide.
- Create a new section of title 38 to authorize expansion and implementation of the VA whole health model of care systemwide at all VA health care facilities.

Relationship-Based Care

- Require VA to design, develop, and train a health peer partner workforce with the specific goal of providing all veterans with a trusted health coach and care coordinator for managing their own health, well-being, and resilience needs. The goal should be to provide enough health peer partners to supply one partner for every 200 veterans.

Recovery-Focused Care

- Require VA to train its workforce with skills for a recovery-focused care. All leadership, providers, staff, and veterans and their families should learn about a recovery model and develop skills in self-care.

- Hire staff trained in recovery-focused care, to include health coaches, nutritionists, mind-body practitioners, acupuncturists, chiropractors, massage therapists, yoga providers, exercise specialists, cognitive behavioral therapists, social workers and other professionals that support and enhance veterans' self-care, well-being, and resilience skills. The goal should be at least 30% of the VA workforce trained in these skills within 5 years of adopting this recommendation.

- Invest dedicated funds in the 5 years after adopting this recommendation sufficient to accelerate this training and hire providers with recovery-focused skills.

Value-Based Payment for Care

- Require VA to transition its VERA system from a fee-for-service funding model to a per-patient model with financial incentives for improving population health and person-centered metrics.

- Require all VA community care contracts for veteran care to use value-based payment rather than payment based on the volume of CPT and ICD coding and RVUs done.

Whole Health Care

- Fund the roll-out of the whole health implementation plan at every VA medical facility and community-based outpatient clinic (CBOC). The funding for each medical center will be enough to support the initial costs of implementing the whole health system. It is anticipated that after this period the program will be self-sustaining based on VERA allocation and cost offsets.

- Require the Secretary of Veterans Affairs, not later than 3 years after adopting this recommendation and again 5 years after adopting this recommendation, to report to the committees on veterans affairs of the Senate and the House of Representatives on VA's experience and progress under the program, to include progress in implementing whole health and its contributions related to pain treatment, mental health outcomes, suicide prevention, opioid utilization, and integration for advancing the VA Health Care Transformation Model.

Continuing Innovation and Improvement

- Fund a continuous innovation and improvement center and network specifically focused on driving the VA Health Care Transformation Model.
- Focus the continuous innovation and improvement center—like the Center for Medicare and Medicaid Innovation in HHS—on designing, developing, testing, and implementing the VA Health Care Transformation Model across all delivery systems and in contracts with the private sector.
- Integrate VA's existing metrics systems (e.g., SAIL, VERA, Patent Experience Office) into a unified system that tracks quality, performance, and value based on the quadruple aim framework
- Require VA, HHS, and DoD to evaluate and develop methodologies for measuring whole-person and wellness-based outcomes for determining care quality for all veterans in the nation.

Executive Branch

Person-Centered Care

- Require that all health care team members, as a minimum, use the same core set of tools for developing and tracking progress of a veteran's PHP. This PHP toolkit should include at least the following tools:
  - Patient Education Information: Although customized patient information is encouraged for every health center and CBOC, simple educational materials around how healing works and VA's process for facilitating health and well-being for veterans should be widely available at every encounter.
  - Personal Health Inventory: A simple, two-page personal health inventory (PHI) for beginning and tracking veterans' healing journey should be used. The PHI should allow veterans to describe their life purpose, their current state of health and well-being, and their readiness to engage in health behavior change.
  - The HOPE Note: All veterans should receive a healing-oriented practices and environments (HOPE) assessment and note to be documented and tracked in the medical record. The HOPE Note builds off of the PHI and captures the primary determinants of healing used for the PHP.
  - Personal Health Plan: All veterans should have a dynamic PHP, that is referred to and used at every encounter with the VA.
  - Health and Well-Being: A health and well-being metric such as the Healthy Days Index or the Cantril Ladder should be administered at regular episodes and in all major encounters.

- Health and Well-Being Resource List: Every health care provider and team should have rapid and easy access to information and support resources (both inside VA and in the community) needed to facilitate advancement of veterans on their healing journey.
- Enterprisewide: Create a PHP template for use across the VHA enterprise.
- Electronic Health Record: Ensure that all veterans create a PHP that is embedded in the EHR and revisited with all providers on a regular basis.
- Health Technologies: Use all available health care technologies to help veterans fulfill their PHP and reach their desired level of health, well-being, and resilience.

Relationship-Based Care

- Redesign and expand the peer support specialist program, so that these specialists can flexibly address a wide array of specific needs for each veteran including access to mental health services, behavior change with health coaching, system navigation and coordination, and facilitation of access to community services.
- Hire veterans who understand their peers and can communicate effectively with other veterans.
- Pay for caring by providing peer support specialists with sufficient compensation to be effective and know that their skills and time are respected.
- Reorganize the electronic health record to optimize, deliver, document, and track caring encounters that continuously highlight what matters to individual veterans.
- Adopt a patient reported quality assessment tool, such as the PCPCM, that reflects an emphasis on caring and relationships.

Recovery-Focused Care

- Request and fund a consensus study by NAM on recovery-focused and disease-reversal models of care.
- Use a whole-person assessment to identify care veterans need for reaching optimal health. This assessment should include the following dimensions:
  - Mental and Spiritual Dimension: The mental and spiritual dimension of the veterans' lives refers to what matters to them most in their life—their MAP. The goal is to clarify and orient veterans' health care services to a optimize hope for, and success in, their ability to advance meaning and joy in their life.
  - Social and Emotional Dimension: The social and emotional aspects of veterans' lives are reflected in their social support and loneliness. Past traumas, including those in childhood, during deployment, or in their jobs, affect their current needs and

strategies for developing emotional resiliency. Social and emotional connection is a central factor for suicide prevention.

  - Behavior and Lifestyle Dimension: A set of five lifestyle and behavioral factors account for 60% or more of chronic diseases and when optimized, will prevent, and even reverse, many conditions, including mental health conditions. These factors involve substance use, sleep, nutrition, movement, and stress management.

  - Environment: The physical and social environment in which veterans live often determines their ability to start and remain on a healing journey. These factors include basic needs such as housing, food, safety, transportation, employment and income, and exposure to health-destroying factors (e.g., toxins and pollution) or health-enhancing factors (e.g., beauty, nature, and art). Adequacy of these basic needs should be regularly assessed and addressed in all veterans.

  - Well-being Measures: A standard well-being measure should be established for tracking veterans' progress in recovery, health, and well-being. A person-reported outcome measure for quality and well-being should be used as the central measure of VA services for each veteran.

- Make care coordination seamless and ensure providers' roles are clearly defined to prevent gaps in and ensure continuity of care.

- Focus on contracting community-based care that is consistent with a recovery model and ensure that care is optimal by investing in efficient coordination of services and incentives for improvement.

- Make access to recovery-oriented care easy by allowing self-referral, peer and family referral, and referral through primary care and specialty clinics.

- Expand the role of peer support specialists, so they have authority to reach out to veterans and provide group educational services.

Value-Based Payment for Care

- Move rapidly away from volume-based reimbursement models to a value-based payment system that transitions its VERA system to capture value as defined by the quadruple aim and eliminate CPT, ICD, and RVUs approaches for determining payment within 10 years.

- Prioritize and fund care coordination that incorporate specific processes for integrating mental and behavioral health, chronic disease management, referral management, and pharmacy management into their systems.

- Prioritize and address chronic disease risk with preventive and public health outreach, routine and destigmatized mental health care, and community support for social needs.

- Prioritize and fund services such as motivational interviewing, behavioral medicine, health coaching, behavioral technology, and group education approaches, to promote behavioral change and prevent chronic disease.

- Prioritize and fund nondrug treatment approaches for mental health, primary care, pain management, and substance use disorders, investing in research and delivery of CIH approaches.

Whole Health Care

- Fund and staff the rollout of the whole health implementation plan across VA and assure it is aligned to support the VA Health Care Transformation Model.

- Support the whole health rollout by hiring, training, and deploying WHPs at a minimum ratio of 1 WHP for every 200 veterans.

- Expand the current educational efforts for whole health and CIH approaches to all VA leaders, providers, staff, patients, and families. This expansion should include education and training on self-care and mental health services for all providers and staff in VA to prevent depression and burnout and enhance their ability to heal.

- Specify evaluation criteria and the necessary data and information to be submitted in an annual report by facilities initiating whole health. To evaluate the effect of this effort, VA should conduct a formal outcome evaluation focused on the effects of whole health system deployment on pain and mental health outcomes, opioid prescription rates, and suicide prevention efforts. This evaluation should be carried out in conjunction with researchers from the VA Office of Research and Development and be funded at a level of $1,500,000 per year for 5 years from adoption of this recommendation.

- Ensure that, to the extent practical, the staged implementation of whole health takes place with attention to geographic diversity, so that newly implementing facilities are reasonably distributed around the country to help ensure speedy access for all veterans to these new services. Develop virtual options wherever appropriate.

- Ensure that adequate training and technical assistance is provided to medical centers to support implementation of the whole health system. VA may provide this training directly or through grants or contracts with appropriate public or nonprofit private entities.

Continuing Innovation and Improvement

- Create a continuous innovation and improvement center and network that is focused entirely on producing the VA Health Care Transformation Model and incentivize VA health care leaders and providers with both fixed-payment and variable-bonus processes to engage in continuous improvement with incentives for improving population based and person-centered metrics.

- Require the continuous innovation and improvement center to be problem-focused, seek practical solutions, incorporate continuous measurement, use rapid PDSA cycles, invest in and tests disruptive innovations, be fully accountable, and allow for capturing and reinvesting the savings produced from such innovations back into the organization and site that produces them.

- Integrate all data tracking processes that use the quadruple aim to guide improvement simultaneously on clinical outcomes, patient and provider satisfaction, total per capita costs, and health equity in the populations of veterans served.

- Include quality measures and veteran-centered approaches recommended by the COVER Commission as requirements in contracts with community-based service providers.

> "Moral injury looks, smells, and tastes an awful lot like PTSD. …It diverges from PTSD in two areas. One is that the incidence of suicidal ideation tends to be a lot higher because you have violated your own moral code, and the other is that there is a strong need for redress."
>
> –Focus Group Participant

Recommendation 4: Implement a multipronged effort to improve the state of evidence regarding veterans' suicide, roll out proven interventions to those most at risk, and streamline VA's suicide-prevention message modeling for clarity and consistency with research.

Problem

Between 2005 and 2016, the suicide rate for veterans increased 25.9% (VA, 2018). In 2016, the suicide rate, adjusted for age and gender, was 1.5 times greater for veterans than nonveterans, with an average of more than 6,000 veteran suicides per year (VA, 2018). The state of mental health care for veterans demands attention. Despite efforts to improve mental health care for veterans, this population remains at risk. On average, 17 veterans take their own lives every day (VA, 2018), yet veteran suicide-prevention science is still in its infancy.

Background

The COVER Commission conducted an in-depth analysis of the factors in veterans' suicide. The commission interviewed people working with veterans and their families on the ground and at the Veterans Crisis Line. The commission also visited outside suicide prevention researchers to get a broader view of the field.

During the COVER Commission's tenure, President Donald Trump created a cabinet-level task force to address veteran suicide prevention (Stars & Stripes, 2019). This report is part of a broader conversation and ecosystem on veterans' suicide prevention. Knowing that this suicide-prevention-oriented task force will offer its own recommendations, the COVER Commission focused on broad issues related to suicide prevention.

Findings

Suicide Risk Assessment and Prevention Research

Nelson (2017) provided a systematic review that updates evidence of the accuracy of methods to identify individuals at increased risk of suicide and addressed the effectiveness and adverse effects of health care interventions relevant to U.S. veteran and military populations in reducing

suicide and suicide attempts. Although the study had some exclusions, such as interventions involving medication, it provides a broad view of the current state of the science for this critical issue.

Nelson's (2017) conclusions of the systematic review were bleak:

> *Risk assessment methods have been shown to be sensitive predictors of subsequent suicide and suicide attempts, but the frequency of false positives limits their clinical utility. Future research should continue to refine these methods and examine clinical applications. Studies of suicide prevention interventions provide inconclusive evidence to support their use, and additional RCTs of promising individual therapies and site-randomized population-level interventions are needed.*

Nelson's (2017) statement that further research is needed is mirrored by Nock et al. (2013, p. 97):

> *Moving forward, the prevention of suicide requires additional research aimed at: (a) better describing when, where, and among whom suicidal behavior occurs, (b) using exploratory studies to discover new risk and protective factors, (c) developing new methods of predicting suicidal behavior that synthesize information about modifiable risk and protective factors from multiple domains, and (d) understanding the mechanisms and pathways through which suicidal behavior develops.*

Suicide Assessment and Follow-up Engagement: Veteran Emergency Treatment

In 2008, the Blue Ribbon Panel on Veteran Suicide recommended that VA develop and implement an emergency-department-based intervention for suicidal veterans who are discharged from the emergency department. In response, VA leadership developed a clinical demonstration project called Suicide Assessment and Follow-up Engagement: Veteran Emergency Treatment (SAFE VET). This program was specifically designed to address the "dearth of empirically supported brief intervention strategies to address this problem in health care settings generally and particularly in emergency departments, where many suicidal patients present for care" (Stanley et al., 2018). The SAFE VET interventions engage suicidal patients with mental health care providers to develop an individualized safety plan based on restricting means, developing problem-solving and coping skills, using social support and mental health and crisis services, and seeking additional mental health treatment.

Stanley et al. (2018) conducted a large-scale cohort comparison study to determine whether the SAFE VET intervention was associated with reduced suicidal behavior and improved outpatient treatment engagement in the 6 months following discharge, an established high-risk period. SAFE VET was associated with a 45% reduction in suicidal behaviors, approximately halving the odds of suicidal behavior over 6 months (odds ratio, 0.56; 95% CI, 0.33-0.95, P = .03). Additionally, veterans that received the SAFE VET intervention were more than twice as likely to attend at least one outpatient mental health visit (odds ratio, 2.06; 95% CI, 1.57-2.71; P < .001).

In a study that analyzed medical staff perceptions of the SAFE VET intervention, almost all staff indicated that SAFE VET was helpful in connecting veterans with follow-up services (Chesin et al., 2017). A slight majority of staff believed SAFE VET increased the safety of participating veterans. Study finding indicated medical staff members benefited from SAFE VET

implementation because their comfort in discharging veterans at some risk for suicide increased (Chesin et al., 2017)

The SAFE VET program is ready for broader scale implementation. The logistics of providing the intervention in person to veterans in emergency rooms across the country are likely infeasible. The Suicide Safety Plan portion of SAFE VET could be delivered via telehealth networks to participating emergency rooms, with follow-up conversations being administered telephonically (Barbara Stanley, communication with the commission, April 18, 2019). VA has incredible expertise in delivering telehealth care and could deliver this critical intervention across the country.

Lethal Means Storage Options

Easy access to the ability to kill oneself can be incredibly dangerous to people who live with suicidal thoughts. The practical capability to transition from suicidal ideation to suicide completion is especially a concern with firearm suicides (Houtsma, Butterworth, & Anestis, 2018). As such, lethal-means restriction has become one of the focuses of national suicide prevention efforts and calls to action for suicide prevention (Mann & Michel, 2016).

Similar to other suicide prevention research, lethal-means restriction research is still in the early stages. Guidance for lethal-means restriction counseling does not necessarily transition into widescale use in clinical practice (Bandealy, Herrera, Weissman, & Scheidt, 2019; Betz et al., 2018). The path to devise public messaging campaigns around lethal-means reduction for veterans at risk of suicide also needs more exploration (Karas et al., 2019).

While the messaging and clinical intervention options are being sorted out, Congress and VA can work on the logistics of lethal-means storage, specifically, ensuring that safe firearm storage is available to veterans and their families to use as a suicide prevention strategy.

Local law enforcement agencies are a logical and probable partner for Congress and VA to partner with for local means restriction. Local law enforcement is already involved in many mental health crises. They are aware of state and local laws involved with firearm storage in a manner that cannot be matched by a federal agency like VA. In many cases, local law enforcement agencies are already providing these services to families at risk of suicide (Runyan et al., 2017). The commission recommends that a community grant program be established to further support the development of voluntary firearm safe storage options across the country.

Suicide Messaging Platform

VA must adopt a suicide prevention messaging platform that explains the interrelationship between susceptibility to suicidality and environmental stressors. The stress-diathesis model should be the foundation for this model while including facets of other research-proven suicide prevention models.

The relationship between mental illness symptoms and suicide risk factors makes it difficult to determine after a suicide if someone would actually have had the right number and type of symptoms to be diagnosed with a mental illness. Consequently, it remains difficult to interpret the significance of knowing "50% of veterans who completed suicide had received a mental

health diagnosis before their death" (Keita Franklin, presentation to Commission, January 30, 2019).

It is unclear how many among the remaining 50% would have had the right symptom cluster to have been diagnosed with a mental illness and whether the statistics would be consistent with the general acknowledgment that "over 90% of those who committed suicide had a psychiatric diagnosis at the time of death" (Bertolote & Fleischmann, 2002). Reed (2013) indicated, "We certainly need to learn more about the relationship between mental illness and suicidal behaviors. I welcome any research and dialogue that will help clarify this association. But from a prevention standpoint, we should not let the '90 percent' figure limit our pursuit of solutions or prevention opportunities." To effectively follow Reed's advice, VA needs an overall model to communicate to veterans, family members, and others how to prevent suicide and why certain strategies work.

VA requires a suicide prevention model that explains the complex realities of suicide, suicide prevention, and treatment for suicidal behavior. The stress-diathesis model is well-suited to form the foundation of a suicide prevention model for VA. Based on this model, suicidal behavior results from the interaction between environmental stressors and susceptibility to suicidal behavior (Van Heeringen & Mann, 2014).

Wilcox (2019, p. 212) offers a more in-depth explanation:

> *In this model, diathesis describes the development of risk, defined by conditions that create an enduring vulnerability to be suicidal. Stress refers to triggering environmental (and contextual) factors that promote acute risk and the breakdown of protective factors among those already vulnerable. The development of suicidal behavior is the result of an interaction between stressors and a susceptibility to suicidal behavior (diathesis). A typical stressor includes the acute worsening of a psychiatric condition, but often an acute psychosocial crisis seems to be the most proximate stressor or 'the straw that broke the camel's back' leading to suicidal behavior. Pessimism and aggression/impulsivity are components of the diathesis for suicidal behavior. Sex, religion, familial/genetic factors, childhood experiences, and various other factors influence the diathesis stress model. The model posits that suicide is the result of an interaction between state-dependent (environmental) stressors a trait-like diathesis or susceptibility to suicide behavior, independent of psychiatric disorder. Stressors, such as life events and psychiatric disorders, are important risk factors for suicide, but the diathesis concept explains why only a few of these individuals exposed to these stressors will take their own life. Early-life adversity and epigenetic mechanisms seem to be related to causal mechanism for diathesis.*

This model has held up for years for the variety of suicide factor data that has arisen in both military and veteran populations (Mann, Waternaux, Hass, & Malone, 1999). It is easily grasped by various populations such as families affected by suicide, clinicians, and policymakers. Other suicide factors can be added to the diathesis or stress categories. The model also has a strong basis in neurobiology, which renders it less susceptible to changes in the process of diagnosis and treatment of psychiatric conditions (Van Heerigen, Kees, & Mann, 2014). This model is flexible enough to factor in conditions such as depression, BD, schizophrenia, substance abuse, and adverse childhood experiences, all of which are substantial risk factors for suicide (Mann & Currier, 2010). These conditions can be activated without trauma experience and are critical to

understanding why some veterans are in danger of committing suicide even if they have not been in combat.

An effective and concise suicide message from VA will allow VA to improve, strengthen and support public health suicide prevention program that are rolling out across the country. States like Arizona (ABC15: Arizona News, 2019) and Montana (Associations Now, 2017) have taken dramatic steps forward in public health campaigns for suicide prevention. These efforts have been fostered across the country through the Mayor's Challenge and the Governor's Challenge to prevent suicide (VA, 2019a). These campaigns should be expanded and improved through development of a consistent, research-supported suicide prevention model and further research to ensure that these programs are as effective as possible.

The model should have flexibility and logical consistency in addressing some of the issues that are related to suicide prevention campaigns to include the following:

- Stressful life events such as divorce can be risk factors for suicide, but only a small number of people who experience a stressful life event will complete suicide.
- Mental illnesses are a significant risk factor for suicide, but you do not have to have all of the symptoms that classify a mental illness to be suicidal.
- Although factors such as mental health and stressful life events can be the driving force behind suicidality, the biological roots of the condition are strong enough that a substance like Ketamine may be able to dramatically reduce short-term suicidality without meaningfully creating any long-term changes in mental health or stressful life events.
- Although suicidality may be different for each person with similar backgrounds and experiences, there are some points that are consistent across suicides (e.g., suicidality is not a logical response to adverse events).

VA Disability Rating System

Unemployment is a common risk factor related to suicide (Shana Bakken, communication with the commission, March 12, 2019). Employment problems can be related to other suicide risk factors such as loss of status or respect, financial difficulties, homelessness, lack of social support, and lack of meaning and purpose.

Employment can produce benefits similar to those of clinical mental health interventions to include physical activity, social interaction, opportunities to play valued social roles, development of skills, distraction from clinical symptoms, and the indirect benefits of earning income, to include paid time off and employer-supported health insurance.

Because there is a risk that employment may reduce or eliminate health care access and disability benefits, the current VA benefit system disincentivizes veterans with disabilities from seeking employment. "Most Veterans believed that working would result in loss of benefits, and the majority agreed they would turn down a job if it entailed loss of disability payments" (Meshberg-Cohen, et al., 1996, p. 447).

This issue is a major concern for substance abusers, who are at high risk of suicide. Even if these veterans want to work, it is hard for them to give up the stability of VA health care and disability pay, when they are at high risk for losing jobs that might affect their VA benefits (Shana Bakken, communication with the commission, March 12, 2019). This paradox is especially problematic for veteran receiving substance abuse treatment because employment success has been related not only to reduced substance use, but also other benefits such as medical, legal, family, social, and psychiatric functioning improvements.

Concern among veterans that paid work may result in a reduction or loss of benefits suggests that they may be more focused on averting loss than maximizing profit, even if the odds of benefits reduction are small. Given the potential benefits of work in improving mental health and reducing suicide risk, VA needs to address this issue.

Conclusions

VA and the National Institute of Mental Health need to expand veteran suicide-prevention research. VA should develop a telehealth resources to implement SAFE VET to emergency rooms throughout the country. VA needs to ensure that its suicide-prevention messaging carries the overall point that suicide is not a rational brain response to adverse experiences. Adopting a suicide-prevention model that explains the complex realities of suicide, suicide prevention, and treatment for suicidal behavior is essential, and the stress-diathesis model is ideal for grounding VA's suicide-prevention message.

Implementation

Legislative Branch

- Fund and require VA to expand veteran suicide prevention research.
- Fund development of telehealth resources to SAFE VET to emergency rooms throughout the country.
- Develop a safe storage community grant program that will award communities with grants for developing safe storage firearm programs that can be accessed by veterans through referrals by SAFE VET or other VA providers.

Executive Branch

- Develop a telehealth resources to deliver SAFE VET to emergency rooms throughout the country.
- Ground VA's suicide prevention message in the stress-diathesis model after conducting messaging and marketing analysis to determine the best language and format to describe the model.
- Modify 38 CFR Section 4 to ensure that veterans' disability benefits other than those based on unemployability (38 CRF Section 4.18) will not be reduced based on

employment, including nonmarginal employment. Allow veterans who qualify for disability rates for unemployability to seek a 2-year extension of unemployability benefits after being hired for nonmarginal employment. The purpose of this extension will be to ensure veterans' vocation is stable before their unemployment benefits are reduced or eliminated.

- Adopt a public health model approach to addressing treatment-resistant depression, turning to states that are effectively rolling out public health suicide-prevention campaigns, such as Arizona.

> "I have treatment resistant depression. I've been on 30 different kinds of meds over the past 30 years…They gave me all kinds of meds, but nothing was effective. And it was like blaming me: 'Well Prozac's supposed to treat everybody, so if you're on Prozac and you don't get better, then you must not really be depressed.' That kind of thing."
>
> –Focus Group Participant

Recommendation 5: Provide universal access to effective care for treatment-resistant depression for all veterans in the VA mental health system.

Problem

Treatment-resistant depression is a major issue throughout the mental health treatment system. The nature of this issue is described below (Akil et al., 2018, p. 1):

> *An estimated 50% of depressed patients are inadequately treated by available interventions. Even with an eventual recovery, many patients require a trial and error approach, as there are no reliable guidelines to match patients to optimal treatments and many patients develop treatment resistance over time. This situation derives from the heterogeneity of depression and the lack of biomarkers for stratification by distinct depression subtypes.*

Background

The VA/DoD Clinical Practice Guideline for the Management of Major Depressive Disorder (VA/DoD Guideline) states that, "Military personnel are prone to depression, at least partially as a result of exposure to traumatic experiences, including witnessing combat and separation from family during deployment or military trainings" (VA/Department of Defense, 2016, p. 6). The VA/DoD Guideline highlights data from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS) as an example.

Army STARRS described the 30-day prevalence of major depressive disorder (MDD) as 4.8% compared to less than 1% among a civilian comparison group (Kessler et al., 2014). In fiscal year 2015, among veterans served by VA, the documented prevalence of any depression (including depression not otherwise specified) was 19.8%, while the documented prevalence of MDD was 6.5% (VA, 2015).

Findings

VA's ability to serve veterans with depression is hampered by the current state of the science to diagnose and treat depression. Only about half of patients with depression receive adequate treatment by available interventions, and that treatment comes through trial and error, rather than the results of guidelines that pair patients with the ideal treatment (Akil et al., 2018). Treatment resistance often occurs as a result of this process. According to data collected by the COVER Commission, only approximately 1166 patients VA-wide were referred for electroconvulsive therapy (ECT) in 2018 and about 772 were referred for repetitive transcranial magnetic stimulation (rTMS).

Other estimates of the prevalence of treatment-resistant depression range from 30% (Rush et al., 2006) to 50% (Souery et al., 2007). A recent study in the United Kingdom found treatment-resistant depression rates of 55% (Wiles et al., 2014). The Depression Task Force saw hope in the future, as advances for studying genetic and epigenetic mechanisms and brain functioning, enhance the ability to "parse the broad, heterogeneous syndrome of human depression into biologically-defined subtypes and to generate more effective and rapidly-acting treatments based on a knowledge of disease etiology and pathophysiology and circuit dynamics" (Akil et al., 2018).

The possibility of future scientific advancements does not relieve the current burden that VA bears to provide adequate care options for veterans with treatment-resistant depression. The VA/DoD Guideline has the following recommendations for veterans with treatment-resistant depression (VA/DoD, 2016):

- "For patients with treatment-resistant MDD who had at least two adequate pharmacotherapy trials, we recommend offering monoamine oxidase inhibitors … or tricyclic antidepressants … along with patient education about safety and side effect profiles of these medications" (VA/DoD, 2016).
- "We recommend offering electroconvulsive therapy (ECT) with or without psychotherapy in patients with severe MDD and any of the following conditions:
  - Catatonia
  - Psychotic depression
  - Severe suicidality
  - A history of a good response to ECT
  - Need for rapid, definitive treatment response on either medical or psychiatric grounds
  - Risks of other treatments outweigh the risks of ECT (i.e., co-occurring medical conditions make ECT the safest treatment alternative)
  - A history of a poor response to multiple antidepressants
  - Intolerable side effects to all classes of antidepressant medications (e.g., seizures, hyponatremia, severe anxiety)
  - Patient preference
  - Pregnancy" (VA/DoD, 2016)

- "We suggest offering treatment with repetitive transcranial magnetic stimulation … for treatment during a major depressive episode in patients with treatment-resistant MDD" (VA/DoD, 2016).

Conclusions

VA must make all of these treatment modalities available to veterans that need them to address the problem of treatment-resistant depression. Treatment-resistant depression is a major component of the veteran patient population, which necessitates making such treatment available, whether through VA or through contracts with outside treatment providers. Although VA does appear to offer these services at some flagship facilities, the services are not available consistently from facility to facility, and obtaining them is particularly challenging at facilities in rural areas.

Implementation

Legislative Branch

- Require VHA leaders to include treatment-resistant depression care in VA's overall care updates to make it clear which areas and regions are not delivering care to these veterans that need it.

Executive Branch

- Assess availability of care for treatment-resistant depression across the enterprise, and create and implement a plan for ensuring all veterans have access to this type of care.
- Offer training for appropriate providers for administering ECT, so that this treatment is more readily available within VA.
- When evidence-based treatments for treatment-resistant depression such as ECT and rTMS are not available in a veteran's facility, provide transportation to another VA facility that offers such care.

> "Get[ting] in with the neuro research and all that kind of thing is really cool…they have a lot of research stuff, but access to it here at the CBOC seems stretched out a lot. I feel like the staff in mental health are very strained."
>
> –Focus Group Participant

Recommendation 6: Expand VA's precision mental health efforts in partnership with the National Institute for Mental Health to more effectively diagnose and treat mental health conditions.

Problem

The state of the science in screening, diagnosing, and treating mental health conditions is in flux, as described below (Insel et al., 2010, p. 748).

> *Current versions of the [Diagnostic and Statistical Manual of Mental Disorders] and [International Classification of Disease] have facilitated reliable clinical diagnosis and research. However, problems have increasingly been documented over the past several years, both in clinical and research arenas. Diagnostic categories based on clinical consensus fail to align with findings emerging from clinical neuroscience and genetics. The boundaries of these categories have not been predictive of treatment response. And, perhaps most important, these categories, based upon presenting signs and symptoms, may not capture fundamental underlying mechanisms of dysfunction. One consequence has been to slow the development of new treatments targeted to underlying pathophysiological mechanisms.*

Background

The critical nature of this issue to VA's services is one of both issue severity (veteran suicide) and scope. According to VA's Office of Research and Development (2019), "More than 1.8 million veterans received specialized mental health care from VA in fiscal year 2015." VA serves almost 2 million veterans a year in a treatment system based on mental health diagnosis categorization that the former director of the National Institute of Mental Health has deemed not to be "predictive of treatment response" (Insel et al., 2010). That flaw in VA's mental health treatment system presents a fissure in its ability to prevent veteran suicides.

Findings

The scientific search for biological signatures to guide the screening, diagnosis, and treatment of psychiatric conditions has evolved beyond the traditional diagnostic categories into a more transdiagnostic viewpoint as described below (Beauchaine & Constantino, 2017, p. 773):

> *An emerging consensus in the psychopathology research community is that complex functional interactions among a limited number of neural and hormonal systems – far fewer in quantity than syndromes defined in the psychiatric nomenclature – give rise to many if not most mental health conditions. From this perspective, endophenotypes might be more effectively reconstrued as markers of genetic liability to transdiagnostic vulnerability traits (e.g., impulsivity, irritability, anhedonia). As Skuse noted over 15 years ago, '…a focus on traits, rather than syndromes, is appropriate and could in due course contribute to the redefinition of traditional psychiatric syndromes'. When reframed in this way, common neural correlates of psychopathology among what have traditionally been considered as distinct disorders are no longer a nuisance in our quest for greater specificity, but are instead opportunities to better understand common etiologies.*

Researching biosignatures that can affect care of brain health conditions is critical to improving mental health treatment. Transdiagnostic measurements are not intended to replace psychiatrists, psychologists, primary care providers, therapists, peer support specialists, and others who treat mental health patients, but rather to add insights to their efforts as illustrated in a few key examples. One such example is found from functional magnetic resonance imaging through which researchers have been able to establish that a common intermediate phenotype exists that could be used to guide development of multimodal therapeutic approaches aimed at symptoms as well as the underlying functional and quality of life issues (McTeague et al., 2017).

As an example, genetics researchers have established that for common neuropsychiatric disorders genetic variants, along with environmental risk factors, increase the risk for developing such disorders (Bray & O'Donovan, 2019). The next step is "Translating these discoveries into an understanding of molecular, cellular and neurophysiological mechanisms underlying neuropsychiatric conditions [which] will require the expertise of researchers in many areas of neuroscience" (Bray & O'Donovan, 2019, p. 8).

Related to blood plasma, research indicates that five of the six molecules most commonly studied as plasmatic markers of schizophrenia, major depressive disorder, and bipolar disorder are the same across diagnoses, suggesting there may be a transdiagnostic nature to these psychiatric conditions (Pinto et al., 2017).

VA's precision mental health program is tackling some of the most critical questions about how to improve the diagnosis and treatment of psychiatric conditions. The program recently published results of its groundbreaking study (Etkin et al., 2019). In this study, researchers found a particular common combined phenotype. "We found that a subgroup of patients with post-traumatic stress disorder (PTSD) from two independent cohorts displayed both aberrant functional connectivity within the ventral attention network … as revealed by functional magnetic resonance imaging … neuroimaging and impaired verbal memory on a word list learning task" (Etkin et al., 2019). This combined phenotype "could be used to predict a poor response to psychotherapy, the best-validated treatment for PTSD" (Etkin et al., 2019).

Similarly, Establishing Moderators and Biosignatures of Antidepressant Response for Clinical Care for Depression (EMBARC) has made significant strides in its analysis of depression (National Institutes of Health, 2018). That effort, and related efforts by a team at the University of Texas Southwestern, have identified potential biosignatures involving inflammation (Jha &

Trivedi, 2018), blood (Czysz et al., 2019; Furman, et al., 2018), and advanced imaging (Cooper, et al., 2019).

Conclusions

Advances in precision mental health research underscore the viability of using biosignatures associated with various mental health diagnoses to pinpoint the ideal treatments for individual mental health patients. The precision mental health initiative in the Commander John Scott Hannon Veterans Mental Health Care Improvement Act would require the Secretary of Veterans Affairs to develop and implement an initiative to identify and validate brain and mental health biomarkers among veterans, with specific consideration for depression, anxiety, post-traumatic stress disorder, traumatic brain injury, and other mental health conditions the Secretary of Veterans Affairs considers appropriate as a precision medicine for veterans initiative. Passing this bill would set the stage for streamlining mental health treatment among veterans by providing them with the optimal treatment based on biosignature markers.

The next stage of developing precision medicine in VA requires both research and translation into clinical practice. VA facilities outside of the flagship institutions will need to participate to ensure adequate representation of a diverse group of veterans. Precision medicine will be specific enough that groups that are not included in the research will not benefit from all of the findings.

Veterans Equitable Resource Allocation (VERA) is critical to how facility administrators are measured. The VERA model must be aligned to support a broad-scale research and translational initiative. If precision medicine efforts are not properly incentivized in VERA, then that lack of local incentivization will stunt precision medicine efforts in VA.

Implementation

Legislative Branch

- Pass the Precision Mental Health Initiative in the bipartisan Commander John Scott Hannon Veterans Mental Health Care Improvement Act.

Executive Branch

- Expand the precision mental health initiative.
- Ensure that the VERA model supports precision health care initiatives.

> "Mayo Clinic and other places around the country used [Ketamine], but not the VA system. The VA has a whole set of different rules and standards. But now that the VA approved [Ketamine use], several months ago, my VA doesn't do it. Other VAs, but not mine."
>
> –Focus Group Participant

Recommendation 7: Identify and rectify availability gaps for evidence-based psychotherapeutic interventions.

Problem

VA has moved toward the evidence-based model of medicine, yet the availability of different evidence-based therapies varies widely among facilities. It is unclear why treatment options offered in some places are not offered in others. For example, during a site visit to VA facilities in Chicago, IL, the COVER Commission learned that clinicians at James A. Lovell Federal Health Care Center find Eye Movement Desensitization and Reprocessing (EMDR) a critical evidence-based practice, greatly appreciated by veterans served there. The clinicians at Jesse Brown VA Medical Center, which is 36 miles away, however, stated that they did not offer EMDR to veterans. These programs are both in the same geographic region and Veterans Integrated Service Network (VISN). The fact that they did not offer the same evidence-based practices to veterans is an indicator of how variable the availability of evidence-based practices are across the VA system.

Background

The COVER Commission developed a clinical inventory questionnaire (CIQ) to identify which evidence-based mental health treatments are offered by VA. The evidence-based treatments included in the questionnaire were identified using the VA/DoD Clinical Practice Guideline for the Management of Major Depressive Disorder (VA/DoD Guidelines). Those treatments that were found to be effective, including treatments that were recommended in the guidelines, were included in the questionnaire and stratified by the mental health conditions that align with the commission's legislated mission. The mental health conditions included major post-traumatic stress disorder (PTSD), opioid use disorder (OUD), alcohol use disorder (AUD), major depressive disorder (MDD), suicidal behavior, and insomnia disorder.

Between September and October 2019, the commission distributed the CIQ with the assistance of the Office of the Deputy Under Secretary for Health Operations Management to all 18 VISNs to be completed at the facility level. Ninety-seven VA health care facilities, across 15 VISNs, completed the questionnaire. No VA facilities from VISNs 20, 22, and 23 responded to the questionnaire; therefore, those VISNS were not included in the analyses. The commission

aggregated questionnaire responses and identified results at the VISN-level to better assess the availability of treatments across VISNs. Data generated from the questionnaire constituted a convenience sample determined by those facilities that returned the surveys. Limitations of the analysis include the fact that three VISNs were not represented and that not all facilities within the participating VISNs participated. Because of these limitations, prevalence may be underestimated.

Findings

Findings from CIQ analysis provide a description of the availability of evidence-based treatments across VA facilities specific to PTSD, AUD, OUD, MDD, suicidal behavior, and insomnia disorder. Among the responding VISNs, most offered evidence-based treatments in at least one of their facilities; however, the treatment options available to veterans at surveyed facilities varied from location to location.

Post-Traumatic Stress Disorder

Cognitive processing therapy (CPT) and prolonged exposure therapy (PE) were the most commonly endorsed therapies for PTSD, as all facilities offered CPT services, and 99% of facilities offered PE services. All VISNs offered at least one evidence-based treatment for PTSD; however, several VISNs (2, 6, 7, 9, 10, 15, and 16) did not have any facilities that offered brief eclectic therapy or narrative exposure therapy as a treatment option.

Opioid Use Disorder

Regarding pharmacotherapy interventions, 99% of facilities offered Buprenorphine/Naloxone therapies, and 31% offered methadone therapies. Of note, no facilities in VISN 9 offered methadone therapies. Regarding psychosocial interventions, 98% of facilities offered individual counseling, and 60% of facilities offered contingency management interventions.

Alcohol Use Disorder

Motivational enhancement therapy services were the most commonly offered intervention for AUD (99%). At least one evidence-based AUD treatment was offered in all surveyed facilities within each VISN. Except for VISN 7, all VISNs offered all evidence-based AUD treatments in at least one facility within the VISN. VISN 7 did not include any facilities that offered community reinforcement approach treatments.

Major Depressive Disorder

All facilities that participated offered at least one evidence-based MDD treatment. Except for VISN 7, all VISNs offered all evidence-based MDD treatments in at least one facility within the VISN. VISN 7 did not include any facilities that offered mindfulness-based cognitive therapy treatments.

Suicidal Behavior

The evidence-based psychotherapies for suicidal behavior in the questionnaire were cognitive behavior therapy (CBT) for suicide and dialectical behavior therapy (DBT). DBT is the most

commonly offered suicide prevention intervention; 80.4% of facilities offered DBT services. Additionally, 61% of facilities offered CBT for suicide prevention.

Insomnia Disorder

The evidence-based psychotherapies for insomnia disorder in the questionnaire were CBT for insomnia and brief behavior therapy for insomnia. Approximately 98% of facilities offered CBT for insomnia, while 44.3% offered brief behavior therapy for insomnia. No facilities within VISN 7 offered brief behavior therapy for insomnia.

Conclusions

VA uses systematic and tested dissemination strategies to increase provider knowledge and use of research-based practices recommended in widely used clinical practice guidelines used for treatment of veteran mental health problems. It is not clear the full breadth of practices from the VA/DoD Guidelines being offered, which practices are not offered broadly, or how it is determined and redetermined which practices will be offered.

Additionally, psychotherapy and related evidence-based practices, especially for PTSD, are frequently not implemented to the full extent described in the in the practice guidelines. Many veterans diagnosed with PTSD, depression, and SUD do not receive the recommended treatments (National Academies of Sciences, Engineering, and Medicine, 2018).

Comparative data show that VA outperforms the private sector on seven process-based quality measures assessing medication treatment for mental health disorders, suggesting that VA provides better care in these areas than does the private sector. Nonetheless, large percentages of veterans are not getting care as set forth in clinical standards for dosage, frequency, and follow-up (National Academies of Sciences, Engineering, and Medicine, 2018).

Implementation

Legislative Branch

- There are no statutory changes required for this recommendation.

Executive Branch

- Conduct a gap analysis throughout the VA health care system of the use and availability of psychotherapeutic interventions recommended in widely used clinical practice guidelines. Report on why certain interventions are not widely implemented or are excluded from VA-wide rollout, and share the results across the enterprise.

- Adopt a plan with measurable, time-limited steps to address gaps that limit veterans' access to care that is essential to treat their conditions.

> "The more peer support you have, the better chance you have of getting new services out there available….Why can't there be an assigned sponsor to help walk them through the process…and just take them by the hand and just tell them…it's going to be okay, and walk them through the services, which would help reduce…the suicide rate."
>
> –Focus Group Participant

Recommendation 8: Recognize and incentivize the roles of peer support specialists, behavioral health specialists, health coaches, and chaplains in mental health care in the Veterans Equitable Resource Allocation system.

Problem

The current model of accounting and valuing VA health care services—Veterans Equitable Resource Allocation (VERA)—highlights the number of services provided by certain health care providers such as physicians, psychologists, and social workers. Certain professions that provide services to VA patients are left out of the VERA model; therefore, they are undervalued by the system regardless of the quality of care individuals in these professions provide to veterans. As a result of the VERA model, certain clinical fields are overwhelmed, while other professions are underutilized.

Background

VA allocates general purpose funds to its 18 VISNs through the VERA model (Government Accountability Office [GAO], 2019). As described by GAO, "[The] VERA model uses a national, formula-driven approach that considers the number and type of veterans served and the complexity of care provided—collectively referred to as patient workload—as well as certain geographic factors, such as local labor costs, to determine the amount of general purpose funds each VISN should receive. The Veterans Health Administration (VHA) uses VERA to establish funding levels for each VISN in the following areas: patient care, equipment, education support, and research support, the largest of which is patient care" (GAO, 2019, p. 11).

VERA highlights the number of services provided by licensed health care providers such as physicians, psychologists, and social workers. There are, however, certain professions like peer support specialists and health coaches that are left out of the VERA model and disregarded in VA health care funding decisions. Consequently, the VA health care system is almost totally reliant on services of licensed health care professionals, even for the tasks that do not require a licensed professional and may in fact be best accomplished by professionals who have the capability to spend more time with veterans to build rapport and truly understand their health care goals and challenges.

Findings

Although there are many positions in the VA health care system not captured in VERA, the COVER Commission has identified four that should be added to VERA to help optimize VA mental health care: peer support specialists, behavioral health specialists, health coaches, and chaplains.

Peer Support Specialists

VA hires peer specialists and peer support technicians, referred to in this report with the single term *peer support specialist* (Chinman, Henze, & Sweeney, n.d.). Peer support specialists promote recovery by sharing their own recovery stories, providing encouragement, instilling a sense of hope, and teaching skills to veterans. VA peer support specialists must possess defined competencies and are trained to use their lived experiences to help veterans identify and achieve identified life goals related to recovery. Their specific tasks include the following: (Chinman, et al., n.d.)

- Facilitate peer support groups
- Share personal recovery stories
- Advocate for veteran consumers
- Act as role models of recovery
- Provide crisis support
- Communicate with clinical staff
- Act as a liaison between staff and veterans
- Work on a variety of clinical teams
- Provide outreach & educate VA facility staff and veterans about peer support services

"The effects of receiving peer support are broad and include not only clinical effects, such as [quality of life] or the hospitalization rate, but also personal and emotional effects, such as feelings of understanding or trust" (Miyamoto & Sono, 2012, p. 22). Research supported benefits of peer support include the following: (Chinmon et al., n.d.)

- Less inpatient use
- More time and engagement with the community
- Better treatment engagement
- Greater satisfaction with life
- Greater quality of life
- Greater hopefulness
- Better social functioning
- Fewer problems and needs

Although the peer support specialist role is not designed to replace licensed clinicians, for systems struggling to recruit and retain licensed clinicians, peer support specialist can play an especially vital part in overall mental health care provision. "Involving consumer–providers in mental health teams results in psychosocial, mental health symptom and service use outcomes for clients that were no better or worse than those achieved by professionals employed in similar roles, particularly for case management services" (Pitt et al., 2013, p. 2).

Peer support specialists are reimbursed by Medicaid in more than 20 states and use of this care model is expanding (Chinman et al., n.d.)

Partners in those states that offer Medicare reimbursement can help VA understand how to maximize the benefit of these critical players in the mental health care team.

Behavioral Health Technicians

The U.S. military increasingly uses behavioral health technicians (BHTs) (Defense Health Agency, 2019). As clinical extenders, BHTs may allow for an increased number of patients to be seen and possibly contribute to a reduction in network referrals. DoD has found that with appropriate training and supervision, BHTs can perform and support a wide range of clinical services including, but not limited to the following:

- Intake evaluations/biopsychosocial assessments
- Triage screenings
- Occupational evaluation screenings
- Group counseling (e.g., support groups)
- Individual counseling
- Psychometric testing administration (including neuropsychological and psychodiagnostic evaluations)
- Psychoeducational groups
- Psychoeducational presentations/briefings
- Outreach and prevention
- Treatment planning
- Case management/care coordination
- Crisis intervention
- Command consultation

BHTs can help extend clinical availability by allowing licensed behavioral health providers more time to focus on patients with complex psychopathology (Defense Health Agency, 2019). BHTs work is supervised under a licensed behavioral health provider in a manner similar to how physician assistants work. Supervising providers identify which patients are suitable for BHT intervention and maintain ultimate responsibility for those individuals' care. "Factors a provider might consider when assigning a patient care task to a BHT could include patient diagnosis, symptom severity, and complexity of psychopathology, as well as training, skill level, and experience of the BHT" (Defense Health Agency, 2019, p. 3). BHTs are trained to address brief, solution-focused interventions for psychosocial concerns and stressors. They are trained to work in both individual and group formats to offer counseling and psychoeducational support.

Health Coaches

Health coaches have proven effective in both rehabilitative and prevention roles (Dejonghe, Becker, Froboese, & Schaller, 2017). The COVER Commission observed them used as critical components of the whole health team in both private-care facilities and the Tampa VA Medical Center. Coach interventions can be based on a number of different frameworks, such as motivational interviewing, social cognitive theory, problem solving technique, cognitive

behavioral therapy, protection motivation theory, psychological behavior changing theory, and the collaborative care model (Dejonghe et al., 2017). Health coaching interventions have demonstrated efficacy in psychological, physiological, and behavioral indicators (Dejonghe et al., 2017).

Chaplains

VA has been using chaplains since 1865, and their primary roles of VA hospital chaplains include the following: (VA, n.d. b)

- Ensuring that veteran patients (both inpatient and outpatient) receive appropriate clinical pastoral care as desired or requested by the veteran.
- Ensuring that hospital, domiciliary, and nursing home patients' constitutional right to free exercise of religion is protected. What this means is that it is the veteran's choice as to whether to meet with a chaplain or any religious person.
- Protecting patients from having religion imposed on them.

Chaplain services must always be the veteran's choice. When a veteran chooses to use chaplain services, chaplains can provide supportive spiritual care and also act a member of the patient care team through the following:

- Grief and loss care.
- Risk screening to identify factors that may affect recovery.
- Communication with a veteran's caregivers.
- Facilitation of communication, assisting in decision making, and conduction conflict resolution among staff members, patients and family members.
- Referral and linkage to internal and external resources.
- Participating in medical rounds and patient care conferences.
- Charting spiritual care interventions in medical charts.

VA and DoD have worked to integrate chaplains as part of the mental health treatment teams.

> *"Training chaplains in appropriate, evidence-based psychotherapeutic modalities in a manner that retains pastoral identities is important, given the barriers to mental health care that exist for many veterans and service members, such as fear than information will not remain confidential or that one will be perceived as weak. Whatever the reason for turning to a chaplain, veterans and service members need chaplains who can effectively address psychosocial problems that are within the chaplain's scope of practice and who can knowledgeably and efficiently refer to professional mental health services when needed. Conversely, veterans and service members need mental health professionals who understand what chaplains can offer and who can make appropriate referrals when indicated. Current systems redesign efforts provide a model and suggestions for improving integrated care practices (e.g., via improved cross-disciplinary procedures for screening, referrals, documentation, assessment, and communication), while allowing precise determination around scopes of practice and processes for cross-disciplinary collaboration to be informed by the unique characteristics of local facilities."* (Nieuwsma et al., 2014, pp. 891–893)

Conclusions

All of the professions described above are either underused or under incentivized in the current VERA system. Although peer support specialists, BHTs, health coaches, and chaplains cannot fix the long-term issues that need to be resolved in the overall VA care model, ensuring that these positions are effectively recognized as critical to veterans care in VERA should help address some of the critical challenges in the current overburdening and licensed clinical staff and underutilization of nontraditional care team members that that can help move the needle for veterans whole health care.

Implementation

Legislative Branch

- There are no statutory changes required for this recommendation.

Executive Branch

- Develop the position of a behavioral health technician, with a similar pay structure to a case manager. BHTs will serve the same critical role in the VA mental health care system that they do in the DoD mental health care system.
- Ensure the roles of peer support specialists, BHTs, health coaches, and chaplains in mental health care are effectively recognized and incentivized in the VERA System.

> "Washington and Colorado were two of the first states to legalize [marijuana use]. Actually, it was recommended by the physical therapist, and we got tinctures and creams and different things for about $100."
>
> –Focus Group Participant

Recommendation 9: Engage with other federal agencies, as appropriate, to research the potential short- and long-term risks, as well as benefits, of medical cannabis and psychedelic drugs.

Problem

Medical cannabis and psychedelic drugs may have uses in treating mental health issues among veterans; however, these substances are currently classified as Schedule 1 under the Controlled Substances Act, which precludes VA from conducting research on their efficacy.

Background

Medical marijuana has become a staple in health care systems in 33 states, the District of Columbia, and Puerto Rico (Procon.org, 2019). In those states, veterans are using medical marijuana as part of their health care outside of VA. This situation necessitates that VA better understand medical marijuana, and how it can benefit and harm patients who use it, so VA providers can better care for these veterans. Currently VA has been limited by legal and policy reasons from conducting this critical research.

In a similar vein, some of the most interesting research in the country on posttraumatic stress disorder (see e.g., Sessa, 2017) and other mental health conditions (see e.g., Johnson & Griffiths, 2017), use of 3,4-Methylenedioxymethamphetamine (MDMA) is in Phase 3 clinical trials with the Food and Drug Administration (FDA). Psilocybin is in Phase 2 clinical trials. The psychedelic research movement is gathering momentum at Johns Hopkins University's medical school (Colagrossi, 2019) and Imperial College in London (O'Hare, 2019), and both recently announced the establishment of psychedelic research centers.

Although the findings have limited generalizability due to sample size and homogeneity issues, studies have shown some promise for treating disorders for which available treatments are insufficient—mood, substance, anxiety disorders, post-traumatic stress disorder—using psychedelics, including MDMA (Garcia–Romeu et al., 2016).

Findings

The U.S. federal government's policies have blocked externally valid, randomized clinical trials on the effects of cannabis (Stith & Vigil, 2016). Scientists seeking to conduct research on cannabis must submit to an arduous application process that may last years. The research requires approval from multiple government agencies, including some with stated opposition to any therapeutic uses of cannabis. After the application process is complete, all cannabis used for research purposes must be purchased through the National Institute on Drug Abuse (NIDA). The tetrahydrocannabinol (THC) levels of the cannabis produced by NIDA is much lower than the THC potency levels used by patients around the country.

Because VA is unable to conduct research into issues that are actively affecting veterans' health care (medical cannabis) or issues that could dramatically affect veterans' health care (medical psychedelics), VA is unable to explore possibilities such as whether medical psilocybin is effective in decreasing anxiety and depression in patients with life-threatening cancer (Griffiths et al., 2016). The opioid epidemic highlighted the need for third-party research into negative effects of treatment interventions and underscored that FDA approval alone does not reveal all of the potential negative consequences that can come about when a prescription treatment is made available to the public.

Conclusions

There are significant questions about the benefits and costs of using cannabis and psychedelics in treating mental health issues. The efficacy and safety of these types of treatments are unclear, but it is essential that VA engage in research to better understand them.

Implementation

Legislative Branch

- Ensure that VA researchers have a pathway to engage with other federal agencies to safely conduct research on the medical use of cannabis and psychedelics, including MDMA.
- Ensure that NIDA develops strains of cannabis with THC levels equivalent to those being used by medical cannabis users in the states where medical cannabis is legal to ensure that research on medical cannabis use generates meaningful information on the related risks and benefits.

Executive Branch

- Engage with other federal agencies to conduct research into the positive and negative effects on veterans' mental health of medical cannabis and psychedelics, including MDMA.
- Provide VA providers with up-to-date information on research related to use of medical cannabis and psychedelics, including MDMA.

- Educate VA providers about their ability to discuss the benefits and possible negative effects of medical cannabis with veterans in their care.

> They can let [veterans] know about transportation available to the hospital, for one thing, like they do have vans and stuff. That would literally help them get there."
>
> –Focus Group Participant

Recommendation 10: Ensure that veterans can access mental health care by reviewing and updating transportation processes throughout the VA system.

Problem

VA has a complex transportation system that relies on a combination of different services and agencies (VA, 2019b). Transportation systems in general are rapidly changing. New forms of transportation, such as ride sharing and rental scooter and bike services have become common. VA has not updated its approach to transporting veterans to care to include these new transportation modes, yet these transportation models could increase the likelihood that some veterans will receive the mental health care they need.

Background

Transportation

A brief snapshot of complex heterogeneity of VA's veteran transportation program can be seen through the purpose section of VA's recently published Directive on Veterans Transportation Services.

> *This Veterans Health Administration (VHA) Directive provides policy for the Veterans Transportation Service (VTS) and all patient transportation both shuttle and door to door and covers those transportation services provided to eligible persons pursuant to Section 111A of Title 38 of the United States Code (U.S.C.). Specifically, this policy states which persons are eligible, how they may apply for transportation benefits, and how VA would provide transportation, including such limitations as are necessary for the safe and effective operation of the program. AUTHORITY: 38 U.S.C. 111A, 38 Code of Federal Regulations (CFR) 70.2, 70.30 and 70.70-.73. NOTE: This directive states VHA policy for all patient transportation provided pursuant to the authorities cited above regardless of whether the program is funded by VTS. This directive does not apply to transportation that is provided incidentally to patient care. This directive does not apply to transportation provided by volunteers as part of the Volunteer Transportation Network which is specifically addressed in VHA Handbook 1620.02, Volunteer Transportation Network, dated September 9, 2014.*
>
> *This Directive also identifies the role and responsibilities of the VTS Mobility Manager for management of the Beneficiary Travel Program and to serve as the point of contact … for the*

> *Highly Rural Transportation Program and for other community providers of transportation and state Veterans agencies and departments of Transportation as contained in the nationally classified VTS Mobility Manager Position Description (Supervisory Mobility Transportation Specialist).* (VA, 2019b, p. 1).

Overall, transportation systems around the country have been changing rapidly as mass transportation options have increased, the ride-sharing economy has flourished, and scooter companies have risen up to carry passengers for the *last mile* from public transportation to their destinations. A recent survey indicated that about 36% of Americans used ride-sharing services such as Lyft or Uber in 2019, which represents a 15% increase compared to 2015 (Mazareanu, 2019). Meanwhile, electric scooters are literally changing the landscape in many urban areas where riders can access dockless scooters wherever previous riders left them. Rental scooters offer a tremendous cost advantage for travelling short distances. "You can start riding many electric scooters for $1 and then 15 cents a minute thereafter. A 2-mile ride takes about 10 minutes and costs less than $3. When you're done, you don't have to take it inside or even plug it in; just leave it in a public space where it doesn't block traffic" (Irfan, 2018). It is not clear how these innovations align with veterans' need to get to their appointments at VA facilities. Questions remain such as which of these innovations are handicap accessible, which are available in rural areas, and how they factor into the strengths and challenges of VA's current transportation system.

Conclusions

Transportation is a critical element to a functioning mental health treatment system. Although telehealth is improving, veterans still require transportation to VA facilities for much of their care. Using mass transportation may be problematic for veterans with certain mental health conditions such as post-traumatic stress disorder and anxiety disorders. If clinicians were able to order special modes of transportation (e.g., Uber or Lyft rides) for these veterans, it might help them receive the care they need. Additionally, VA needs to evaluate its overall transportation program to identify policies that may be out of date and in need of revision and to reflect the existence of new transportation systems.

Implementation

Legislative Branch

- Work with VA to evaluate the program that provides transportation for veterans who require assistance to get to health care appointments and modify existing and adopt new policies as needed to reflect changes in transportation systems.

Executive Branch

- Evaluate the program that provides transportation for veterans who require assistance to get to health care appointments and modify existing and adopt new policies as needed to reflect changes in transportation systems.

- Allow special modes of transportation, such as ride-sharing services (i.e., Uber and Lyft) to be ordered for veterans with mental health diagnoses.

REFERENCES

100 Million Healthier Lives. (n.d.). *Well Being in the Nation (WIN) measures*. Retrieved from https://www.winmeasures.org/statistics/winmeasures

ABC15: Arizona News. (2019). *Arizona takes suicide prevention program on the road in hopes of saving veterans*. Retrieved from https://www.abc15.com/news/state/arizona-takes-suicide-prevention-program-on-the-road-in-hopes-of-saving-veterans

Akil, H., Gordon, J., Hen, R., Javitch, J., Mayberg, H., McEwen, B.,… Nestler, E. J. (2018). Treatment resistant depression: A multi-scale, systems biology approach. *Neuroscience Biobehavioral Review, 84*, 272–288. doi:10.1016/j.neubiorev.2017.08.019

American Psychology Association. (2018). *Can psychedelic drugs heal?* Retrieved from https://www.eurekalert.org/pub_releases/2018-08/apa-cpd080118.php#

Associations Now. (2017). *Montana broadcasters launch suicide-prevention campaign*. Retrieved from https://associationsnow.com/2017/06/montana-broadcasters-launch-suicide-prevention-campaign/

Bandealy, A., Herrera, N., Weissman, M., & Scheidt, P. (2019). Use of lethal means restriction counseling for suicide prevention in pediatric primary care. *Preventive Medicine, 130*. doi:10.1016/j.ypmed.2019.105855

Barry, M. J., & Edgman–Levitan, S. (2012). Shared decision making—The pinnacle of patient-centered care. *New England Journal of Medicine, 366*(9), 780–781. doi:10.1056/NEJMp1109283

Basu, S., Berkowitz, S. A., Phillips, R. L., Bitton, A., Landon, B. E., & Phillips, R. S. (2019). Association of primary care physician supply with population mortality in the United States, 2005–2015. *JAMA Internal Medicine, 179*(4), 506–514. doi:10.1001/jamainternmed.2018.7624

Beauchaine, T. P., & Constantino, J. N. (2017). Redefining the endophenotype concept to accommodate transdiagnostic vulnerabilities and etiological complexity. *Biomarkers in Medicine, 11*(9), 769–780. doi:10.2217/bmm-2017-0002

BeConnected. (2017). *Arizona forms coalition to help prevent Veteran suicides*. Retrieved from https://www.blogs.va.gov/VAntage/41472/connected-arizona-forms-coalition-help-prevent-veteran-suicides/

Bertolote, J. M., & Fleischmann., A. (2002). Suicide and psychiatric diagnosis: A worldwide perspective. *World Psychiatry, 1*(3), 181–185. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1489848/

Betz, M. E., Brooks-Russell, A., Brandspigel, S., Novins, D. K., Tung, G. J., & Runyan, C. (2018). Counseling suicidal patients about access to lethal means: Attitudes of emergency nurse leaders. *Journal of Emergency Nursing, 44*(5), 499–504. doi:10.1016/j.jen.2018.03.012

Bodenheimer, T., & Sinsky, C. (2014). From triple to quadruple aim: Care of the patient requires care of the provider. *Annals of Family Medicine, 12*(6), 573–576. doi:10.1370/afm.1713

Bray, N. J., & O'Donovan, M. C. (2019). The genetics of neuropsychiatric disorders. *Brain and Neuroscience Advances, 2*. doi:10.1177/2398212818799271

Carletto, S., Borghi, M., Bertino, G., Oliva, F., Cavallo, M., Hofmann, A.,…Ostacoli, L. (2016). Treating post-traumatic stress disorder in patients with multiple sclerosis: A randomized controlled trial comparing the efficacy of eye movement desensitization and reprocessing and relaxation therapy. *Frontiers in Psychology, 7*(526). doi:10.3389/fpsyg.2016.00526

Centers for Disease Control and Prevention. (2019). *Chronic diseases in America*. Retrieved from https://www.cdc.gov/chronicdisease/resources/infographic/chronic-diseases.htm

Chesin, M. S., Stanley, B., Haigh, E.A., Chaudhury, S. R., Pontoski, K., Knox, K. L., Brown, G. K. (2017). Staff views of an emergency department intervention using safety planning and structured follow-up with suicidal veterans. *Archives of Suicide Research, 2*(21), 127–137, doi:10.1080/13811118.2016.1164642

Chinman, M., Henze, K., & Sweeney, P. (n.d.) *Peer specialist toolkit: Implementing peer support services in VHA* (S. McCarthy, Ed.) Retrieved from https://www.mirecc.va.gov/visn4/docs/Peer_Specialist_Toolkit_FINAL.pdf

CNBC. (2018). Buffett: Health care is a tapeworm on the economic system. Retrieved from https://www.cnbc.com/video/2018/02/26/buffett-health-care-is-a-tapeworm-on-the-economic-system.html

Colagrossi, M. (2019, September 10). *Johns Hopkins opens center for psychedelic research.* Retrieved from https://bigthink.com/psychedelic-research-center

Compton-Phillips, A., & Weil, E. (2019). Care redesign survey: To improve chronic disease care, change the payment model. *NEJEM Catalyst*. Retrieved from https://catalyst.nejm.org/doi/full/10.1056/CAT.19.0620

Conrad, A., Isaac, L., & Roth, W. T. (2008). The psychophysiology of generalized anxiety disorder: 2. effects of applied relaxation. *Psychophysiology, 45*(3), 377–388. doi:10.1111/j.1469-8986.2007.00644.x

Cooper, C. M., Chin Fatt, C. R., Jha, M. Fonzo, G. A., Grannemann, B.D., Carmody, T., … Trivedi, M. H. (2019). Cerebral blood perfusion predicts response to sertraline versus placebo for major depressive disorder in the EMBARC trial. *EClinicalMedicine, 10,* 32-41. doi:10.1016/j.eclinm.2019.04.007

Czysz, A. H., South, C., Gadad, B. S., Arning, E., Soyombo, A., Bottiglieri, B., & Trivedi, M.H. (2019). Can targeted metabolomics predict depression recovery? Results from the CO-MED trial. *Translational Psychiatry, 9*(11). doi:10.1038/s41398-018-0349-6

Defense Health Agency. (2019). *Healthcare Provider's Practice Guide for the Utilization of Behavioral Health Technicians*. Retrieved from https://pdhealth.mil/sites/default/files/images/docs/Provider%27s%20Practice%20Guide_4JUNE2019_508.pdf

Dejonghe, L. A., Becker, J., Froboese, I., & Schaller, A. (2017). Long-term effectiveness of health coaching in rehabilitation and prevention: A systematic review. *Patient Education and Counseling, 100*(9), 1643–1653. doi:10.1016/j.pec.2017.04.012

Dugas, M. J. Duman, M., & Taşhan, S. T. (2018). The effect of sleep hygiene education and relaxation exercises on insomnia among postmenopausal women: A randomized clinical trial. *International Journal of Nursing Practice, 24*(4), 1–8. doi:10.1111/ijn.12650

Dugas, M. J., Brillon, P., Savard, P., Turcotte, J., Gaudet, A., Ladouceur, R., Leblanc, R., and Gervais, N. J. (2010). A randomized clinical trial of cognitive-behavioral therapy and applied relaxation for adults with generalized anxiety disorder. *Behavioral Therapy, 41*(1), 46–58. doi:10.1016/j.beth.2008.12.004

Dundon, M., Dollar, K., Schohn, M., & Lantinga, L. J. (2011). *Primary care-mental health integration co-located, collaborative care: An operations manual*. Retrieved from https://www.mentalhealth.va.gov/coe/cih-visn2/Documents/Clinical/Operations_Policies_Procedures/MH-IPC_CCC_Operations_Manual_Version_2_1.pdf

Dzau, V. J., McClellan, M., & McGinnis, J. M. (2016). Vital directions for health and health care: An initiative of the National Academy of Medicine. *JAMA*, *316*(7), 711–712. doi:10.1001/jama.2016.10692

Etkin, A., Maron-Katz A., Wu, W., Fonzo, G., Huemer, J., Vértes, P., …O'Harra, R. (2019). Using fMRI connectivity to define a treatment-resistant form of post-traumatic stress disorder. *Science Translational Medicine, 11*(486). doi:10.1126/scitranslmed.aal3236

Etz, R. S., Zyzanski, S. J., Gonzalez, M. M., Reves, S. R., O'Neal, J. P., & Stange, K. C. (2019). A new comprehensive measure of high-value aspects of primary care. *The Annals of Family Medicine*, *17*(3), 221–230. doi:10.1370/afm.2393

Farhud, D. D. (2015). Impact of lifestyle on health. *Iranian Journal of Public Health, 44*(11), 1442–1444. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/issues/262953/

Feeley, D. (2017). *The triple aim or the quadruple Aim? Four points to help set your strategy.* Retrieved from http://www.ihi.org/communities/blogs/the-triple-aim-or-the-quadruple-aim-four-points-to-help-set-your-strategy

Fitzgerald, P. B., Hoy, K. E., Elliot, D., McQueen, S., Wambeek, L. E., & Daskalakis, Z. J. (2016). A negative double-blind controlled trial of sequential bilateral rTMS in the treatment of bipolar depression. *Journal of Affective Disorders, 198,* 158–62. doi:10.1016/j.jad.2016.03.052

Furman, J. L., Soyombo, A., Czysz, A. H., Jha, M. K., Carmody, T. J., Mason, B. L., … Trivedia, M. H. (2018). Adiponectin moderates antidepressant treatment outcome in the combining medications to enhance depression outcomes randomized clinical trial. *Personalized Medicine in Psychiatry,* 1–7. doi:10.1016/j.pmip.2018.05.001

GAO (2019). *Veterans health care: VA needs to improve its allocation and monitoring of funding*. Retrieved from https://www.gao.gov/assets/710/701581.pdf

Garcia–Romeu, A., Kersgaard, B., & Addy, P. H. (2016). Clinical applications of hallucinogens: A review. *Experimental and Clinical Psychopharmacology, 24*(4), 229. doi:10.1037/pha0000084

Geller, J., Janson, P., McGovern, E., & Valdini, A. (1999). Loneliness as a predictor of hospital emergency department use. *The Journal of Family Practice, 48*(10), 801–804. Retrieved from https://www.mdedge.com/familymedicine/article/60985/loneliness-predictor-hospital-emergency-department-use

Gordon, J. S. (2009). *Unstuck: Your guide to the seven-stage journey out of depression.* New York, NY: Penguin.

Grant, S., Colaiaco, B., Motala, A., Shanman, R. M., Sorbero, M. E., & Hempel, S. (2017). *Needle acupuncture for posttraumatic stress disorder (PTSD): A systematic review.* Retrieved from - https://www.rand.org/pubs/research_reports/RR1433.html

Griffiths, R. R., Johnson, M. W., Carducci, M. A., Umbricht, A., Richards, W. A., Richards, B. D., ... & Klinedinst, M. A. (2016). Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer: A randomized double-blind trial. *Journal of Psychopharmacology, 30*(12), 1181–1197. doi:10.1177/0269881116675513

Haselden, M., Brister, T., Robinson, S., Covell, N., Pauselli, L., Dixon, L., (2019). Effectiveness of the NAMI Homefront Program for military and veteran families: In-Person and online benefits. *Psychiatric Services, 70*(10), 935–939. doi:10.1176/appi.ps.201800573

Hayes-Skelton, S. A., Roemer, L., & Orsillo, S. M. (2013). A randomized clinical trial comparing an acceptance-based behavior therapy to applied relaxation for generalized anxiety disorder. *Journal of Consulting and Clinical Psychology, 81*(5), 761–773. doi:10.1037/a0032871

Heath S. (2017). *What are healthcare navigators, patient-centered care benefits*? Retrieved from https://patientengagementhit.com/news/what-are-healthcare-navigators-patient-centered-care-benefits

Highfill, T. (2016). Comparing estimates of US health care expenditures by medical condition, 2000–2012. *Survey of Current Business, 96*(3). Retrieved from https://apps.bea.gov/scb/pdf/2016/3%20March/0316_comparing_u.s._health_care_expenditures_by_medical_condition.pdf

Hood, C. M., Gennuso, K. P., Swain, G. R., & Catlin, B. B. (2016). County health rankings: Relationships between determinant factors and health outcomes. *American Journal of Preventive Medicine, 50*(2), 129–135. doi:10.1016/j.amepre.2015.08.024

Houtsma, C., Butterworth, S. E., & Anestis, M. D. (2018). Firearm suicide: pathways to risk and methods of prevention. *Current Opinion in Psychology, 22,* 7–11. doi:0.1016/j.copsyc.2017.07.002

Hoyer, J., Beesdo, K., Gloster, A. T., Runge, J., Höfler, M., & Becker, E. S. (2009). Worry exposure versus applied relaxation in the treatment of generalized anxiety disorder. *Psychotherapy and Psychosomatics, 78*(2), 106–115. doi:10.1159/000201936

Hu, S. H., Lai, J. B., Xu, D. R., Qi, H. L., Peterson, B. S., Bao, A. M., … Xu, Y. (2016). Efficacy of repetitive transcranial magnetic stimulation with quetiapine in treating bipolar II depression: a randomized, double-blinded, control study. *Scientific Reports, 6,* 1–7. doi:10.1038/srep30537

IBM Watson Health. (2019). *IBM Watson Health Announces 100 Top Hospitals.* Retrieved from https://newsroom.ibm.com/2019-03-04-IBM-Watson-Health-Announces-100-Top-Hospitals

Irfan, U. (2018). *Electric scooters' sudden invasion of American cities, explained: Turns out there's a lot of latent demand for a quick and cheap way to get around.* Retrieved from https://www.vox.com/2018/8/27/17676670/electric-scooter-rental-bird-lime-skip-spin-cities

Insel, T., Cuthbert, B., Garvey, M., Heinssen, R., Pine, D. S., Quinn, K., … Wang, P. (2010). Research domain criteria (RDoC): Toward a new classification framework for research on mental disorders. *The American Journal of Psychiatry, 167*(7), 748–751. doi:10.1176/appi.ajp.2010.09091379

Institute for Health Metrics and Evaluation. (2018). *US health map*. Retrieved from http://www.healthdata.org/data-visualization/us-health-map

Institute of Medicine of the National Academies. (2013). *U.S. health in international perspective: Shorter lived, poorer healt*h. Retrieved from https://www.nap.edu/catalog/13497/us-health-in-international-perspective-shorter-lives-poorer-health.

Institute of Medicine. (2001). C*rossing quality of chasm: A new health system for the 21st century*. Retrieved from http://www.nationalacademies.org/hmd/~/media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf

Institute of Medicine. (2005). *Complementary and alternative medicine in the United States: Committee on the Use of Complementary and Alternative Medicine by the American Public*. Washington DC: The National Academies Press.

Iora Health. (n.d.) Retrieved from https://www.iorahealth.com/

Jacob, N. (2014). *How to innovate on what matters most*. Retrieved from https://www.govtech.com/local/GT-How-to-Innovate-on-What-Matters-Most.html

James A. Haley Veterans' Hospital - Tampa, Florida. (2016). *Unique program helps women Veterans THRIVE.* Retrieved from https://www.tampa.va.gov/TAMPA/features/THRIVE.as

Janbozorgi, M., Zahirodin, A., Norri, N., Ghafarsamar, R., & Shams, J. (2009). Providing emotional stability through relaxation training. *Eastern Mediterranean Health Journal, 15*(3), 629–638. Retrieved from https://apps.who.int/iris/handle/10665/117679

Jha, M. K., Trivedi, M. H. (2019). Personalized antidepressant selection and pathway to novel treatments: clinical utility of targeting inflammation. *International Journal of Molecular Sciences, 19*(1). doi:10.3390/ijms19010233.

Johnson, M. W., & Griffiths, R. R. (2017). Potential therapeutic effects of psilocybin. *Neurotherapeutics, 14*(3), 734–740. doi:10.1007/s13311-017-0542-y

Jonas, W. B., Chez, R. A., Smith, K., & Sakallaris, B. (2014). Salutogenesis: the defining concept for a new healthcare system. *Global Advances in Health and Medicine, 3*(3), 82–91. doi:10.7453/gahmj.2014.005

Jonas, W. B., Schoomaker, E., Marzolf, J. R., & Gaudet, T. (2019). *Whole health for the whole person: VHA's redesign of health care*. Retrieved from https://catalyst.nejm.org/cause-crises-whole-health-whole-person/

Karras, E., Stokes, C. M., Warfield, S. C., Barth, S. K., & Bossarte, R. M. (2019). A randomized controlled trial of public messaging to promote safe firearm storage among U.S. military veterans. *Social Science & Medicine, 241*. doi:10.1016/j.socscimed.2019.03.001

Kessler, R. C., Heeringa, S. G., Stein, M. B., Colpe, L. J., Fullerton; C. S., Hwang, I., … Army STARRS Collaborators. (2014). Thirty-day prevalence of DSM-IV mental disorders among nondeployed soldiers in the US Army: results from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *JAMA Psychiatry, 71*(5), 504–513. doi:10.1001/jamapsychiatry.2014.28

Kindig, D. A., Booske, B. C., & Remington, P. L. (2010). Mobilizing Action Toward Community Health (MATCH): metrics, incentives, and partnerships for population health. *Preventing Chronic Disease, 7*(4), A68. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2901566/

Lake, J. H., & Spiegel, D. (Eds.). (2007). *Complementary and alternative treatments in mental health care.* Washington, DC: American Psychiatric Publishing, Inc.

Lemke, S., Boden, M. T., Kearney, L. K., Krahn, D. D., Neuman, M. J., Schmidt, E. M., & Trafton, J. A. (2017). Measurement-based management of mental health quality and access in VHA: SAIL mental health domain. *Psychological Services*, *14*(1), 1–12. doi:10.1037/ser0000097

Mann, J. J. & Currier, D. M. (2010). Stress, genetics and epigenetic effects on the neurobiology of suicidal behavior and depression. *European Psychiatry, 25*(5), 268–271. doi:10.1016/j.eurpsy.2010.01.009

Mann, J. J., & Michel, C. A. (2016). Prevention of firearm suicide in the United States: What works and what is possible. *American Journal of Psychiatry, 173*(10), 969–979. doi:10.1176/appi.ajp.2016.16010069

Mann J. J., Waternaux C., Haas G. L., & Malone K. M. (1999). Toward a clinical model of suicidal behavior in psychiatric patients. *American Journal of Psychiatry, 156*(2), 181–189. doi:10.1176/ajp.156.2.181

Marmot, M. (2005). Social determinants of health inequalities. *Lancet, 365*(9464), 1099–1104. doi:10.1016/S0140-6736(05)71146-6

Martin, L. A. & Mate K. (2018). *IHI Innovation System.* Retrieved from http://www.ihi.org/resources/Pages/IHIWhitePapers/IHI-Innovation-System.aspx

Masterson, L. (2017). Kaiser Permanente, other heavy hitters call for value-based healthcare model. Healthcare Drive. Retrieved from https://www.healthcaredive.com/news/kaiser-permanente-other-heavy-hitters-call-for-value-based-healthcare-mode/441456/

Mazareanu, E. (2019). *Ridesharing services in the U.S. – Statistics & facts.* Retrieved from https://www.statista.com/topics/4610/ridesharing-services-in-the-us/

McGinnis, J. M., Stuckhardt, L., Saunders, R., & Smith, M. (Eds.). (2013). *Best care at lower cost: the path to continuously learning health care in America.* Washington, DC: The National Academies Press.

McGinnis, J. M., Williams-Russo, P., & Knickman, J. R. (2002). The case for more active policy attention to health promotion. *Health Affairs*, *21*(2), 78–93. doi.org/10.1377/hlthaff.21.2.78

McTeague, L. M., Huemer, J., Carreon, D. M., Jiang, Y., Eickhoff, S. B., & Etkin, A. (2017). Identification of common neural circuit disruptions in cognitive control across psychiatric disorders. *American Journal of Psychiatry, 174*(7), 676–685. doi:10.1176/appi.ajp.2017.16040400

Meshberg-Cohen, S., Reid-Quiñones, K., Black, A. C., & Rosen, M. I. (2014). Veterans' attitudes toward work and disability compensation: Associations with substance abuse. *Addictive behaviors, 39*(2), 445–448. doi:10.1016/j.addbeh.2013.09.005

Meyer, H. (2019). *Healthcare spending will hit 19.4% of GDP in the next decade, CMS projects*. Retrieved from https://www.modernhealthcare.com/article/20190220/NEWS/190229989/healthcare-spending-will-hit-19-4-of-gdp-in-the-next-decade-cms-projects

Military.com. (2019, October 30). *VA overhauls police force after scathing watchdog reports, lapses in hospital security*. Retrieved from https://www.military.com/daily-news/2019/10/30/va-overhauls-police-force-after-scathing-watchdog-reports-lapses-hospital-security.html

Miyamoto, Y., & Sono, T. (2012). Lessons from peer support among individuals with mental health difficulties: a review of the literature. *Clinical Practice and Epidemiology In Mental Health (8)*, 22–29. doi:10.2174/1745017901208010022

Mukamel, D. B., Haeder, S. F., & Weimer, D. L. (2014). Top-down and bottom-up approaches to health care quality: the impacts of regulation and report cards. *Annual Review of Public Health, 35,* 477–497. doi:10.1146/annurev-publhealth-082313-115826

Myczkowski, M. L., Fernandes, A., Moreno, M., Valiengo, L., Lafer, B., Moreno, R. A., … Brunoni, A. R. (2018). Cognitive outcomes of TMS treatment in bipolar depression: Safety data from a randomized controlled trial. *Journal of Affective Disorders, 235,* 20–6. doi:10.1016/j.jad.2018.04.022

National Academies of Sciences, Engineering, and Medicine. (2018). *Evaluation of the Department of Veterans Affairs mental health services.* Washington, DC: The National Academies Press. doi:10.17226/24915

National Academies of Sciences, Engineering, and Medicine. (2019). *Taking action against clinician burnout: A systems approach to professional well-being.* Washington, DC: The National Academies Press.

National Board for Health & Wellness Coaching. (n.d). *NBHWC approved training programs*. Retrieved from https://nbhwc.org/approved-programs/

National Committee for Quality Assurance (NCQA). (2019). *Patient-centered medical home.* Retrieved from https://www.ncqa.org/programs/health-care-providers-practices/patient-centered-medical-home-pcmh/

National Institutes of Health. (2018). *Establishing moderators and biosignatures of antidepressant response for clinical care for depression (EMBARC).* Retrieved from https://clinicaltrials.gov/ct2/show/NCT01407094

National Institutes of Health. (n.d.). *Science of behavior change*. Retrieved from https://commonfund.nih.gov/behaviorchange

National Intrepid Center of Excellence. (n.d.). Retrieved from https://www.nicoe.capmed.mil/SitePages/Home_alt2.aspx

National Research Council, & Committee on Population. (2013). *US health in international perspective: Shorter lives, poorer health.* Washington, DC: The National Academies Press.

Nelson, H. D., Denneson, L. M., Low, A. R., Bauer, B. W. O'Neil, M., Kansagara, D., Teo, A. R. (2017). Suicide risk assessment and prevention: a systematic review focusing on veterans. *Psychiatric Services, 68*(10), 1003–1015. doi:10.1176/appi.ps.201600384

Nieuwsma, J. A., Jackson, G. L., DeKraai, M. B., Bulling, D. J., Cantrell, W. C., Rhodes, J. E., … Meador, K. G. (2014). Collaborating across the Departments of Veterans Affairs and Defense to integrate mental health and chaplaincy services. *Journal of General Internal Medicine, 29*(Suppl 4), 885–894. doi:10.1007/s11606-014-3032-5

Nock, M.K., Deming, C. A., Fullerton, C. S., Gilman S. E., Goldenberg, M., Kessler, R. C., McCarroll, J. E., … Ursano, R. J. (2013). Suicide among soldiers: a review of psychosocial risk and protective factors. *Psychiatry: Interpersonal & Biological Processes, 76*(2), 97–125. doi:10.1521/psyc.2013.76.2.97

O'Hare, R. (2019, April 26). *Imperial launches the world's first centre for psychedelics research.* Retrieved from https://www.imperial.ac.uk/news/190994/imperial-launches-worlds-first-centre-psychedelics/

Office of Research and Development. (n.d.). *Mental health*. Retrieved from https://www.research.va.gov/topics/mental_health.cfm

Office of Strategic Integration. (2013). *VHA T21 implementation & sustainment guidance.*

Office of Systems Redesign and Improvement. (n.d.). *Organizational excellence*. Retrieved from https://www.va.gov/HEALTHCAREEXCELLENCE/about/organization/systems-redesign-and-improvement.asp

Partners. (n. d.). *Whole person integrated care model: Advancing the quadruple aim and community wellness*. Retrieved from https://www.partnersbhm.org/wp-content/uploads/2017/07/WPIC_White_Paper_revise_7.19.2017.pdf

Peek, C. J. (2013). *Lexicon for behavioral health and primary care integration*. Retrieved from https://integrationacademy.ahrq.gov/sites/default/files/Lexicon.pdf

Penn, M., Bhatnagar, S., Kuy, S., Lieberman, S., Elnahal, S., Clancy, C., & Shulkin, D. (2019). Comparison of wait times for new patients between the private sector and United States Department of Veterans Affairs medical centers. *JAMA Network Open, 2*(1), e187096–e187096. doi:10.1001/jamanetworkopen.2018.7096

Perich, T., Manicavasagar, V., Mitchell, P. B., & Ball, J. R. (2013). The association between meditation practice and treatment outcome in mindfulness-based cognitive therapy for bipolar disorder. *Behaviour Research and Therapy, 51*(7), 338–43. doi:10.1016/j.brat.2013.03.006

Peterson Center on Healthcare. (2013). *America's most valuable care: Primary care snaps*hots. Retrieved from https://petersonhealthcare.org/primary-care-snapshots

Pinto, J. V., Moulin, T. C., & Amaral, O. B. (2017). On the transdiagnostic nature of peripheral biomarkers in major psychiatric disorders: a systematic review. *Neuroscience & Biobehavioral Reviews, 83*, 97–108. doi:10.1016/j.neubiorev.2017.10.001

Pitt, V., Lowe, D., Hill, S., Prictor, M., Hetrick, S. E., Ryan, R., & Berends, L. (2013). Consumer-providers of care for adult clients of statutory mental health services. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.CD004807.pub2.

Praharaj, S. K., Ram, D., & Arora, M. (2009). Efficacy of high frequency (rapid) suprathreshold repetitive transcranial magnetic stimulation of right prefrontal cortex in bipolar mania: A randomized sham controlled study. *Journal of Affective Disorders, 117*(3), 146–50. doi:10.1016/j.jad.2008.12.020

PricewaterhouseCooper's. (2016). *Population health: scaling up.*

Procon.org. (2019). *Legal marijuana states and DC.* Retrieved from https://medicalmarijuana.procon.org/view.resource.php?resourceID=000881

RAND Corporation. (2011). *Annual report 2011*. Retrieved from https://www.rand.org/content/dam/rand/pubs/corporate_pubs/2012/RAND_CP1-2011.pdf

Reed, J. (2013). *90 percent*. Retrieved from http://www.sprc.org/news/90-percent

Robert Wood Johnson Foundation. (2016). *Building a culture of health: Milwaukee, Wisconsin*. Retrieved from https://www.rwjf.org/en/cultureofhealth/what-were-learning/sentinel-communities/milwaukee-wisconsin.html

Rodriguez, T. (2017). *The empower veterans program*. Retrieved from https://www.clinicalpainadvisor.com/home/conference-highlights/aapm-2017-annual-meeting/the-empower-veterans-program/

Roeder, A. (2014). *Zip code better predictor of health than genetic code*. Retrieved from https://www.hsph.harvard.edu/news/features/zip-code-better-predictor-of-health-than-genetic-code/

Rohan, M. L., Yamamoto, R. T., Ravichandran, C. T., Cayetano, K. R., Morales, O. G., Olson, D. P., … Cohen, B. M. (2014). Rapid mood-elevating effects of low field magnetic stimulation in depression. *Biological Psychiatry, 76*(3), 186–93. doi:10.1016/j.biopsych.2013.10.024

Rothbaum, B. (n.d.). *Trauma and anxiety recovery pro*gram. Retrieved from http://psychiatry.emory.edu/programs/tarp/

Runyan, C. W., Brooks-Russell, A., Brandspigel, S., Betz, M., Tung, G., Novins, D., & Agans, R. (2017). Law enforcement and gun retailers as partners for safely storing guns to prevent suicide: A study in 8 Mountain West states. *American Journal of Public Health, 107*(11), 1789–1794. doi:10.2105/AJPH.2017.304013

Rush, J. A., Trivedi, M. H., Wisniewski. S. R., Nierenberg, A. A., Stewart, J. W., Warden, D., … Fava, M. (2006). Acute and longer-term outcomes in depressed outpatients requiring one or several treatment steps: STAR*D report. *The American Journal of Psychiatry, 163*(11), 1905–1917. doi:10.1176/appi.ajp.163.11.1905

Safford, B. H., & Manning, C. (2012). Six characteristics of effective practice teams. *Family Practice Management, 19*(3), 26–30. Retrieved from https://www.aafp.org/fpm/2012/0500/p26.html

Sampaio, B., Tortella, G., Borrione, L., Moffa, A. H., Machado-Vieira, R., Cretaz, E., … Brunoni, A. R. (2018). Efficacy and safety of transcranial direct current stimulation as an add-on treatment for bipolar depression: a randomized clinical trial. *JAMA Psychiatry*, *75*(2), 158–66.

Sessa, B. (2017). MDMA and PTSD treatment: "PTSD: from novel pathophysiology to innovative therapeutics." *Neuroscience Letters, 649*, 176–180. doi:10.1016/j.neulet.2016.07.004

Shrank, W. H., Rogstad, T. L., & Parekh, N. (2019). Waste in the US health care system: estimated costs and potential for savings. *JAMA, 322*(15), 1501–1509. doi:10.1001/jama.2019.13978

Smith, C., Armour, M., Lee, M., Wang, L., & Hay, P. (2018). Acupuncture for depression. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.CD004046.pub4

Souery, D., Oswald, P., Massat, I., Bailer, U., Bollen, J., Demyttenaere, K., . . . Group for the Study of Resistant Depression. (2007). Clinical factors associated with treatment resistance in major depressive disorder: Results from a European multicenter study. *The Journal of Clinical Psychiatry, 68*(7), 1062–1070. doi:10.4088/JCP.v68n0713

Southcentral Foundation. (n.d.) [Website]. Retrieved from https://www.southcentralfoundation.com/

Stanford Medicine Clinical Excellence Research Center. (n.d.) Retrieved from http://med.stanford.edu/cerc.html

Stanley, B., Brown, G., Brenner, L. A., Galfalvy, H. C., Currier, G. W., Knox, K. L.,… Green, K. L. (2018). Comparison of the safety planning intervention with follow-up vs usual care of suicidal patients treated in the emergency department. *JAMA Psychiatry 75*(9), 894–900. doi:10.1001/jamapsychiatry.2018.1776

Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *The Milbank Quarterly*, *83*(3), 457–502. doi:10.1111/j.1468-0009.2005.00409.x

Stars and Stripes. (2019). *Trump creates task force to combat veteran suicide.* Retrieved from https://www.stripes.com/trump-creates-task-force-to-combat-veteran-suicide-1.571510

Stith, S. S. & Vigil, J. M. (2016). Federal barriers to Cannabis research. *Science, 352*(6290), 1182. doi:10.1126/science.aaf7450

Tanielian, T., Jaycox, L. H., Schell, T. L., Marshall, G. N., Burnam, M. A., Eibner, C., & Vaiana, M. E. (2008). *Invisible wounds: Mental health and cognitive care needs of America's returning veterans.* Santa Monica, CA: Rand Corporation. doi.org/10.7249/rb9336

Tavares, D. F., Myczkowski, M. L., Alberto, R. L., Valiengo, L., Rios, R. M., Gordon, P., … Brunoni, A. R. (2017). Treatment of bipolar depression with deep TMS: results from a double-blind, randomized, parallel group, sham-controlled clinical trial. *Neuropsychopharmacology, 42*(13), 2593–2601. doi:10.1038/npp.2017.26

Taylor, C. B., Sallis, J. F., & Needle, R. (1985). The relation of physical activity and exercise to mental health. *Public Health Reports, 100*(2), 195–202. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1424736/

The Playbook. (2019). *Primary care transformation: no longer a task of one*. Retrieved from https://www.bettercareplaybook.org/_blog/2019/21/primary-care-transformation-no-longer-task-one

Klein, E. (2013). If this was a pill, you'd do anything to get it. *The Washington Post*, April 28, 2013. Retrieved from https://www.washingtonpost.com/news/wonk/wp/2013/04/28/if-this-was-a-pill-youd-do-anything-to-get-it/.

VA. (2008). *Uniform mental health services in VA medical centers and clinics, 1160.01.*

VA. (2015). *Preliminary findings regarding prevalence and incidence of major depressive disorder (MDD), non-MDD depression diagnoses, and any depression diagnosis in FY 2015 among veterans*.

VA (2018). *VA National Suicide Data Report 2005-2016.* Retrieved from https://www.mentalhealth.va.gov/docs/data-sheets/OMHSP_National_Suicide_Data_Report_2005-2016_508.pdf

VA. (2019a). *VA, Health and Human Services announce Governor's Challenge to Prevent Suicide.* Retrieved from https://www.blogs.va.gov/VAntage/55707/va-health-human-services-announce-governors-challenge-prevent-suicide/

VA. (2019b). *Veterans transportation services*. Directive 1695. Retrieved from https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=8511

VA. (n.d. a). *Access to care.* Retrieved from https://www.accesstocare.va.gov/Healthcare/overall

VA. (n.d. b). *National chaplain center*. Retrieved from https://www.patientcare.va.gov/chaplain/index.asp

VA. (n.d. c). *Whole Health.* Retrieved from https://www.va.gov/wholehealth/

VA/Department of Defense. (2016). *VA/DoD clinical practice guideline for the management of major depressive disorder*. Retrieved from https://www.healthquality.va.gov/guidelines/MH/mdd/VADoDMDDCPGFINAL82916.pdf

Van Heeringen, K., & Mann, J. J. (2014). The neurobiology of suicide. *The Lancet Psychiatry, 1*(1), 63–72. doi:10.1016/S2215-0366(14)70220-2

Vogt, D., Taverna, E. C., Nillni, Y. I., Booth, B., Perkins, D. F., Copeland, L. A., Finley, E. P., Tyrell, F. A. and Gilman, C. L. (2019). Development and validation of a tool to assess military veterans' status, functioning, and satisfaction with key aspects of their lives. *Applied Psychology: Health and Well-Being, 11*(2): 328–349. doi:10.1111/aphw.12161

Waters H. & Graf, M. (2018). *The Costs of Chronic Disease in the U.S. Milken Institute.* Retrieved from http://milkeninstitute.org/sites/default/files/reports-pdf/ChronicDiseases-HighRes-FINAL_0.pdf

Watkins, K. E., Pincus, H. A., Smith, B., Paddock, S. M., Mannle Jr, T. E., Woodroffe, A., ... & Adamson, D. M. (2011). *The cost and quality of VA mental health services.* Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/pubs/research_briefs/RB9594.html

Well Being In the Nation (WIN) Network. (n.d.). Retrieved from https://wellbeingtrust.org/areas-of-focus/community-transformation/well-being-in-the-nation-win-network/

West, C. P., Dyrbye, L. N., & Shanafelt, T. D. (2018). Physician burnout: Contributors, consequences and solutions. *Journal of Internal Medicine, 283*(6), 516–529. doi:10.1111/joim.12752

Wilcox, H. C., Clarke, D., Grzenda, A., Smith, S. G., & Eaton, W. W. (2019). Suicide as a public health burden. In W. W. Eaton & M. D. Fallin (Eds.), *Public mental health* (pp. 207–222). New York, NY: Oxford University Press. doi: 10.1093/oso/9780190916602.001.0001

Wiles N., Thomas L, Abel A,. Barnes, M., Carrol, F., Ridgway, N., Sherlock, S., Turner, N., …Lewis, G. Clinical effectiveness and cost-effectiveness of cognitive behavioural therapy as an adjunct to pharmacotherapy for treatment-resistant depression in primary care: the CoBalT randomised controlled trial. *Health Technology Assessment*, *18*(31). doi:10.3310/hta18310

Wilke (2019). In Congress, veteran suicide prevention is a bipartisan topic. Here's the plan. *Military.com*. Retrieved from https://www.military.com/daily-news/2019/10/31/congress-veteran-suicide-prevention-bipartisan-topic-heres-plan.html

Windover, A. K., Martinez, K., Mercer, M. B., Neuendorf, K., Boissy, A., & Rothberg, M. B. (2018). Correlates and outcomes of physician burnout within a large academic medical center. *JAMA Internal Medicine, 178*(6), 856–858. doi:10.1001/jamainternmed.2018.0019

Wolfe, A. (2001). Institute of Medicine report: crossing the quality chasm: a new health care system for the 21st century. *Policy, Politics, & Nursing Practice*, *2*(3), 233–235. doi:10.1177/152715440100200312

Yang, L. L., Zhao, D., Kong, L. L., Sun, Y. Q., Wang, Z. Y., Gao, Y. Y., … Wang, Y. M. (2019). High-frequency repetitive transcranial magnetic stimulation (rTMS) improves neurocognitive function in bipolar disorder. *Journal of Affective Disorders, 246,* 851–56. doi:10.1016/j.jad.2018.12.102

Yeung, A., Feng, R., Kim, D., Wayne, P., Yeh, G., Baer, L., …Fava, M. (2017). A pilot, randomized controlled study of Tai Chi with passive and active controls in the treatment of depressed Chinese Americans. *Journal of Clinical Psychiatry, 78*(5), e522–e528. doi:10.4088/JCP.16m10772

Yeung, A., Lepoutre, V., Wayne, P., Yeh, G., Slipp, L., Fava, M., …Benson, H. (2012). Tai Chi treatment for depression in Chinese Americans. *American Journal of Physical Medicine & Rehabilitation, 91*(10), 863–870. doi:10.1097/PHM.0b013e31825f1a67

Zack, M. M., Moriarty, D. G., Stroup, D. F., Ford, E. S., & Mokdad, A. H. (2004). Worsening trends in adult health-related quality of life and self-rated health—United States, 1993–2001. *Public Health Reports, 119*(5), 493–505. doi:10.1016/j.phr.2004.07.007

APPENDIX A:
ENABLING LEGISLATION

Public Law 114–198 114th Congress

Subtitle C—Complementary and Integrative Health

SEC. 931. EXPANSION OF RESEARCH AND EDUCATION ON AND DELIVERY OF COMPLEMENTARY AND INTEGRATIVE HEALTH TO VETERANS.

(a) ESTABLISHMENT.—There is established a commission to be known as the ''Creating Options for Veterans' Expedited Recovery'' or the ''COVER Commission'' (in this section referred to as the ''Commission''). The Commission shall examine the evidence-based therapy treatment model used by the Secretary of Veterans Affairs for treating mental health conditions of veterans and the potential benefits of incorporating complementary and integrative health treatments available in non-Department facilities (as defined in section 1701 of title 38, United States Code).

(b) DUTIES.—The Commission shall perform the following duties:

(1) Examine the efficacy of the evidence-based therapy model used by the Secretary for treating mental health illnesses of veterans and identify areas to improve wellness-based out- comes.

(2) Conduct a patient-centered survey within each of the Veterans Integrated Service Networks to examine—

(A) the experience of veterans with the Department of Veterans Affairs when seeking medical assistance for mental health issues through the health care system of the Department;

(B) the experience of veterans with non-Department facilities and health professionals for treating mental health issues;

(C) the preference of veterans regarding available treatment for mental health issues and which methods the veterans believe to be most effective;

(D) the experience, if any, of veterans with respect to the complementary and integrative health treatment therapies described in paragraph (3);

(E) the prevalence of prescribing prescription medication among veterans seeking treatment through the health care system of the Department as remedies for addressing mental health issues; and

(F) the outreach efforts of the Secretary regarding the availability of benefits and treatments for veterans for addressing mental health issues, including by identifying ways to reduce barriers to gaps in such benefits and treatments.

(3) Examine available research on complementary and integrative health treatment therapies for mental health issues and identify what benefits could be made with the inclusion of such treatments for veterans, including with respect to—

(A) music therapy;

(B) equine therapy;

(C) training and caring for service dogs;

(D) yoga therapy;

(E) acupuncture therapy;

(F) meditation therapy;

(G) outdoor sports therapy;

(H) hyperbaric oxygen therapy;

(I) accelerated resolution therapy;

(J) art therapy;

(K) magnetic resonance therapy; and

(L) other therapies the Commission determines appropriate.

(4) Study the sufficiency of the resources of the Department to ensure the delivery of quality health care for mental health issues among veterans seeking treatment within the Department.

(5) Study the current treatments and resources available within the Department and assess—

(A) the effectiveness of such treatments and resources in decreasing the number of suicides per day by veterans;

(B) the number of veterans who have been diagnosed with mental health issues;

(C) the percentage of veterans using the resources of the Department who have been diagnosed with mental health issues;

(D) the percentage of veterans who have completed counseling sessions offered by the Department; and

(E) the efforts of the Department to expand complementary and integrative health treatments viable to the recovery of veterans with mental health issues as determined by the Secretary to improve the effectiveness of treatments offered by the Department.

(c) MEMBERSHIP.—

(1) IN GENERAL.—The Commission shall be composed of 10 members, appointed as follows:

(A) Two members appointed by the Speaker of the House of Representatives, at least one of whom shall be a veteran.

(B) Two members appointed by the minority leader of the House of Representatives, at least one of whom shall be a veteran.

(C) Two members appointed by the majority leader of the Senate, at least one of whom shall be a veteran.

(D) Two members appointed by the minority leader of the Senate, at least one of whom shall be a veteran.

(E) Two members appointed by the President, at least one of whom shall be a veteran.

(2) QUALIFICATIONS.—Members of the Commission shall be individuals who—

(A) are of recognized standing and distinction within the medical community with a background in treating mental health;

(B) have experience working with the military and veteran population; and

(C) do not have a financial interest in any of the complementary and integrative health treatments reviewed by the Commission.

(3) CHAIRMAN.—The President shall designate a member of the Commission to be the Chairman.

(4) PERIOD OF APPOINTMENT.—Members of the Commission shall be appointed for the life of the Commission.

(5) VACANCY.—A vacancy in the Commission shall be filled in the manner in which the original appointment was made.

(6) APPOINTMENT DEADLINE.—The appointment of members of the Commission in this section shall be made not later than 90 days after the date of the enactment of this Act.

(d) POWERS OF COMMISSION.—

(1) MEETINGS.—

(A) INITIAL MEETING.—The Commission shall hold its first meeting not later than 30 days after a majority of members are appointed to the Commission.

(B) MEETING.—The Commission shall regularly meet at the call of the Chairman. Such meetings may be carried out through the use of telephonic or other appropriate telecommunication technology if the Commission deter- mines that such technology will allow the members to communicate simultaneously.

(2) HEARINGS.—The Commission may hold such hearings, sit and act at such times and places, take such testimony, and receive evidence as the Commission considers advisable to carry out the responsibilities of the Commission.

(3) INFORMATION FROM FEDERAL AGENCIES.—The Commission may secure directly from any department or agency of the Federal Government such information as the Commission considers necessary to carry out the duties of the Commission.

(4) INFORMATION FROM NONGOVERNMENTAL ORGANIZATIONS.—In carrying out its duties, the Commission may seek guidance through consultation with foundations, veteran service organizations, nonprofit groups, faith-based organizations, private and public institutions of higher education, and other organizations as the Commission determines appropriate.

(5) COMMISSION RECORDS.—The Commission shall keep an accurate and complete record of the actions and meetings of the Commission. Such record shall be made available for public inspection and the Comptroller General of the United States may audit and examine such record.

(6) PERSONNEL RECORDS.—The Commission shall keep an accurate and complete record of the actions and meetings of the Commission. Such record shall be made available for public inspection and the Comptroller General of the United States may audit and examine such records.

(7) COMPENSATION OF MEMBERS; TRAVEL EXPENSES.—Each member shall serve without pay but shall receive travel expenses to perform the duties of the Commission, including per diem in lieu of substances, at rates authorized under sub-chapter I of chapter 57 of title 5, United States Code.

(8) STAFF.—The Chairman, in accordance with rules agreed upon the Commission, may appoint and fix the compensation of a staff director and such other personnel as may be necessary to enable the Commission to carry out its functions, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, without regard to the provision of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, except that no rate of

pay fixed under this paragraph may exceed the equivalent of that payable for a position at level IV of the Executive Schedule under section 5315 of title 5, United States Code.

(9) PERSONNEL AS FEDERAL EMPLOYEES.—

(A) IN GENERAL.—The executive director and any personnel of the Commission are employees under section 2105 of title 5, United States Code, for purpose of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of such title.

(B) MEMBERS OF THE COMMISSION.—Subparagraph (A) shall not be construed to apply to members of the Commission.

(10) CONTRACTING.—The Commission may, to such extent and in such amounts as are provided in appropriations Acts, enter into contracts to enable the Commission to discharge the duties of the Commission under this Act.

(11) EXPERT AND CONSULTANT SERVICE.—The Commission may procure the services of experts and consultants in accordance with section 3109 of title 5, United States Code, at rates not to exceed the daily rate paid to a person occupying a position at level IV of the Executive Schedule under section 5315 of title 5, United States Code.

(12) POSTAL SERVICE.—The Commission may use the United States mails in the same manner and under the same conditions as departments and agencies of the United States.

(13) PHYSICAL FACILITIES AND EQUIPMENT.—Upon the request of the Commission, the Administrator of General Services shall provide to the Commission, on a reimbursable basis, the administrative support services necessary for the Commission to carry out its responsibilities under this Act. These administrative services may include human resource management, budget, leasing accounting, and payroll services.

(e) REPORT.—

(1) INTERIM REPORTS.—

(A) IN GENERAL.—Not later than 60 days after the date on which the Commission first submits the final report under paragraph (2), the Commission shall submit to the Committees on Veterans' Affairs of the House of Representatives and the Senate and the President a report detailing the level of cooperation the Secretary of Veterans Affairs (and the heads of other departments or agencies of the Federal Government) has provided to the Commission.

(B) OTHER REPORTS.—In carrying out its duties, at times that the Commission determines appropriate, the Commission shall submit to the Committees on Veterans' Affairs of the House of Representatives and the Senate

and any other appropriate entities an interim report with respect to the findings identified by the Commission.

(2) FINAL REPORT.—Not later than 8 months after the first meeting of the Commission, the Commission shall submit to the Committee on Veterans' Affairs of the House of Representatives and the Senate, the President, and the Secretary of Veterans Affairs a final report on the findings of the Commission. Such report shall include the following:

(A) Recommendations to implement in a feasible, timely, and cost-efficient manner the solutions and remedies identified within the findings of the Commission pursuant to subsection (b).

(B) An analysis of the evidence-based therapy model used by the Secretary of Veterans Affairs for treating veterans with mental health care issues, and an examination of the prevalence and efficacy of prescription drugs as a means for treatment.

(C) The findings of the patient-centered survey conducted within each of the Veterans Integrated Service Networks pursuant to subsection (b)(2).

(D) An examination of complementary and integrative health treatments described in subsection (b)(3) and the potential benefits of incorporating such treatments in the therapy models used by the Secretary for treating veterans with mental health issues.

(3) PLAN.—Not later than 90 days after the date on which the Commission submits the final report under paragraph (2), the Secretary of Veterans Affairs shall submit to the Committees on Veterans' Affairs of the House of Representatives and the Senate a report on the following:

(A)An action plan for implementing the recommendations established by the Commission on such solutions and remedies for improving wellness-based outcomes for veterans with mental health care issues.

(B) A feasible timeframe on when the complementary and integrative health treatments described in subsection (b)(3) can be implemented Department-wide.

(C) With respect to each recommendation established by the Commission, including any complementary and integrative health treatment, that the Secretary determines is not appropriate or feasible to implement, a justification for such determination and an alternative solution to improve the efficacy of the therapy models used by the Secretary for treating veterans with mental health issues.

(f) TERMINATION OF COMMISSION.—The Commission shall terminate 30 days after the Commission submits the final report under subsection (e)(2).

APPENDIX B:
COMMISSIONER BIOGRAPHIES

Thomas (Jake) J. Leinenkugel

Chair

Jake Leinenkugel served as an officer in the U.S. Marine Corps from 1976 to 1982 and then remained in the active reserve from 1982 to 1987. He served in various roles in his family's business, the Jacob Leinenkugel Brewing Company, to include serving as president from 1988 to his retirement in 2014. Leinenkugel served as a director for both the Marshfield Clinic Health System Casper/Rutledge Charity Foundation, and the St. Joseph's and Sacred Heart Hospital Systems. He was one of three founders of the Chippewa Area (Wisconsin) United Way Endowment Funds. Leinenkugel was appointed to the role of senior White House advisor in January 2017 and left that position to serve as chair of the COVER Commission. Leinenkugel holds a BA in business and human resource management from Pepperdine University, as well as postbaccalaureate certificates from the Wharton Business School Financial Leaders Management Course, Columbia University Executive Senior Leadership Management Course, and the Darden Business Leaders Senior Development Course.

RADM Thomas (Tom) E. Beeman, PhD, U.S. Navy (Ret.)

Cochair

Tom Beeman, with more than 45 years of health care experience, currently serves as executive-in-residence at the University of Pennsylvania Health System (UPHS). Beeman recently retired as assistant deputy surgeon general for reserve affairs, U.S. Navy, where he served as deputy commander for the National Intrepid Center of Excellence, National Naval Medical Center. He previously served as chief operating officer for regional operations. Prior to his roles at UPHS, Beeman served as president and chief executive officer (CEO) of Lancaster General Health for 10 years. Beeman served as president and CEO at Saint Thomas Health Services in Nashville, Tennessee, and as senior vice president for hospital operations and executive director of the Hospital of the University of Pennsylvania. He is a fellow of the College of Physicians of Philadelphia, a fellow of the American College of Health Care Executives, and a member of the Association of Military Surgeons of the United States. Beeman holds a bachelor's degree in community health studies and a master's degree in health education from St. Joseph's University, a master's degree in hospital administration from Widener University, and a PhD in leadership and policy from Vanderbilt University, where he has taught courses in systems theory. He is the coauthor of *Leading from Within* and *Developing Philanthropic Champions* and has published academic articles on leadership.

Col. Matthew (Matt) F. Amidon, U.S. Marine Corps Reserve (Ret.)

Commissioner

Matt Amidon is director for the Military Service Initiative at the George W. Bush Institute. There he works to develop and implement policy and strategic efforts, Team 43 Sports events, and research requirements and conferences to support the Military Service Initiative goal of

fostering successful transitions for post 9/11 veterans and their families. Amidon has served in both active duty and reserve capacities since 1994, to include serving in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). He holds a bachelor's degree with majors in political science and geography and a minor in history from the University of Vermont, a master's degree in business administration from Southern Methodist University Cox School of Business, and a master's of science degree from the Eisenhower School for National Security and Resource Strategy.

The Honorable Thomas (Tom) E. Harvey, Esq.

Commissioner

Tom Harvey is a Vietnam Army combat veteran whose decorations include the Silver Star, the Purple Heart, and 12 others for valor and service. A lawyer by training, Harvey served as chief counsel and staff director of the Senate Veterans Affairs Committee, deputy administrator of the Veterans Administration, and VA assistant secretary for congressional affairs. Following 5 years with a major Wall Street law firm, Harvey came to Washington, DC, as a White House fellow. He has also served in DoD and as general counsel and congressional liaison of the United States Information Agency. He served as senior counselor of the Institute of International Education, which administers the Fulbright Program. He currently serves on the boards of the Milbank Memorial Fund, the focus of which is public health policy, and of the Art Students League of New York, where he studies watercolor painting. He holds both BA and JD degrees from the University of Notre Dame and an LLM degree from the New York University School of Law.

Ltc. Wayne B. Jonas, MD, U.S. Army (Ret.)

Commissioner

Wayne Jonas is a retired lieutenant colonel in the Medical Corps of the U.S. Army. Currently, he is a practicing family physician, an expert in integrative health and health care delivery, and a widely published scientific investigator. His book, *How Healing Works*, was published in January 2018 by Ten Speed Press. From 2001 to 2016, Jonas was chief executive officer of Samueli Institute, a nonprofit medical research organization supporting the scientific investigation of healing processes in the areas of stress, pain, and resilience. Jonas was the director of the Office of Alternative Medicine at the National Institutes of Health from 1995 to 1999, and prior to that served as the director of the medical research fellowship at the Walter Reed Army Institute of Research. He is a fellow of the American Academy of Family Physicians.

LtCol Jamil S. Khan, U.S. Marine Corps (Ret.)

Commissioner

Jamil Khan served in the U.S. Marine Corps from the Vietnam era through the Desert Shield/Desert Storm period, participating in joint operations in what is currently NATO and CENTCOM Theater of Operations. He retired in 1994. Khan is active in veterans' mental health community outreach and suicide prevention efforts and Rock County Veterans' Treatment Court in Janesville, Wisconsin. Khan is a life member of all major veteran service organizations, to include the American Legion, Beirut Veterans of America, Veterans of Foreign Wars, Vietnam Veterans of America, and the Marine Corps Association. After retiring, he worked as a

geographic information system technologist at Rock County Janesville, Wisconsin, and IS technologist at University of Wisconsin Madison. Khan currently volunteers in civic projects including hospice care and veterans' outreach health care programs. Khan earned an undergraduate degree in social sciences and an MA in history from University of Peshawar, Pakistan, an MA in human resources management from Pepperdine University, and an MS in organizational development, planning, and budgeting from the Joint Command and Staff College.

Matthew (Matt) J. Kuntz, Esq.

Commissioner

Matthew (Matt) Kuntz served as an infantry officer in the Army, was recognized as Distinguished Member of the 35th Regiment for his service, and was released after medical discharge. Kuntz was practicing corporate law in Helena, Montana, when his step-brother, a Montana National Guardsmen who suffered from PTSD, committed suicide. Kuntz began advocating for effective screening and treatment of posttraumatic stress injuries of returning service members. Because of his efforts, Senate Bill 711, which requires multiple, face-to-face mental health screenings throughout the nation's fighting force, was attached to the FY 2010 National Defense Authorization Act and signed into law in October 2009. In 2008, Kuntz became executive director for the Montana National Alliance on Mental Illness (NAMI) to support, educate, and advocate for Montanans suffering from serious mental illness and their families. Kuntz has helped establish mental health peer services in Montana, develop children's mental health crisis beds, and prevent incarceration of offenders with serious mental illness. Kuntz has advocated for increased access to service dogs for military service members and veterans with mental health conditions and brain injuries. He led the team that developed www.treatmentscout.com, a mental health and substance abuse navigation and review website that includes more than 1,600 veterans health care clinics. Kuntz was also instrumental in development of the Center for Mental Health Research and Recovery at Montana State University and was named interim director in August of 2018. He holds a bachelor's degree from the United States Military Academy and a law degree from the University of Oregon.

Shira Maguen, PhD

Commissioner

Shira Maguen is mental health director of the Post-9/11 Integrated Care Clinic and staff psychologist on the PTSD clinical team at the San Francisco VA Health Care System (SFVAHCS). Maguen is also professor in the Department of Psychiatry at the University of California, San Francisco School of Medicine. Maguen serves as the San Francisco site colead for the VA Women's Health Practice-Based Research Network and Director of the SFVAHCS PTSD Mental Illness Research, Education, and Clinical Centers postdoctoral research fellowship. She is involved with both the research and clinical components of the PTSD program. Her research interests fall under the umbrella of PTSD, moral injury, and suicide, and include risk and resilience factors in veterans, with a focus on women veterans. She is the author of more than 100 peer-reviewed publications, most of which focus on veteran mental health. Maguen is currently the principal investigator (PI) on a VA-funded, multisite randomized, controlled trial of a treatment for moral injury called Impact of Killing (IOK), and a co-PI on a VA grant to

create a screening tool and self-report diagnostic measure of eating disorders. She recently completed a DoD grant focused on evaluation of evidence-based treatments for PTSD using natural language processing and a VA grant examining a brief behavioral treatment for insomnia in primary care.

Maj. Michael J. Potoczniak, PhD, U.S. Army Reserve

Commissioner

Mike Potoczniak is currently a licensed psychologist in California and mental health director for the Santa Rosa community-based outpatient clinic in San Francisco VA. He previously served as team lead for addiction recovery treatment services at Martinez Outpatient Clinic in Martinez, California. Prior to this VA position, he served as program director for the addiction, consultation, and treatment program at the Palo Alto VA. Potoczniak currently serves in the Army Reserve and has been deployed twice, most recently as the behavioral health theater consultant located in Qatar, Afghanistan, and Kuwait, providing administrative oversight and quality assurance activities for behavioral health operations in the Middle East. Potoczniak earned undergraduate and master's degrees at Manhattan College in New York City, NY; and a PhD in counseling psychology at the University of Miami, Coral Gables, FL. He completed his predoctoral residency at the University of California, Irvine and subsequently worked at the University of Colorado at Boulder and the University of California, Berkeley prior to serving the in Army and VA.

Capt. John (Jack) M. Rose, U.S. Navy (Ret.)

Commissioner

Jack Rose is currently a board member for NAMI for Kenosha County (Wisconsin) having served as president from 2006 to 2014. He has participated in various capacities with NAMI over the past 18 years at both the state and local levels. A mental health advocate, Rose is currently chair of the Mental Health/AODA Services Committee for Kenosha County and has served on the Behavior Health Treatment Court since its inception in 2013. He has served on the adjunct faculty at Carthage College in Kenosha. Recently reelected for his third term, he also serves as an alderman for the 15th District for the City of Kenosha. Rose has been a member of the Service Academy Nominations Advisory Board (First Congressional District, Wisconsin) since 2004. A naval aviator, retiring after 26 years in 1994, Rose served in various duty assignments to include squadron command, operational deployments/detachments worldwide, and the Pentagon. He served as a planner and venue manager for the 1996 Olympics in Atlanta and subsequently worked as project manager for Advantest America and ITT Pure-Flo. Rose holds a bachelor's degree from the U.S. Naval Academy and an MBA from University of West Florida. He is also a graduate of the Industrial College of the Armed Forces.

APPENDIX C:
THE COMMISSION'S PROCESS

Charge to the Commission

The COVER Commission was convened in response to the Comprehensive Addiction and Recovery Act of 2016 (Pub. L. No. 114-198). It was charged with five tasks designed to advise VA, the administration, and Congress on how to provide optimal mental health and whole person care. The commission created workgroups to examine these five tasks, which focused on the efficacy of current mental health services provided to veterans by VA, the advisability of providing complementary and integrative health (CIH) care options for veterans, and the ability of VA to sufficiently fund adequate care to improve veterans' mental health and prevent suicide in this vulnerable population.

Task 1: Models for Optimal Mental Health and Whole Person Care

Workgroup Members

Lead for Workgroups 1–3: Tom Beeman
Commissioners: Wayne Jonas, Lead; Shira Maguen; Mike Potoczniak; Jamil Khan
Assistant Designated Federal Officer/Subject-Matter Expert: John Klocek

Work Process

Task 1 charged the commission with examining the efficacy of the evidence-based therapy model used by the Secretary for treating mental health illnesses of veterans and identify areas to improve wellness-based outcomes.

To accomplish its task the commission followed the steps below:

- Define the terms and guiding principles for the workgroup task.
- Understand the current models in VA that provide mental health, CIH, and whole person care.
- Evaluate the outcomes of VA and private-sector models for "treating mental health illness and improving wellness-based outcomes" using the quadruple aim framework.
- Survey the private sector to determine the prevalence of mental health, behavioral health, and CIH use.
- Select from these findings to create the best models of care from the above.
- Recommend an optimal model of veteran care and describe how VA can build on and transform its current approaches to provide that type of care for all veterans.

Work Products

The following COVER Commission work products are available online at va.gov/cover:

- Summaries of Population Health and Models of Care Research
- Health Care Systems Catalogue

Task 2: Models for Optimal Mental Health and Whole Person Care

Workgroup Members

Lead for Workgroups 1-3: Tom Beeman
Commissioners: Mike Potoczniak, Lead; Wayne Jonas; Shira Maguen; Tom Harvey
Assistant Designated Federal Officer/Subject-Matter Expert: Kendra Weaver

Work Process

Task 2 requires the commission to conduct a patient-centered survey within each of the Veterans Integrated Service Networks (VISNs). The following topics must be addressed in the survey:

- Veterans' experiences with VA when seeking medical assistance for mental health issues through the department's health care system.
- Veterans' experience with treating mental health issues at non-VA facilities by private-sector health professionals.
- Veterans' preferences regarding available treatment for mental health issues and the methods they believe are most effective.
- Veterans' experience with respect to CIH therapies.
- The prevalence of prescribing medication to veterans seeking treatment through the VA health care system for treating mental health issues.
- The outreach efforts of the Secretary of Veterans Affairs regarding availability of mental health benefits and treatments for veterans, including efforts to reduce barriers to receiving benefits and treatments.

The commission considered several options for how to proceed with addressing the requirements for Task 2, including using existing data, conducting a web-based survey, conducting patient-centered focus groups, or some combination of these options. The complexity of creating and administering a web-based survey made that infeasible, so the commission chose to analyze existing data and conduct focus groups. Given the charge to examine veterans' preferences and experiences with mental health services, the commissioners deemed focus groups an optimal data collection strategy to gather the extensive qualitative data needed to supplement the data analyses.

The commission also used existing quantitative and qualitative data and conducted literature reviews, identifying relevant information aligned to the key questions and subcomponents of the legislative task. Below is an overview of the data sources the commission analyzed:

- Veteran Satisfaction Survey (VSS): The VSS is a mail survey sent to a random sample of new and established veterans who recently received mental health services.
- Veterans Outcome Assessment (VOA): The VOA is modeled after the Consumer Assessment of Healthcare Providers and Systems Experience of Care and Health Outcomes survey. The VOA is a quality improvement project designed to determine whether VA mental health services are effective and assess clinical outcomes, program effectiveness and satisfaction of VA mental health services.
- Complementary and Integrative Health (CIH) Veteran Preference Survey: A national survey of veterans' interest in, frequency of, and reasons for use of, and satisfaction with 26 CIH approaches.
- Veteran Outreach Efforts (VOE) Questionnaire: The VOE questionnaire was developed by the COVER Commission to capture the frequency of mental and behavioral health outreach efforts within the VA healthcare system.
- Strategic Analytics for Improvement and Learning (SAIL): VA developed the SAIL model to measure, evaluate and benchmark quality and efficiency at medical centers (SAIL, 2019).
- Survey of Healthcare Experiences of Patients (SHEP): The COVER Commission received data from the VHA SHEP survey responses provided by veterans who use VA mental health services.

Work Products

Findings for the Task 2 focus groups are included in the main body of this report. The following COVER Commission work product is available online at va.gov/cover:

- Summary Report of Task 2 Data Analysis

Task 3: Research on CIH Approaches for Mental Health Issues

Workgroup Members

Lead for Workgroups 1-3: Tom Beeman
Commissioners: Shira Maguen, Lead; Wayne Jonas; Mike Potoczniak; Jack Rose
Assistant Designated Federal Officer/Subject-Matter Expert: Alison Whitehead

Work Process

Task 3 charged the commission with examining available research on CIH approaches for addressing mental health issues and identify potential benefits for veterans of providing

services such as music therapy, equine therapy, training and caring for service dogs, yoga therapy, acupuncture therapy, meditation therapy, outdoor sports therapy, hyperbaric oxygen therapy, accelerated resolution therapy, art therapy, magnetic resonance therapy, and other therapies the COVER Commission determined appropriate.

The commission conducted evidence-based reviews of peer-reviewed scientific literature on CIH therapies for mental health conditions. The reviews followed a standardized, stepwise process that included defining the review scope, developing key questions in PICOTS (population, interventions, comparators, outcomes, timing, and setting) format, developing a prioritized list of critical outcomes, and creating a systematic review protocol, including search criteria and inclusion and exclusion criteria.

Evidence reports include an introductory methodology section, clearly outlined key questions, PICOTS elements, critical outcomes, inclusion and exclusion criteria, search strategy, and risk-of-bias and quality assessment procedures. A narrative synthesis of the key findings and evidence tables with summaries of all included studies are provided for each review.

Work Products

The following COVER Commission work products are available online at va.gov/cover:

- Evidence-based Review for CIH and Post-Traumatic Stress Disorder
- Evidence-based Review for CIH and Opioid Use Disorder
- Evidence-based Review for CIH and Alcohol Use Disorder
- Evidence-based Review for CIH and Major Depressive Disorder
- Evidence-based Review for CIH and Generalized Anxiety Disorder
- Evidence-based Review for CIH and Bipolar Disorder
- Evidence-based Review for CIH and Suicidal Behavior
- Evidence-based Review for CIH and Insomnia Disorder

Task 4: Resources for Ensuring Quality Mental Health Care

Workgroup Members

Lead for Workgroups 4-5: Matt Amidon
Commissioners: Jack Rose, Lead; Jake Leinenkugel; Matt Kuntz; Jamil Khan
Assistant Designated Federal Officer/Subject-Matter Expert: Stacey Pollack

Work Process

Task 4 charged the commission with studying the sufficiency of VA's resources for ensuring veterans receive quality health care for mental health issues. For the purposes of its research, the commission defined sufficiency as the ability to meet the needs of veterans living with diagnoses such as post-traumatic stress disorder, depression, and substance abuse disorders (demand) to achieve *recovery* through efficient care and effective outcomes (supply).

The commission used the quadruple aim framework to evaluate the sufficiency of VA resources for ensuring veterans receive quality care for mental health issues. The commission met with

subject matter experts to evaluate VA's resources and conducted quantitative data analyses using existing data sources.

Work Products

The following COVER Commission work product is available online at va.gov/cover:

- Summary Report of Task 4 Data Analysis

Task 5: Available Mental Health Treatments and Resources

Workgroup Members

Lead for Workgroups 4-5: Matt Amidon
Commissioners: Matt Kuntz, Lead; Jake Leinenkugel; Jack Rose; Tom Harvey
Assistant Designated Federal Officer/Subject-Matter Expert: Stacey Pollack

Work Process

Task 5 charged the commission with studying current mental health treatments and resources available within VA and assessing the following:

- The effectiveness of such treatments and resources in decreasing the number of suicides per day by veterans.
- The number of veterans who have been diagnosed with mental health issues.
- The percentage of veterans diagnosed with mental health issues who are using VA resources.
- The percentage of veterans who have completed counseling sessions offered by VA.
- The viability of treatments offered by VA for improving to the recovery of veterans with mental health issues.

The workgroup used existing quantitative and qualitative data and conducted literature reviews, identifying relevant tables and figures from peer-reviewed publications that aligned to the key questions and subcomponents of the COVER Commission's legislative requirement.

Each data source evaluated a different veteran subpopulation and included its own methodology. Data sources included the following:

- Veterans Crisis Line (VCL): The mission of the VCL is to reduce the number of suicides by reducing immediate stress, offering callers options, and referring them to the nearest appropriate VA or community resources.
- Clinical Inventory Questionnaire (CIQ): The CIQ was developed by the workgroup to determine which evidence-based mental and behavioral health treatments are offered by VA.

- Complementary and Integrative Health Veteran Preference Survey: In July 17-25, 2017, Taylor et al. (2019) conducted the first national survey of *v*eterans' interest in, frequency of, and reasons for use of, and satisfaction with 26 CIH approaches. Taylor conducted additional analyses on behalf of the commission using the data collected from the CIH Veteran Preference Survey.

- Strategic Analytics for Improvement and Learning: VA developed the SAIL model to measure, evaluate and benchmark quality and efficiency at medical centers.

- Evaluation of the Department of Veterans Affairs Mental Health Services: The Evaluation of VA Mental Health Services was a legislatively-mandated study designed to examine the access and quality of the mental health services provided to *v*eterans serving in Afghanistan and Iraq during Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn.

- Healthcare Analysis and Information Group: The FY 2015 VHA Complementary and Integrative Health Services Survey was developed with the assistance of the Healthcare Analysis and Information Group to evaluate and report on the current state of Integrative Health services across VA.

- Department of Defense Suicide Event Report Annual Reports: The DoD Suicide Event Report is an annual surveillance tool used to collect standardized data on every service member who dies by suicide or makes a suicide attempt.

Work Products

The following COVER Commission work product is available online at va.gov/cover:

- Summary Report of Task 5 Data Analysis

APPENDIX D:
ACRONYM LIST

ADA	Americans with Disabilities Act
AET	aerobic exercise training
AR	applied relaxation
Army STARRS	Army Study to Assess Risk and Resilience in Servicemembers
ART	accelerated resolution therapy
AUD	alcohol use disorder
BHT	behavioral health technician
BD	bipolar disorder
CBOC	community-based outpatient clinic
CBT	cognitive behavior therapy
CIH	complementary and integrative health
CIQ	clinical inventory questionnaire
COC	continuum of care
CPT	Cognitive Processing Therapy
CPT	Current Procedural Terminology
DBT	dialectical behavior therapy
dTMS	deep transcranial magnetic stimulation
ECT	electroconvulsive therapy
EHR	electronic health record
EMDR	Eye Movement Desensitization and Reprocessing
ESP	Evidence Synthesis Program
FDA	Food and Drug Administration
FQHC	Federally Qualified Health Center
GAD	generalized anxiety disorder
GAO	Government Accountability Office
HBOT	hyperbaric oxygen therapy
HDRS	Hamilton Depression Rating Scale
HHS	Department of Health and Human Services
HOPE	healing-oriented practices and environments (assessment)
ICD	International Classification of Disease
IOM	Institute of Medicine
MAP	mission, aspiration, and purpose
MBCT	mindfulness-based cognitive therapy
MCCB	MATRICS Consensus Cognitive Battery
MDD	major depressive disorder
MDMA	Methylenedioxymethamphetamine

MMT	methadone maintenance therapy
MST	military sexual trauma
NAM	National Academy of Medicine
NAMI	National Alliance for Mental Illness
NASEM	National Academies of Sciences, Engineering, and Medicine
NIDA	National Institute on Drug Abuse
NIH	National Institutes of Health
OUD	opioid use disorder
PACT	patient aligned care team
PCMHI	primary care mental health integration
PCPCM	person-centered primary care measure
PDSA	plan-do-study-act (cycle)
PHI	personal health inventory
PHP	personalized health plan
PTSD	post-traumatic stress disorder
RCT	random-control trial
RET	resistance exercise training
RoB	risk of bias
RRTP	residential rehabilitation treatment program
rTMS	repetitive transcranial magnetic stimulation
RVU	relative value unit
SAFE VET	Suicide Assessment and Follow-up Engagement: Veteran Emergency Treatment
SAIL	Strategic Analytics for Improvement and Learning
SCF	Southcentral Foundation
SR	systematic review
SSRI	selective serotonin reuptake inhibitors
TAU	treatment as usual
TCA	tricyclic antidepressant
tDCS	transcranial direct current stimulation
THC	tetrahydrocannabinol
TMS	transcranial magnetic stimulation
VAS	visual analog scale
VERA	Veterans Equitable Resource Allocation
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
VTS	Veterans Transportation Service
WHP	whole health partner
YMRS	Young Mania Rating Scale

COVER COMMISSION
Creating Options for Veterans' Expedited Recovery

COMMISSION STAFF

Casin Spero
Chief Advisor and Staff Director

John Goodrich, MPH
Chief Operating Officer and Designated Federal Officer

Luis Carrillo
Operational Support Staff

Kristiann Dickson
Project Manager

Kathryn Faustmann
Operational Support Staff

Daniel Hanlon
Stakeholder Engagement Officer

John Klocek, PhD
Subject Matter Expert and Alternate Designated Federal Officer

Wendy LaRue, PhD
Chief Content Development Officer

Jennifer McKinney
Content Management Specialist

Laura Ann McMahon
Contracting Officer Representative and Alternate Designated Federal Officer

Stacey Pollack, PhD
Subject Matter Expert and Alternate Designated Federal Officer

Tracy Shewmake
Operational Support Staff

Kendra Weaver, PsyD
Subject Matter Expert and Alternate Designated Federal Officer

Alison Whitehead, MPH
Subject Matter Expert and Alternate Designated Federal Officer