

The VA eScreening Program: Technology to Improve Veteran Healthcare

Niloo Afari, PhD

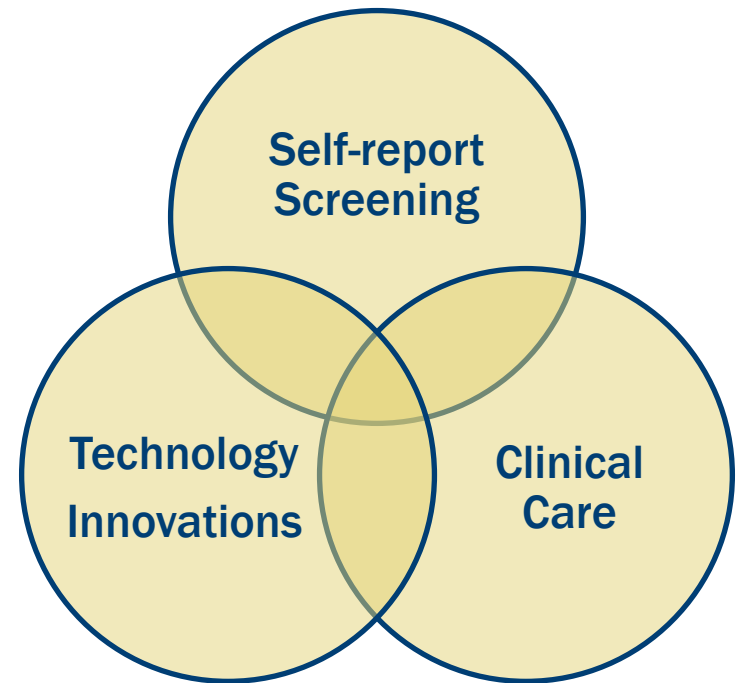
James Pittman, LCSW

Elizabeth Floto, MS

VA Center of Excellence for Stress and Mental
Health

Introduction

- VHA serves about 9 million Veterans each year; estimated 8-12% increase annually
- More than 1.6 million troops deployed to conflicts in the middle east, needing healthcare upon discharge
- Close to 30% of all VHA enrollees receive mental health care
- Efficient and evidence-based screening, assessment, and outcome monitoring is critical to ensure VHA care meets Veteran needs.



eScreening: A Technology Solution

- eScreening is the **only** VA technology with combined functions that is adaptable to the needs of any clinical setting and allows Veterans to:
 - » Report their mental and physical health symptoms with mobile devices into their medical record
 - » Communicate problems and symptoms with providers
 - » Get instantaneous feedback and triage



VS



eScreening Functions

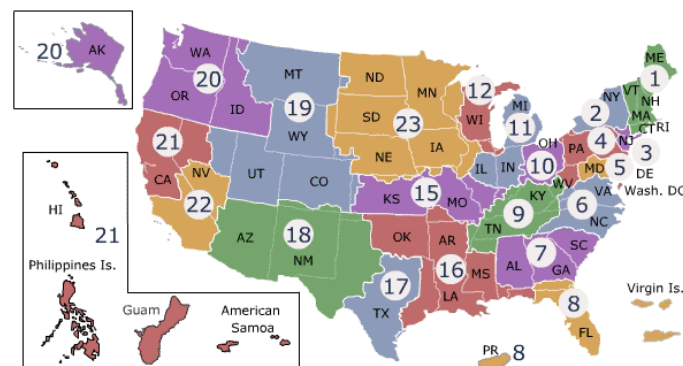
- Patient directed log-in
- Designed for use in multiple settings including: a) high volume primary care; b) one-time comprehensive screening; and c) mental health outcome monitoring
- Web-based screening for Veterans to complete standardized screening prior to scheduled appointments
- 2-way VISTA/CPRS communication allows: a) dynamic assignment of screens based on the individual Veteran's needs; b) completion of clinical reminders; and c) generation of a clinical note for clinician to review and sign
- Scoring and synchronization of screens in real-time to allow advanced notification system for high-risk Veteran responses
- Personalized feedback for Veterans based on their responses
- Dynamic progress reporting gives the ability to provide summary of progress over time in Veteran summary and CPRS note (e.g., PHQ-9 scores over time)
- Dashboard interface and forms editor allows users to: a) adapt scoring logic of existing screens; b) create new screens; c) edit content for Veteran summary and CPRS note; and d) generate data reports for veterans, clinics, or system-wide

eScreening Results

- **FY13 evaluation of eScreening in VA San Diego OEF/OIF/OND Care Management program with close to 1400 Veterans**
 - » Veterans completed screens for PTSD, depression, anxiety, TBI, military sexual trauma, substance abuse, and pain and other somatic symptoms
- **Focus groups with 40 Veterans to examine preference and impact**
- **Overwhelmingly positive impact on clinical care and efficiencies:**
 - » Veterans preferred eScreening over paper-based methods and felt a greater sense of security stating that paper copies are easily lost, destroyed and may go through several staff or provider hands before being used to support their care
 - » “Same Day” access to clinical care and triage for urgent services in 84% of Veterans who did eScreening compared to 49% who were screened by paper
 - » Faster documentation of completed clinical reminders in CPRS, averaging 19 days less time than paper screening
 - » Reduced redundancy yielding an estimated savings of 6.5 provider hours and 4.4 Veteran hours for every 100 Veterans seen
 - » Increased operational efficiencies yielding an estimated savings of \$100 for every 100 clinical reminders completed

Current Status

- 2015 Implementations:
 - Part of standard of care in the VA San Diego Transition Care Management program (formerly OEF/OIF/OND).
 - Select VA San Diego Mental Health clinics to facilitate outcome monitoring in PTSD treatment
 - VA San Diego Primary Care clinics to assist with completion of clinical reminders
 - VA Long Beach Transition Care Management Program.
- Future 2016 Implementations:
 - VA San Francisco Mental Health Access Clinic (03/2016)
 - VA Las Vegas Telehealth Clinic (03/2016)



Clinical Value

- Far-reaching implications for how technology can be harnessed to streamline screening for mental and physical health needs in healthcare systems
- Ideal for high volume settings like Primary Care and Mental Health clinics to meet benchmarks for mental health screening while reducing Veteran burden and increasing breadth of clinical care
- Ability to assist in treatment planning and monitoring treatment outcomes
- Potential to connect to other existing systems such as MyHealtheVet to allow Veterans to complete screening from anywhere with an internet connection

Clinical Reminders in eScreening

- **Advanced Directive Screen**
- **Alcohol Use Screen (AUDIT-C)**
- **Depression Screening (PHQ-9)**
- **Homelessness Screen**
- **Iraq & Afghan Post-Deployment Screen**
 - » OEF/OIF Service
 - » Infectious Disease & Embedded Fragments
- **MST**
- **Screen for PTSD (PC-PTSD & PCL-C)**
- **TBI Screening**
- **Tobacco Cessation Screen**
- **VAS Pain Vital**

FAQ

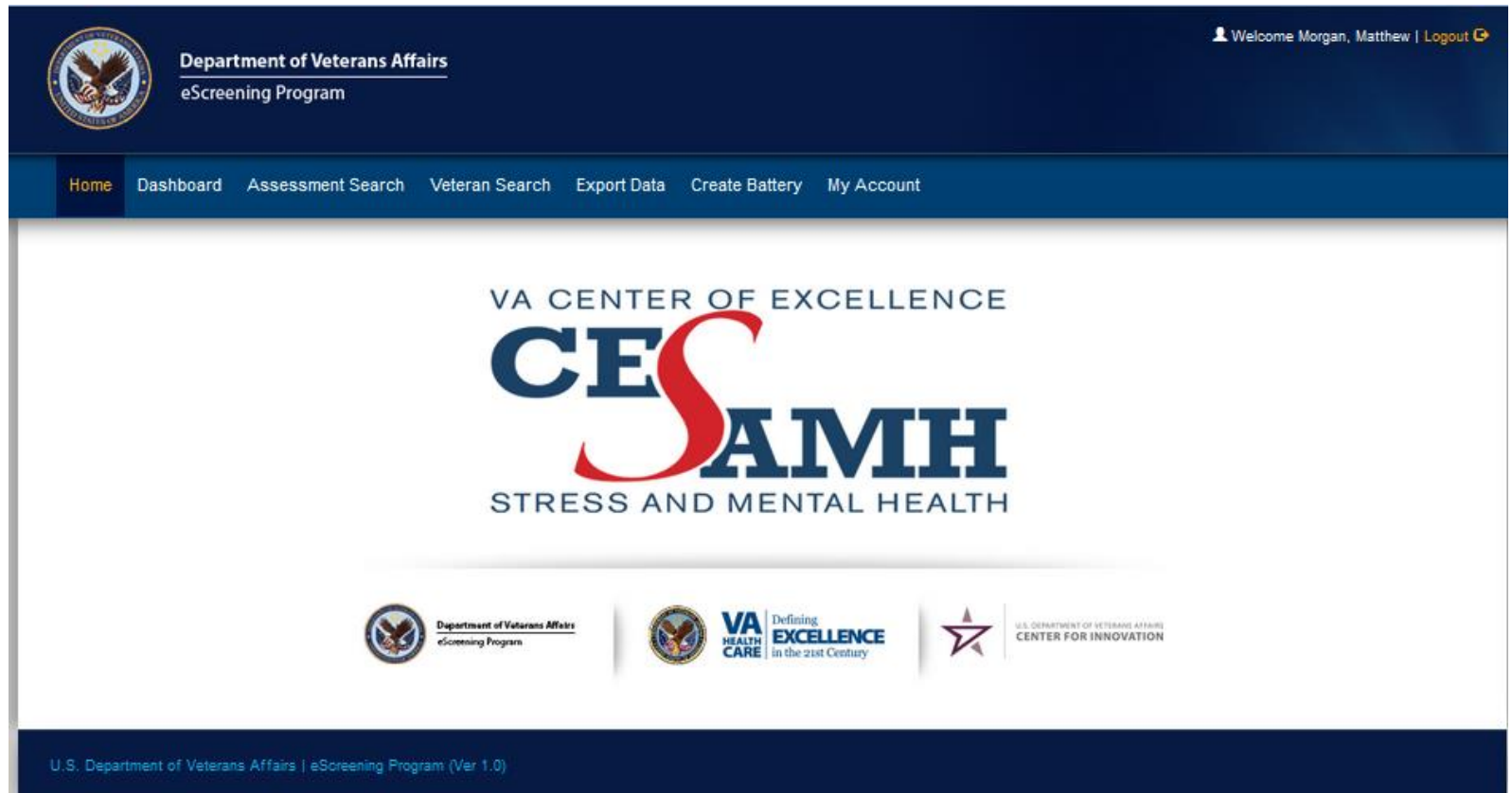
- **Do Veterans have to be at the medical center to do this?**
 - » Yes, the pilot product only works on hardware that is connect to the VA secure intranet. We would love to eventually make it available via myHealtheVet.
- **Could this be on a Kiosk?**
 - » Because it is web based, it can be on any piece of hardware connected to the VA Secure network. It may not be well suited for a Kiosk for a long assessment
- **Who will configure the content?**
 - » In its current configuration, the system has a specific role called a Technical Administrator. This role works with existing staff within a Medical Center to configure content.
- **Are the staff using the staff-facing program from a PC? Are patients getting their printouts that way?**
 - » Yes, if staff wish to print, they can do so from their desktops.
- **Once the information is saved to CPRS does it resolve the Clinical Reminder?**
 - » Yes! It submits Health Factors and Mental Health Assistant data to resolve them.
- **How does it connect to VistA?**
 - » eScreening uses a Proxy Account and connects through Vista Link using remote procedure calls (RPCs).
- **If there is a critical mental health issue, is there a score range to notify the provider of possible critical intervention?**
 - » Yes, if someone meets a certain threshold, the system will display Alerts on the eScreening dashboard. Also, specific sentences could be added to the body of the CPRS note.
- **Can the MD change the veteran entered information ?**
 - » Yes, the information is sent to CPRS as an editable note.
- **Is eScreening available to other facilities at this time?**
 - » The software developed during the software pilot belong s to the VA. There are no further planned implementation due to lack of resources.

MHE Screenshots

Log-in screen



Landing Page for Staff



The screenshot displays the staff landing page for the VA eScreening Program. The header is dark blue with the Department of Veterans Affairs seal on the left, the text "Department of Veterans Affairs eScreening Program" in the center, and a user welcome message "Welcome Morgan, Matthew | Logout" on the right. Below the header is a navigation bar with links: Home (highlighted), Dashboard, Assessment Search, Veteran Search, Export Data, Create Battery, and My Account. The main content area features the "VA CENTER OF EXCELLENCE CESAMH STRESS AND MENTAL HEALTH" logo. At the bottom of the main area are three logos: the Department of Veterans Affairs eScreening Program logo, the VA Health Care logo with the tagline "Defining EXCELLENCE in the 21st Century", and the U.S. Department of Veterans Affairs Center for Innovation logo. The footer is dark blue and contains the text "U.S. Department of Veterans Affairs | eScreening Program (Ver 1.0)".

Department of Veterans Affairs
eScreening Program

Welcome Morgan, Matthew | Logout

Home Dashboard Assessment Search Veteran Search Export Data Create Battery My Account

VA CENTER OF EXCELLENCE
CESAMH
STRESS AND MENTAL HEALTH

Department of Veterans Affairs
eScreening Program

VA HEALTH CARE
Defining EXCELLENCE
in the 21st Century

U.S. DEPARTMENT OF VETERANS AFFAIRS
CENTER FOR INNOVATION

U.S. Department of Veterans Affairs | eScreening Program (Ver 1.0)

Setting up an assessment for a Veteran

Veteran Detail

Veteran Information

Date Refreshed from VistA 01/29/2015 08:50:20 [Refresh Data from VistA](#)

Name (Last, First Middle) ZZTEST, TEST		Status Mapped Veteran	Date of Birth 02/02/1972	SSN-4 0011
Phone 6196665512	Work	Cell	Email	VistA IEN 412562
Map to VistA Record				

Upcoming Appointment List

Date VistA Clinic

No Upcoming Appointment Found.

Clinical Reminder List

Date Name

DUE NOW TBI Screening

DUE NOW Iraq&Afghan Post-Deployment Screen

Batteries

[Create New Battery](#)

Date Created	Status	Battery	Created By (Last, First Middle)	Action
01/28/2015 12:56:51	Deleted	OEF/OIF/OND Initial Screen	Flores, Alishea	View

Configuring the contents of the assessment and CPRS details

Create Battery


Name (Last, First Middle) ZZTEST, TEST		Status Mapped Veteran	Date of Birth 02/02/1972	SSN-4 0011
Phone 6196665512	Work	Cell	Email	VistA IEN 412562

Program * Testing	VistA Clinic * RESEARCH-X	Note Title * RESEARCH/INFORMED CONSENT	Clinician * Morgan, Matthew
----------------------	------------------------------	---	--------------------------------

Please Select Screening Modules for the Veteran

Battery		Screening Module	Description	Notes
<div>Highlight & Select Screening Modules</div> <div><div>Mental Health</div><div>OEF/OIF/OND Initial Screen</div><div>Clear all Reset</div></div> <div><div>Highlight Screening Modules</div><div>Highlight Mental Health</div><div>Highlight OEF/OIF/OND Initial Screen</div><div>Clear all Checked Modules</div></div>	<input checked="" type="checkbox"/>	Advance Directive	Advance Directive, CR (4 items)	
	<input type="checkbox"/>	Audit	MHAC Battery Audit	
	<input checked="" type="checkbox"/>	AUDIT-C	Alcohol Use Disorders Identification Test-Consumption, CR (3 items)	Iraq&Afghan Post-Deployment Screen
	<input checked="" type="checkbox"/>	AV Hallucinations	Auditory/Visual Hallucinations (2 items)	
	<input checked="" type="checkbox"/>	Basic Demographics	Demographics (6 items)	
	<input checked="" type="checkbox"/>	Basic Pain	Pain (2 items)	

Veteran's Experience



Department of Veterans Affairs
eScreening Program

Veteran Login

Last Name

Last Four SSN

Login

U.S. Department of Veterans Affairs | eScreening Program (Ver 1.0)

Customized Welcome Page by Clinic



VA
HEALTH
CARE | Defining
EXCELLENCE
in the 21st Century

Welcome to VA San Diego Healthcare System!

We thank you for your service to our country and look forward to assisting in your enrollment for VA healthcare and transition from active duty to Veteran status.

The following eScreening Questionnaire will help your VA healthcare team to assess your needs and provide the best health and wellness options available to you. Please take your time and answer all questions as completely as possible. If you have any questions, please ask for assistance.

[Start Assessment](#)

VA CENTER OF EXCELLENCE
CE
SAMH
STRESS AND MENTAL HEALTH

Assessment

Identification

0%

Demographics and Social Information

0%

Service History

0%

Health Symptoms

0%

Health Functioning

0%

Health Habits

0%

Psychological Health

0%

Identification

First Name	<input type="text" value="TEST"/>
Middle Name	<input type="text" value="Test"/>
Last Name	<input type="text" value="ZZTEST"/>
SSN Last 4 Digits	<input type="text" value="0011"/>
Email	<input type="text" value="Vet@VA.gov"/>
Best number to reach you *	<input type="text" value="6196665512"/> (Example: 5551235555)
Best time to call	<input type="text" value="Any time"/> <input type="button" value="v"/>

Save & Exit

Next »

Example Questions (AUDC)

How often did you have a drink containing alcohol in the past 52 weeks?

Consider a drink a bottle of beer, a glass of wine, a wine cooler, one cocktail or a shot of hard liquor (like scotch, gin, or vodka).

Never	Monthly or less	2-4 times per month	2-3 times per week	4 or more times per week
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

How many drinks containing alcohol did you have on a typical day when you were drinking in the past 52 weeks?

None	1-2 drinks	3-4 drinks	5-6 drinks	7-9 drinks	10+
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

How often did you have six or more drinks on one occasion in the past 52 weeks?

Never	Less than monthly	Monthly	Weekly	Daily
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Customized Completion Page by Clinic

Congratulations!

Thank You!

Please let the assistant know that you have completed your screen. They will provide you with a personalized summary of your screens. The results of this screen will be sent electronically to a Transition Case Manager for review.

The goal of OEF/OIF/OND Care Management is to help you maximize your VA services and benefits. Here are some services that we provide:

- Care coordination and support with access to VA healthcare services & benefits
- Advocacy to address post-deployment health concerns
- Resources to address employment, education or housing concerns
- Applying for VA, other government, and community benefits
- Resources for marriage, family, and spirituality concerns
- Aid with concerns about drinking or drug use
- Assistance if you are feeling sad, depressed or anxious
- Assistance with visual impairments
- Help if you really aren't sure what you need, but things just don't feel right

You may ask to meet with a Transition Case Manager today to discuss any issues presented in this screen. You can also call the OEF/OIF/OND Care Management team at any point in the future for assistance. Their contact information is listed on your personalized summary.

Done



VA
HEALTH
CARE | Defining
EXCELLENCE
in the 21st Century

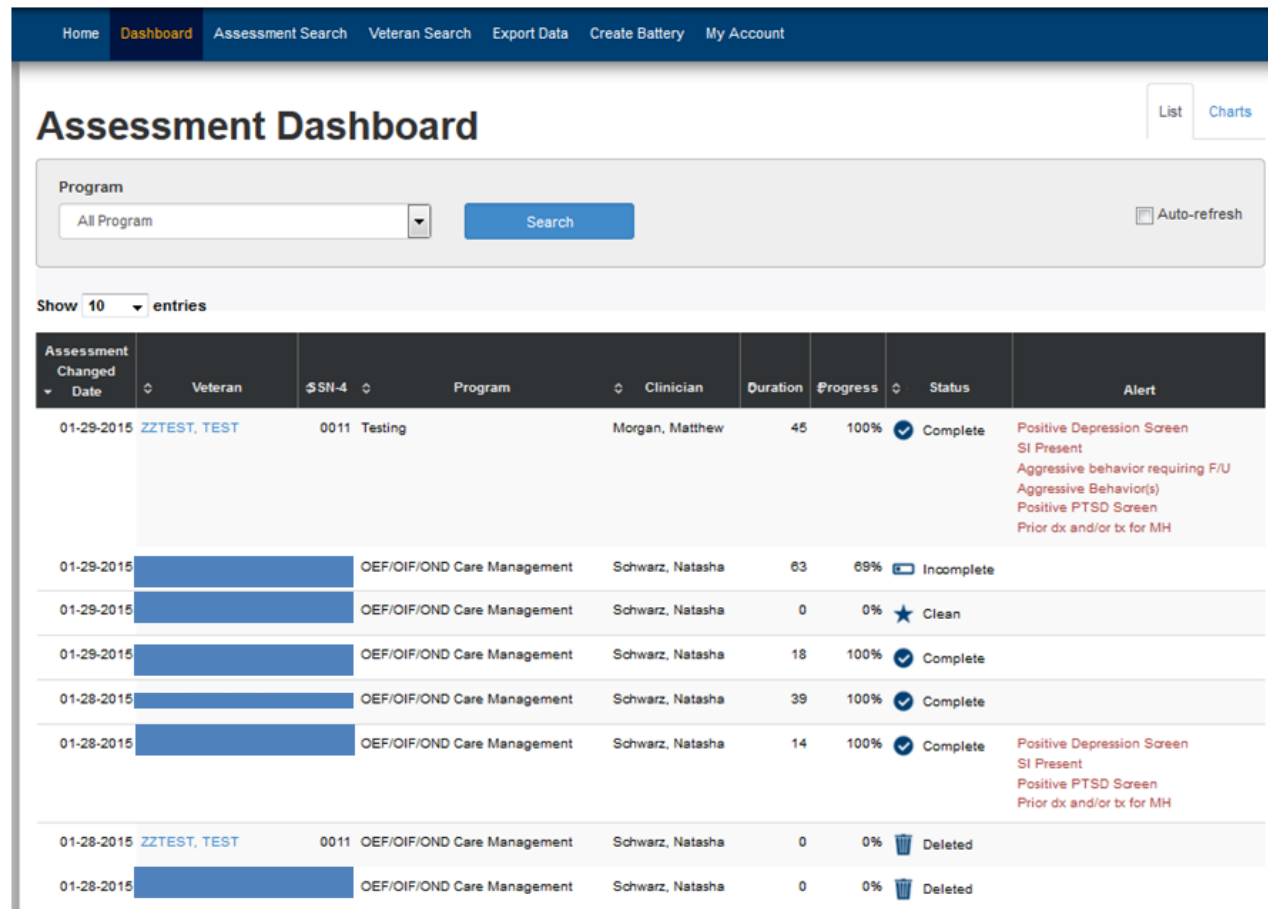
VA CENTER OF EXCELLENCE
CE
SAMH
STRESS AND MENTAL HEALTH

VA CENTER OF EXCELLENCE
CE
SAMH
STRESS AND MENTAL HEALTH



VA
HEALTH
CARE | Defining
EXCELLENCE
in the 21st Century

Staff Real-time Dashboard



Veteran Assessment Details

Assessment Summary

Current Status: Complete | Update Status to: Please Select a Status

Program Name Testing	Name (Last, First Middle) ZZTEST, TEST Test	Date of Birth 02/02/1972	SSN-4 0011
Phone 6196665512	Work	Cell	Email Vet@VA.gov
Battery Name OEF/OIF/OND Initial Screen	Created By Morgan, Matthew Ryan	Date Created 01/29/2015 08:57:28	Date Completed 01/29/2015 10:16:14
			Veteran Summary View Veteran Summary

Completeness



Identification



Demographics and Social Information



Service History



Health Symptoms



Health Functioning



Health Habits



Psychological Health

Alerts

- ⚠ Positive Depression Screen
- ⚠ SI Present
- ⚠ Aggressive behavior requiring F/U
- ⚠ Aggressive Behavior(s)
- ⚠ Positive PTSD Screen
- ⚠ Prior dx and/or tx for MH

VistA Clinic *

RESEARCH-X

Note Title *

RESEARCH/INFORMED CONSENT

Clinician *

Morgan, Matthew

[Review Assessment](#)

[Save To VistA](#)

[Health Factor Titles](#)


[Save](#)

[Cancel](#)


Printable Veteran Summary

Veteran Summary

Print

**VA** HEALTH CARE

Defining
EXCELLENCE
in the 21st Century

**CE**
SAMH
STRESS AND MENTAL HEALTH

eScreening Summary

TEST Test ZZTEST

Matthew Morgan
01-29-2015

Appointments
Appointments unavailable

For questions or concerns, or for a full report of your results, call the OEF/OIF/OND Transition Case Manager, Natasha Schwarz at (858) 642-3615.
If you need medical attention immediately, go straight to the Emergency Department.

Note: The results of this screening are NOT diagnoses and do not affect VA disability ratings.

Homelessness

This is when you do not have a safe or stable place you can return to every night. The VA is committed to ending Veteran homelessness by the end of 2015.

Results: unstable housing/at risk
Recommendation: Call the VA's free National Call Center for Homeless Veterans at (877)-424-3838 and ask for help. Someone is always there to take your call.

Advance Directive

This is a legal paper that tells your wishes for treatment if you become too sick to talk, and if needed, can help your doctors and family to make decisions about your care.

Results: Complete

Environmental Exposure

This is when you have been exposed to a hazard that may have potential health risks.

Results: at risk
Recommendation: Call Dale Willoughby at the Environmental Registry Program and discuss your exposure: (858) 642-3995, weekdays 7:30am-4:00pm.

Tobacco Use

**CE**
SAMH
STRESS AND MENTAL HEALTH

**UCSD**

**VA** HEALTH CARE

Defining
EXCELLENCE
in the 21st Century

Military Sexual Trauma (MST)

MST is sexual assault or repeated, threatening sexual harassment that occurred while the Veteran was in the military. MST can happen any time or anywhere, to men and women. MST can affect your physical and mental health, even years later.

Results: positive screen

Recommendation: Ask your clinician for help managing your MST.

Insomnia

Insomnia is having trouble sleeping that lasts longer than a few weeks. Some causes are: medical (like depression or pain), lifestyle factors (such as too much caffeine), or even stress.

Results: severe insomnia

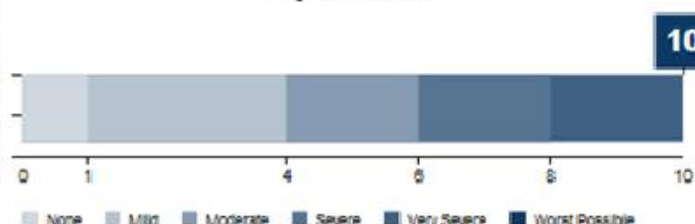
Recommendation: Describe your sleeping problems to your clinician, or learn more about insomnia at the CESAMH site at: <http://escreening.cesamh.org>

Pain

10

Worst Possible

My Pain Score



Pain can slow healing and stop you from being active. Untreated pain can harm your sleep, outlook, and ability to do things.

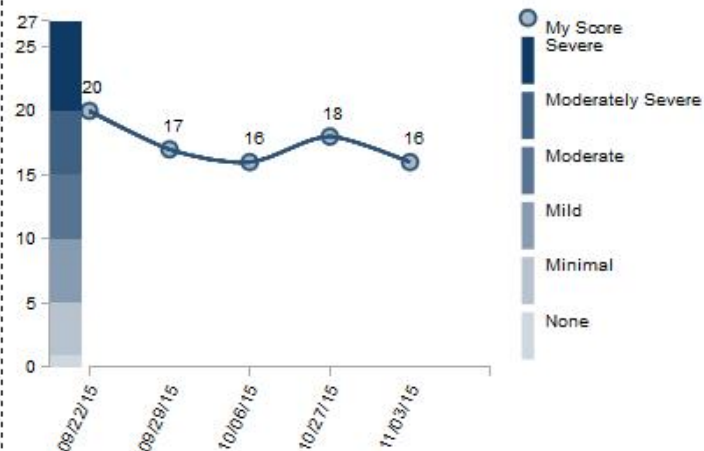
Recommendation: Tell your clinician if medications aren't reducing your pain, or if the pain suddenly increases or changes, and ask for help with managing your pain.

Depression

16

Moderately Severe

My Depression Score



*a score of 10 or greater is a positive screen

Depression is when you feel sad and hopeless for much of the time. It affects your body and thoughts, and interferes with daily life. There are effective treatments and resources for dealing with depression.

Recommendation: Ask your clinician for further evaluation and treatment options

Generated CPRS Note

Vista CPRS in use by: Morgan, Matthew R. (vista.san-diego.med.va.gov)

File Edit View Action Options Tools Help

ZZTEST.TEST (OUTPATIENT) Visit Not Selected Primary Care Team Unassigned

000-00-0011 Feb 02, 1972 (42) Current Provider Not Selected

Flag VistaWeb Remote Data No Postings

Last 100 Signed Notes (Total: 5)

Visit: 01/29/15 RESEARCH/INFORMED CONSENT, RESEARCH-X, Matthew R MORGAN (Jan 29, 15@10:16)

LOCAL TITLE: RESEARCH/INFORMED CONSENT
STANDARD TITLE: RESEARCH CONSENT
DATE OF NOTE: JAN 29, 2015@10:16:14 ENTRY DATE: JAN 29, 2015@10:26:02
AUTHOR: MORGAN, MATTHEW R EXP COSIGNER:
URGENCY: STATUS: UNSIGNED

INTRODUCTION: The Veteran presented to enroll in the VA Healthcare System and consented to be screened using the electronic version v1.1.801 of the Post-911 Screening Packet. The eScreening was administered by Matthew Morgan.

Demographics and Social Information

PRESENTING CONCERN(S): The Veteran identified enrollment, Mental Health Concerns, physical health, establishing a PCP, and Help with housing as the presenting concern(s).
The Veteran indicated that he/she would like information or assistance with the following: Healthcare (specifically, Prosthetic Equipment, sexual health, mental health, Substance Use, and visual impairment services team), VA Benefits (specifically, VA compensation, GI Bill, and VA home loan), Employment (specifically, VA vocational rehabilitation, unemployment benefits, and VA work study), Social (specifically, adjustment to civilian life, relationship concerns, and support groups), Legal (specifically, parole, probation, warrants, and bankruptcy), Housing (specifically, homeless, and foreclosure), Financial (specifically, Financial Information about VA or community resources) and Injury.

DEMOGRAPHICS: The Veteran is a 32 year-old whom is non-Hispanic/Latino, White/Caucasian, Black/African American, American Indian or Alaskan Native, Native Hawaiian or Pacific Islander, and Asian male. The Veteran's reported BMI is 23.054, indicating that he/she is at a normal weight.

EDUCATION, EMPLOYMENT AND INCOME: The Veteran reported completing a 4 year college degree. The Veteran reported being currently employed full time, who usually works as a Day Labor. The Veteran reported that the primary source of income is work, unemployment, disability, the GI Bill, retirement or pension, and Child Support. The Veteran is married.

SOCIAL: The Veteran lives with parents or relatives, friends or roommates, a spouse or partner, children, and Everyone. The Veteran has 4 children who are younger than 1, 1-2, 3-5, and 6-17 years old.

Source(s) of support is/are: parents, friends, partner/spouse, therapist.

Health Factors:
SKIN LESION SCREEN POSITIVE
TBI-BLOW TO HEAD
TBI-OTHER INJURY TO HEAD
CURRENT TORACON USER

Nov 19, 14 MOOD/Individual, MV BHIP IND PEPLER, Michael J. Pepler, LCSW
Oct 03, 14 PSYCH/ADTP/INDIVIDUAL/OUTPATIENT, LJ 2N ADTP BLUE GROUP,
Oct 01, 14 AFTER VISIT SUMMARY, ZZTEST, FAGAN, C Wayne Taylor
Sep 11, 14 Social Work General Note, LJ SOC WK DEF OIF CESAMH, James O E PH
Aug 26, 14 NURS/IMMUNIZATION-INJECTIONS/ORAL ADMINISTRATION, LJ CHR

/ Templates
Encounter
New Note