BG John Cho, MC, USA (Ret)

AMSUS Executive Director and Chief Executive Officer

Federal Healthcare Innovation Sharing and Collaboration Framework

Sharing Institution

Strategy · Culture · Governance

Funding · Decision Rights · Ways of Working and Location · Governance and Culture · Org Structure · KPIs · Talent

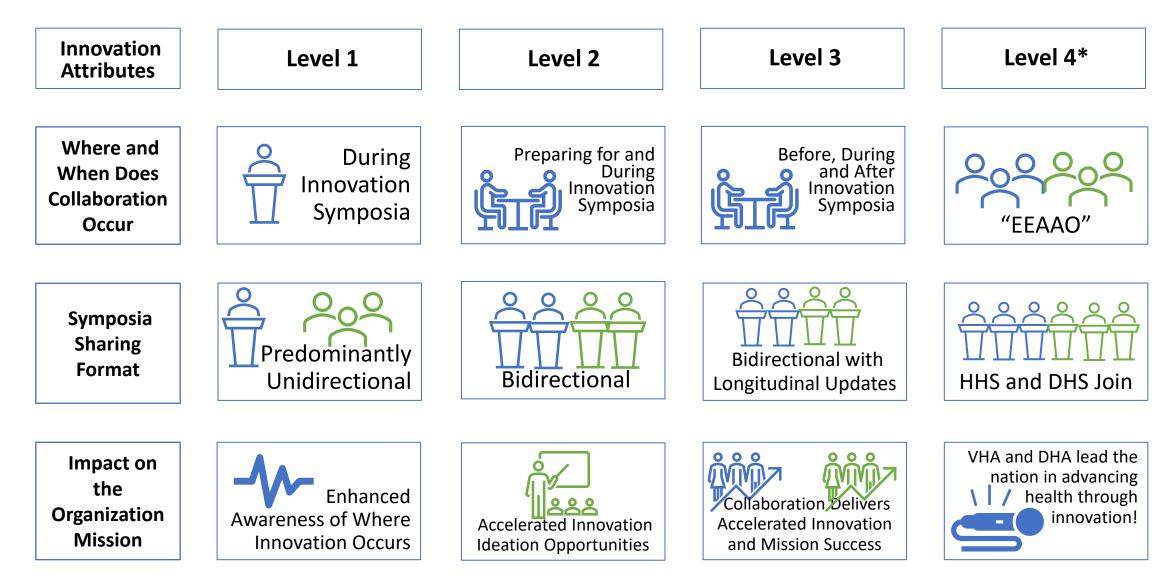Technology · Security and Access Controls · Process · Data and Metadata Capture · Vendor Partnerships

Platform Architecture and Data Integration

Innovation Sharing & Collaboration

Strategic: "Why" the Innovation
Problem to be Solved, Quality Improvement Sought, or Outcome Desired and Your Results to Date

Operational: "What" Changes Your Operating Model Were Required to Achieve Innovation Success
As applicable, describe key changes to funding, ways and where the work to be done was accomplished, decision rights, organizational re-alignment, training required, and program management oversight

Describe techniques used to gain buy-in to overcome cultural resistance

Describe what key performance indicators were measured to assess for innovation success

Tactical: "How" Did You Deliver the Innovation
Describe your innovation process, technology utilized, vendor support/partnerships and where applicable, use of lean/agile processes for application (app) development, DevSecOps, key changes in platform architecture

Describe data ingested and how it was organized, analyzed and integrated into your existing business intelligence tools

Gaining Institution

Strategy · Culture · Governance

Funding · Decision Rights · Ways of Working and Location · Governance and Culture · Org Structure · KPIs · Talent

Technology · Security and Access Controls · Process · Data and Metadata Capture · Vendor Partnerships

Platform Architecture and Data Integration

Interagency Innovation Sharing and Collaboration Maturity Model

Innovation Attributes	Level 1	Level 2	Level 3	Level 4*
Where and When Does Collaboration Occur	During Innovation Symposia	Preparing for and During Innovation Symposia	Before, During and After Innovation Symposia	"EEAAO"
Symposia Sharing Format	Predominantly Unidirectional	Bidirectional	Bidirectional with Longitudinal Updates	HHS and DHS Join
Impact on the Organization Mission	Enhanced Awareness of Where Innovation Occurs	Accelerated Innovation Ideation Opportunities	Collaboration Delivers Accelerated Innovation and Mission Success	VHA and DHA lead the nation in advancing health through innovation!

*Level 4 is the Highest Level

VA Innovation Project Sharing

Behavioral Health Projects

Dr. Joseph Geraci

Director, Transitioning Servicemember/Veteran and Suicide Prevention Center (TASC), VHA

LTC Chris Paine, PhD

Central Texas Market Lead,
Behavioral Health Fort Cavazos, DHA

III Armored Corps Innovation to Address Suicide Risk

Joe Geraci, PhD[1,2], Chris Paine, PhD[3], Madhavi Reddy, PhD[4], Erin Finley [2,5], Marianne Goodman, MD [1,2], Richard Seim, PhD[2], Ronald Kessler, PhD[6]

POCs: joseph.geraci@va.gov and christopher.m.paine.mil@health.mil

[1] VA Transitioning Servicemember/Veteran And Suicide Prevention Center (TASC), VISN 2 Mental Illness Research, Education and Clinical Center, Bronx, NY
[2] VA Center of Excellence for Research on Returning War Veterans, VISN 17, Doris Miller VA Medical Center, Waco, TX
[3] Carl R Darnall Army Medical Center, Fort Cavazos, TX
[4] Walter Reed Army Institute of Research, Silver Spring, MD
[5] Center for the Study of Healthcare Innovation, Implementation, and Policy (CSHIIP), VA Greater Los Angeles Healthcare System
[6] Department of Health Care Policy, Harvard Medical School, Cambridge, MA

Disclaimer

- The investigators have adhered to the policies for protection of human subjects as prescribed in AR 70–25 and VA Office of Research & Development Program Guide (1200.21, VHA Operations Activities That May Constitute Research,2019)

- The opinions or assertions contained herein are the private views of the authors, and are not to be construed as official, or as reflecting true views of the Department of the Army, the Department of Defense or the Department of Veterans Affairs.

Disclosure

Joe Geraci, PhD **has no relevant financial interests to disclose.**

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Disclosure will be made when a product is discussed for an unapproved use.

AffinityCE staff, AMSUS staff, as well as planners and reviewers, have no relevant financial interests with ineligible companies (commercial interests) to disclose.

All relevant financial relationships have been mitigated prior to the commencement of the activity.

Commercial support was not received for this activity.

Learning Objectives

1. Explain how the recently developed DoD STARRS practical risk calculator for suicidal behavior is being utilized to categorize transitioning Veterans based on risk-level
2. Summarize how a DHA and VA partnership is leveraging predictive analytic tools (DoD STARRS calculator) to provide stepped-care interventions for transitioning Servicemembers

Installation (Micro) Level: Identify Harmful Behaviors
-**What, when,** and **where** are the harmful behaviors, as identified by local metrics, that can be targeted with evidence-based, preventive interventions?
 Sources:
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External Stakeholders (Macro) Level: Predict Harmful Behaviors & Identify Evidence-based, preventive Interventions for high-risk Soldiers

-What can we learn from __external stakeholders__ to better __understand & predict harmful behaviors as well as__ identify __evidence-based interventions__ to address installation gaps?

Sources:
-Peer-reviewed journal articles
-Academia, Subject Matter Experts, and Federal Partners

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-Did it work?

Sources:
-Rigorous evaluation studies with comparison groups

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Obstacles
(authorities, resources, processes) submitted to FORSCOM

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OPERATIONAL MODEL: Firearms Leadership

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A $20 million grand challenge to reduce Veteran suicides

The U.S. Department of Veterans Affairs called on innovators to develop suicide prevention solutions that meet the diverse needs of Veterans.

MEET THE WINNERS

MISSION DAYBREAK

FIREARMS & SUICIDE

ABOUT

THE OVERWATCH PROJECT EMPOWERS SERVICE MEMBERS & VETERANS WITH NEW WAYS TO SAVE LIVES

We built the equivalent of the "Friends Don't Let Friends Drive Drunk" campaign for service members and veterans, only instead of talking about alcohol and vehicles, we're talking about firearms and suicide.

ABOUT

THE OVERWATCH PROJECT GOAL:

Transformational norm change on firearms and suicide that leads to significant and sustained reductions in service member and veteran suicide.

EDUCATION

PEER-INTERVENTION TRAINING

Peer intervention training that is solely focused on firearms and suicide prevention.

[+]   Build Knowledge & Shift Beliefs

[+]   Create Ability & Inspire Action

[+]   Change Behaviors

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MAY 2023

TEXAS
The University of Texas at Austin
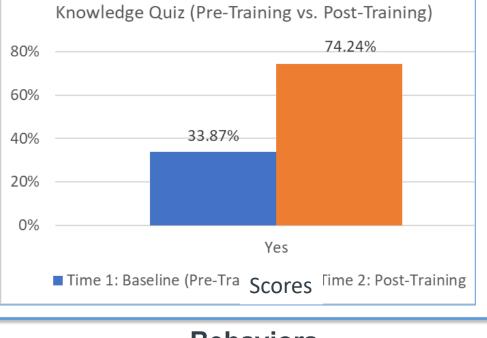
EVALUATION OF OVERWATCH PROJECT FIREARMS/LETHAL MEANS SAFETY TRAINING

Initial findings from training evaluation at the Fort Cavazos People First Center

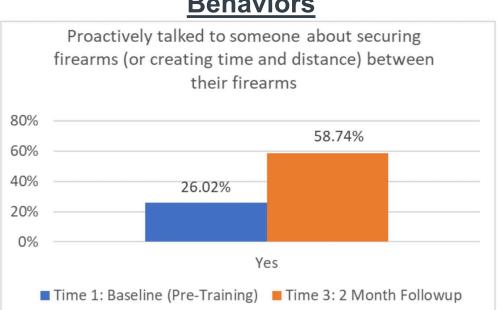**ELISA BORAH, PHD (UT-AUSTIN)**

JOE GERACI, PHD (US DEPT OF VETERANS AFFAIRS)

The University of Texas at Austin
Institute for Military and Veteran Family Wellness
Dell Medical School & Steve Hicks School of Social Work

Knowledge

Knowledge Quiz (Pre-Training vs. Post-Training)

74.24%

33.87%

Scores

■ Time 1: Baseline (Pre-Tra Time 2: Post-Training

Yes

Behaviors

Proactively talked to someone about securing firearms (or creating time and distance) between their firearms

58.74%

26.02%

Yes

■ Time 1: Baseline (Pre-Training) ■ Time 3: 2 Month Followup

Confidence

How confident you are that you will create a proactive plan for yourself to secure your firearms (or to create time and distance from your firearms) in case you are at risk of suicide in the future?
(0= Not at All Confident; 10= Extremely Confident)

Pretest   PostTest   Two month Followup

PFC TC/OP Trainees (n=455)   Comparison (n=454)

$\beta 11 = 0.43$, $p < .001$, $d = .47$

How confident you are that you will create a proactive plan for yourself to secure your firearms (or to create time and distance from your firearms) in case you are at risk of suicide in the future?
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OPERATIONAL MODEL: Firearms Leadership

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Bridging the Deadly Gap with a Precision Medicine Approach:
VA Veteran Sponsorship Initiative+

OPERATIONAL MODEL: Deadly Gap

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Suicide Among Veterans (18 to 34 years old)

o *Suicide rate*: Veterans <u>aged 18 to 34 years old</u> (VA, 2021)

  -Almost **doubled** since 2001 (24/100k to 44/100k)

  -**1.65 times higher** than older veterans (**35+ yo**)

  -**2.73 times higher** than **non-veterans of the same age**

o *Deadly Gap* (Sokol et al. 2021; Geraci et al. 2020)

  -<u>Highest Risk</u>: 3x risk <u>first 1 year post-discharge</u> (Shen et al, 2016; Ravindran et al., 2020)

o *Not using VA care*

  -Only **24% of active-duty Servicemembers (SMs) enroll in VA care** during 1st year after the military (Hannon Act, 2021)

Unadjusted Suicide Rates Based on Age and Veteran Status
National Veteran Suicide Prevention Annual Report (VA, 2022)

Veterans (18-34 years old)
Veterans (35 years-old and older)
Non-Veterans (18-34 years old)

o VA's Response

  -**Public health approach:**

*"The goal is to implement more **universal and preventive interventions** that **are upstream to address social determinants of health and risk factors for suicide** (e.g., lack of connectedness, financial concerns/ unemployment, relationship distress)"* (Carroll et al. 2020).
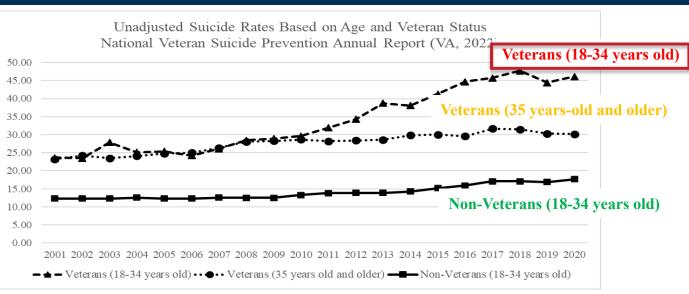
Figure 2. Suicide Rates Conditioned on Time Since Separation by Component With 95% CIs

(Ravindran et al., 2020)

Transition as Usual

Veteran: 30s y/o Asian-American, woman, single, 10 years of military service

Military Discharge: **September 2022**

Prescribed DoD psychotropic meds & attended **7 mental health appts** in last year of military service

Jul 2022 - DoD Psychiatrist Note:

"The SM will **try to get her medication from the VA after she gets out of the Army**…The SM is **anxious about what the future holds for her,** but she is excited as well. I will write for an 8w supply of her medication today…"

Sep 2022 - Veteran calls local VAMC:

VA call center/admin enters note from her call, **"This is my first appointment after getting out of active duty and need to continue getting medication…Please have someone call me to make my first appointment."**

No follow-up from local VAMC

Choose VA

VA | U.S. Department of Veterans Affairs

n=300

DoD STARRS analysis shows that about **_1% of TSMVs_** will have a suicide attempt within the first-year post-military discharge (Kearns et al., 2023)

Every two weeks, VSI enrolls about 300 TSMVs; Prior to April 2023, we did not have an ability to identify those who have the highest risk for suicide attempt

Problem- The Deadly Gap

PCS (Post to Post) Transition Priorities of Work

ETS (Post to Civilian) Transition Priorities of Work

Military Post#1
1. Employment
2. Housing
3. Family
   - Spouse Employment
   - Child schooling
4. Social/Physical Activities
5. Medical Tx

Sponsorship & Unit Leaders
"Leaders manage transitions" (GEN Clarke, SOCOM CDR)

Military Post#2
1. Employment
2. Housing
3. Family
   - Spouse Employment
   - Child schooling
4. Social/Physical Activities
5. Medical Tx

Depart the Military or ETS/EAS

Deadly Gap
(Sokol et al., 2021)

Veteran Suicide Rates (18-34 yo)
2001= 24 per 100k
2019= 44 per 100k

75%= 18-34 yo

"DoD did not screen for suicide risk" (DoD IG, 2021)

43% SMs not career-ready to transition (DoD IG, 2021)

Civilian Transition
1. Employment
2. Housing
3. Family
   - Spouse Employment
   - Child schooling
4. Social/Physical Activities
5. Medical Tx

*Reintegration difficulties persist for over 6 years (Sayer, 2014) & increase suicide ideation (Kline et al., 2011)

Choose VA

VA | U.S. Department of Veterans Affairs

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Veteran Sponsorship Initiative

- The **Veteran Sponsorship Initiative (**VSI**)** is an innovative, *evidence-based* program (*reintegration difficulties* and *social support*) designed to reduce suicide risk factors of Servicemembers going through the military-to-civilian transition.

- Under VSI, Servicemembers are paired 1:1 with VA-trained, volunteer, **community-based peers (through ETS Sponsorship and community partners)** who support them during the transition

- VSI connects Servicemembers to community services, including VA healthcare and benefits

---

- Jointly funded by:
  – VISN 17 Heart of Texas Network
  – VISN 17 Center of Excellence
  – VISN 2 MIRECC
  – Bronx VAMC
  – VA Office of Healthcare Advancements & Partnerships (HAP)
  – HSRD/QUERI Grant
  – Suicide Prevention Research Impact Network (VA HSRD/CSRD)

VSI VETERAN SPONSORSHIP INITIATIVE

Helping Servicemembers Transition to Their Next Chapter

A practical risk calculator for suicidal behavior among transitioning U.S. Army soldiers: results from the Study to Assess Risk and Resilience in Servicemembers-Longitudinal Study (STARRS-LS)

Jaclyn C. Kearns[1,2], Emily R. Edwards[3,4], Erin P. Finley[5,6], Joseph C. Geraci[3,4,5,7], Sarah M. Gildea[8], Marianne Goodman[3,5], Irving Hwang[8], Chris J. Kennedy[9], Andrew J. King[8], Alex Luedtke[10,11], Brian P. Marx[1,2], Maria V. Petukhova[8], Nancy A. Sampson[8], Richard W. Seim[5], Ian H. Stanley[12,13], Murray B. Stein[14,15,16], Robert J. Ursano[17] and Ronald C. Kessler[8]

Table 3. Predictor importance in the final lasso model[a,b]

	Multivariable RR (95% CI)	Univariable RR (95% CI)
I. Self-injurious thoughts and behaviors		
Lifetime active suicidal ideation	1.58 (0.97–2.57)	2.85 (1.94–4.19)
Lifetime passive suicidal ideation	1.43 (0.94–2.19)	2.81 (1.99–3.97)
Lifetime suicide attempt	1.24 (1.06–1.45)	1.60 (1.31–1.96)
Suicidal ideation (active or passive) 2 years before leaving active service	1.21 (0.98–1.49)	1.59 (1.32–1.93)
Lifetime suicide plan	1.02 (0.75–1.39)	2.22 (1.62–3.03)
II. Externalizing disorders		
Frequency of substance use-related interpersonal problems (worst lifetime)	1.34 (1.12–1.61)	1.45 (1.19–1.77)
Frequency of school truancy in childhood	1.26 (0.98–1.61)	1.95 (1.43–2.66)
Frequency of running away from home in childhood	1.25 (1.03–1.52)	1.56 (1.29–1.89)
Antisocial personality traits: Physically assault others	1.11 (0.93–1.33)	1.32 (1.09–1.60)
Childhood conduct: How often bullied or threatened kids	1.11 (0.89–1.38)	1.48 (1.22–1.79)
III. Stressor exposure		
Victim of any criminal offense 4 years before leaving active service	1.36 (1.15–1.61)	1.60 (1.37–1.87)
Any lifetime life-threatening accident or other risky/near death experience[c]	0.55 (0.39–0.78)	0.66 (0.45–0.95)
IV. Socio-demographic and Army career predictors		
1+ dependent age 6–13 years old	1.63 (1.33–1.99)	1.45 (1.24–1.70)
Discharged Honorably or Under Honorable Conditions	1.46 (1.15–1.86)	1.38 (1.05–1.80)
Identify as gay, lesbian, or bisexual	1.20 (1.02–1.42)	1.36 (1.15–1.61)
34+ years old at the time of leaving active service	0.64 (0.42–0.97)	0.57 (0.39–0.83)
2+ Global War on Terror deployments	0.54 (0.36–0.83)	0.56 (0.34–0.95)

With the DoD STARRS practical risk calculator for suicide behavior, we can now categorize based on risk level.

-30% of TSMVs with highest predicted risk account for 93% of medically serious suicide attempts within first year post-military discharge

n=90

n=210

Comparing Two Veteran Transitions

Transition as Usual

Veteran: 30s y/o Asian-American, woman, single, 10 years of military service

Military Discharge: **September 2022**

Prescribed DoD psychotropic meds & attended **7 mental health appts** in last year of military service

Jul 2022 - DoD Psychiatrist Note:

"The SM will ***try to get her medication from the VA after she gets out of the Army***…The SM is ***anxious about what the future holds for her,*** but she is excited as well. I will write for an 8w supply of her medication today…"

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No follow-up from local VAMC

Veteran Sponsorship Initiative

Veteran: 20s y/o African-American, man, married, one child (newborn); 5 years of military service, two deployments

Military Discharge: **December 2022**

Prescribed DoD psychotropic meds & attended **10 mental health appts** in last year of military service

Paired with a VA-trained Peer Sponsor while in military who assisted in finding new job/housing

Early-Dec 2022 - VA VSI Psych Clinical Intake: *"We were able to get him* **VA enrolled**...*SM very* **concerned about not having psych med refills**, *which have stabilized him since April 2022. Currently* **negative for depression/suicide**…**starting new job**."
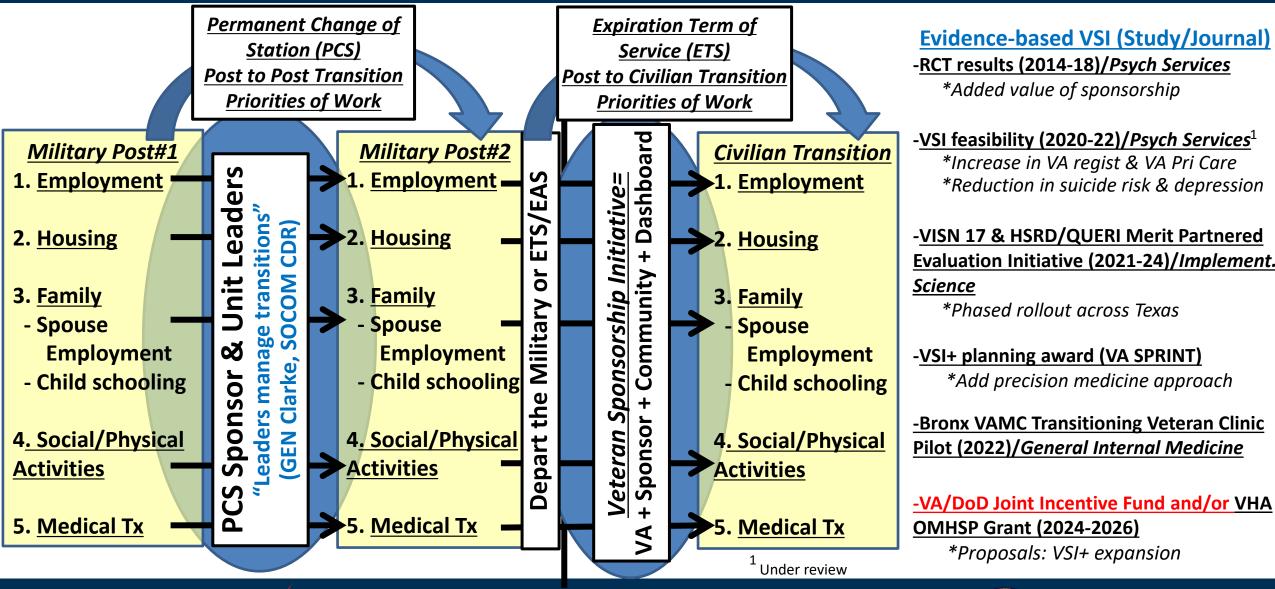
Virtual VA PC consult submitted

Mid-Dec - Virtual Bronx VA Transitioning Veteran PC Clinic: Initial VA PC visit & mailed medication.

Traveling Veteran Consult submitted to Veteran's local VAMC (PC/MH follow-up confirmed)

With VSI, Veteran is enrolled and seen by VA PCP < 90 days from military discharge
- Proactive Approach   - Earlier than first Solid Start Call   - Earlier than VA receives electronic DD 214

Bridging the Gap: Veteran Sponsorship Initiative

Permanent Change of Station (PCS)
Post to Post Transition
Priorities of Work

Expiration Term of Service (ETS)
Post to Civilian Transition
Priorities of Work

Military Post#1
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2. Housing
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   - Spouse Employment
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4. Social/Physical Activities
5. Medical Tx

PCS Sponsor & Unit Leaders
"Leaders manage transitions"
(GEN Clarke, SOCOM CDR)

Military Post#2
1. Employment
2. Housing
3. Family
   - Spouse Employment
   - Child schooling
4. Social/Physical Activities
5. Medical Tx

Depart the Military or ETS/EAS

Veteran Sponsorship Initiative=
VA + Sponsor + Community + Dashboard

Civilian Transition
1. Employment
2. Housing
3. Family
   - Spouse Employment
   - Child schooling
4. Social/Physical Activities
5. Medical Tx

Evidence-based VSI (Study/Journal)
-RCT results (2014-18)/*Psych Services*
  Added value of sponsorship

-VSI feasibility (2020-22)/*Psych Services*[1]
  Increase in VA regist & VA Pri Care
  Reduction in suicide risk & depression

-VISN 17 & HSRD/QUERI Merit Partnered Evaluation Initiative (2021-24)/*Implement. Science*
  Phased rollout across Texas

-VSI+ planning award (VA SPRINT)
  Add precision medicine approach

-Bronx VAMC Transitioning Veteran Clinic Pilot (2022)/*General Internal Medicine*

-VA/DoD Joint Incentive Fund and/or VHA OMHSP Grant (2024-2026)
  Proposals: VSI+ expansion

[1] Under review

Choose VA

VA | U.S. Department of Veterans Affairs

OPERATIONAL MODEL: Deadly Gap

Installation (Micro) Level: Is the preventive intervention effective in reducing harmful behaviors at the installation (micro) level for high-risk Soldiers?

-Did it work?

Sources:
-Rigorous evaluation studies with comparison groups

External Stakeholders (Macro) Level: Predict Harmful Behaviors & Identify Evidence-based, preventive Interventions for high-risk Soldiers

*-What can we learn from **external stakeholders** to better **understand & predict harmful behaviors as well as** identify **evidence-based interventions** to address installation gaps?*

Sources:
-Peer-reviewed journal articles
-Academia, Subject Matter Experts, and Federal Partners

Installation (Micro) Level: Identify Harmful Behaviors
-What, when, and **where** are the harmful behaviors, as identified by local metrics, that can be targeted with evidence-based, preventive interventions?

Sources:
-Commanders' Risk Reduction Toolkit (CRRT)
-DHA Medical/Behavioral Health Records
-Drug and Alcohol Management Information System (DAMIS)
-Defense Sexual Assault Incident Database (DSAID)
-Army Criminal Investigation Division
-Defense Organizational Climate Survey (DEOCS)

Did the intervention reduce targeted harmful behaviors?

Program Results

VSI vs. Transition as Usual (TAU)
VA Registration and VA Primary Care (encounter & consult)

50% increase in VA registration

65% increase in VA primary care
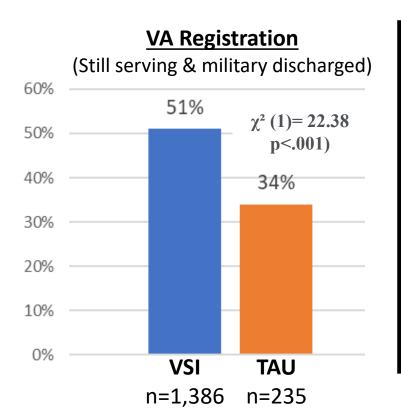
Increased VERA reimbursement

★★★★★
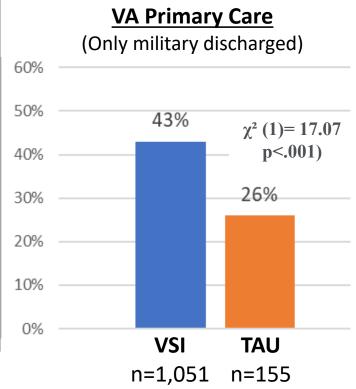
"I got into a really dark place. If it wasn't for your help especially with VA medical I don't think I would've climbed out successfully. Know you made a difference in this combat veteran's life as well as his family"

VA Registration
(Still serving & military discharged)

$\chi^2 (1)= 22.38$
$p<.001)$

- 60%
- 50% — VSI 51%
- 40% — TAU 34%
- 30%
- 20%
- 10%
- 0%

VSI — n=1,386
TAU — n=235

VA Primary Care
(Only military discharged)

$\chi^2 (1)= 17.07$
$p<.001)$

- 60%
- 50%
- 40% — VSI 43%
- 30%
- 20% — TAU 26%
- 10%
- 0%

VSI — n=1,051
TAU — n=155

Choose VA

VA | U.S. Department of Veterans Affairs

DEPARTMENT OF VETERANS AFFAIRS FISCAL YEAR 2024 ANNUAL EVALUATION PLAN

https://department.va.gov/wp-content/uploads/2023/04/va-annual-evaluation-plan-2024.pdf

VA FY 2024 Annual Evaluation Plan

Table of Contents

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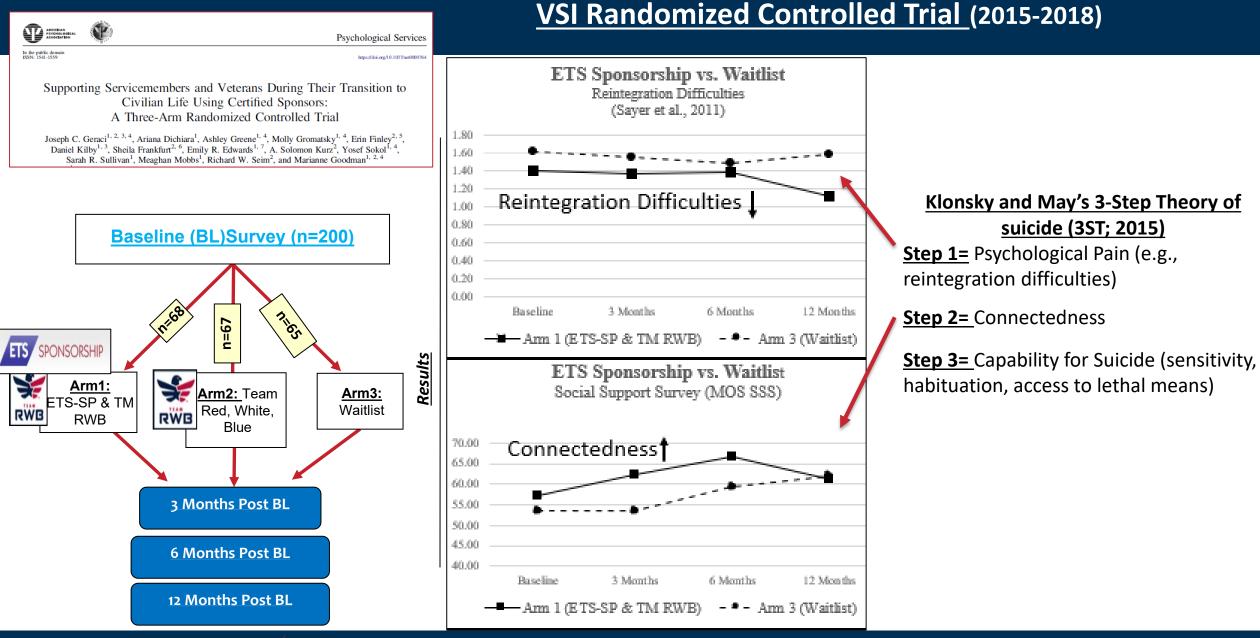-Commanders' Risk Reduction Toolkit (CRRT)
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-Defense Sexual Assault Incident Database (DSAID)
-Army Criminal Investigation Division
-Defense Organizational Climate Survey (DEOCS)

Did the intervention reduce targeted harmful behaviors?

Obstacles (authorities, resources, processes) submitted to FORSCOM

Goal: Successfully transition Servicemembers from their military installation to their new post-military community in the domains of *employment/education, housing, family, social connection and medical.*

Veteran Population Under 25 Years Old by State: Fiscal Year 2017

⭐ = 8x VA Regional Community Coordinators
⭐ = 19x Community Integration Coordinators (Partners)
★ = 4x Transitioning Veteran Primary Care Clinics (Virtual)

Median = 4,069

286 - 1,200
1,201 - 2,200
2,201 - 3,900
3,901 - 5,200
5,201 - 6,600
6,601 - 9,800
9,801 - 27,462

Hawaii

Puerto Rico

Department of Veterans Affairs, Data Governance and Analytics, Veteran Population Projection Model (VetPop), 2016 as of 09/30/2016   Prepared by the National Center for Veterans Analysis an

US Army Soldier for Life/ETS Sponsorship
• Enroll Servicemembers on DoD bases
• Administer VSI+/Harvard Screener for Risk
• Data sharing agreement with VA VSI & CICs

VA Veteran Sponsorship Initiative (VSI)
• **VA Regional Community Coordinators (Social Workers)**
  -Liaison w/ DoD base leaders
  -Leverage existing VA programs (VA TAP, Post 9/11 M2VA, CEPCs, Governor's Challenge)
  -VA Case Management/ Connect to VA Primary Care
  -Regional Community Engagement/Facilitate VA MOAs
  -Sponsor TNG & assistance
• **VA Virtual Primary Care or In-Person Primary Care** *(Traveling Veteran Consults)*

Community Integration Coordinators (CICs)
• VSOs/Local entities w/ VA MOA as part of VA Veteran Sponsor Partnership Network & ETS Sponsorship
• Recruit & ensure volunteer sponsors attend VA training
• Manage Servicemember & Sponsor relationship
• Provide local resources pre, during and post-transition from the military

Projected Enrollment of Servicemembers

	FY2023	FY2024	FY2025	Total
US Army	8,000	16,526	22,000	**46,526**
US Navy	700	2,400	2,400	**5,500**
Total	**8,700**	**18,926**	**24,400**	**52,026**

Questions

U.S. Department of Veterans Affairs

Veterans Health Administration
VISN 2 MIRECC & VISN 17 Center of Excellence
Transitioning Servicemember/Veteran
And Suicide Prevention Center (TASC)

VA Innovation Project Sharing

Mission Daybreak Projects

Dr. Amanda Lienau
Director, Data Analytics Innovation
Office of Healthcare Innovation and Learning, VHA

MISSION DAYBREAK

Amanda Lienau, Ph.D.
Director of Data and Analytics Innovation
Office of Healthcare Innovation and Learning
August 25, 2023

Are you a Veteran having thoughts of suicide or concerned about one?
Contact the Veterans Crisis Line for confidential 24/7 support:
Call 1-800-273-8255 and press 1, or text 838255.

Learning Objections

- By the end of this session participants will be able to:
  - Understand the core problem for the challenge
  - Describe the history of the challenge
  - Understand the current state of the work

Table of Contents

- Executive Summary

- Problem Statement

- White House / VA Strategic Priorities and Solutions

- VA Partnerships

- Company One Pagers

- Veteran Journey Maps

- Mission Daybreak Solver Roadmap

- Spotlight of the Month: Communication

Executive Summary

There is no single solution to suicide, and we are casting a wide net.

By bringing fresh thinking, outside perspectives, and innovative concepts to suicide prevention, we can serve those who have served and provide meaningful support.

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By The Numbers

$20 million total awarded

Over 450 VA Reviewers/Judges/Mentors

Duration: May 2022-February 2023

Phase 1: $8.5m / 40 Finalists

- 30 teams at $250k

- 10 teams at $100k

Phase 2: $11.5 m awarded / 10 Teams

Phase 3: Current Efforts

- **Two: CRADA in Place**

- **Three: HCD / Development Assistance**

- **Four: Eligible for Contracting**

Problem Statement

Suicide is a serious public health crisis

- In 2020, more than 45,000 American adults died from suicide — including 6,146 U.S. Veterans.

- While the Veteran suicide rate has decreased, the rate is still 57.3% higher than for non-Veteran U.S. adults.

- In 2020, suicide was the 13th leading cause of death among Veterans overall, and it was the **second leading cause of death among Veterans under age 45**

- The unique nature of the Veteran experience can often make Veterans particularly vulnerable.

- Suicide is preventable, and we all have a part to play.

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White House / VA Strategic Priorities and Solutions

White House Priority Goals

1. Improve Lethal Means Safety

2. Enhance Crisis Care and Facilitate Transitions

3. Increase Access to and Delivery of Effective Care

4. Address Upstream Risk and Protective Factors

5. Increase Research Coordination, Data Sharing, and Evaluation Efforts

Intervention Outcome

- Firearm and lethal means safety

- Therapeutic approaches and modalities

- Mobile/community-based service provision

- Clinical decision/Health provider training support

- Peer and social support

- Faith based interventions

- Advocacy and Destigmatization

- Telemedicine and virtual assistants

- Extended reality (XR)

- Predictive analytics and risk stratification

VA Partnerships

The challenge is fostering solutions across a broad spectrum of focus areas and creating an entire ecosystem of support for innovators and their solutions.

Extended Reality (XR) Network
Veterans Health Administration

BehaVR

VISN
Veterans Integrative Service Networks

DSS

OMHSP
Office of Mental Health and Suicide Prevention

BraveMind

Mission Daybreak Challenge

ReflexAI

Televeda

VCL
Veterans Crisis Line

Team Guidehouse

Greenhouse
Innovators Network

VEO
Veterans Experience Office

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Company One Pagers: Illustrative

ReflexAI
Direct Veteran Call Experience

BehaVR
Virtual Reality Clinical Setting Experience

Televeda
Community Experience

ReflexAI

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ReflexAI
reflexai.com

Innovation Phase:
*Discover

Project Overview
ReflexAI is an artificial intelligence (AI)-powered tool that can help the Veterans Crisis Line train and maintain a team of responders that can meet the needs of every Veteran who reaches out.

White House / VA Suicide Prevention Strategic Alignment
- Address upstream risk and protective factors
- Increases access of effective clinical care
- Enhance crisis care and facilitate care transition

Problem We Are Solving
- Access to care
- Empower Veterans and families
- Awareness and support services

Coordination & Communication
- Our current measures are focused on partner impact.

*Initial ideation and imagination of potential solutions

Progress Update (Deliverables & Milestones)
Our veteran peer-support tool which is launching in the quarter ahead with nonprofit partners will save thousands of hours in mental health training time while also providing a tool that increases accessibility and inclusivity.

Development Phase and Timeline - Next Steps

Next 30 days:
Development of new quality assurance and feedback metrics using two of the newest large language models.

Next 60 days:
Deployment of first veteran-focused tool with select pilot users for the mental health peer support training tool.

Next 90 days:
Development and refinement with 2-3 additional partners, with ~10 total simulations in development. All operational metrics exceeding the 30-day numbers.

Spotlight Monthly News
- We are working closely with 5-10 veteran-serving nonprofits as part of our peer-support training tool.
- Negotiating with other crisis and mental health organizations to open additional use cases.

BehaVR

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BehaVR
behavr.com

Innovation Phase:
*Discover

Project Overview
gameChange is a digital therapeutics (DTx) with the FDA's Breakthrough Device designation, treats severe social isolation common to PTSD, psychosis, and severe depression, and a precursor to suicidal thoughts and behavior.

White House / VA Suicide Prevention Strategic Alignment
- Increase access and delivery of care
- Address upstream risk and protective factors
- Increase research coordination and data sharing
- Enhance crisis care plus care transition facilitation

Problem We Are Solving
- Access
- Treatment and Intervention

Coordination & Communication
- Our significant event since Mission Daybreak was the merger of BehaVR and OxfordVR.
- The company now has the broadest set of indications for mental & behavioral health in our pipeline and on our platform

*Initial ideation and imagination of potential solutions

Progress Update (Deliverables & Milestones)
Conducted a less rigorous observational pilot study with the Wounded Warrior Project's Independence Program. The results of the WWP pilot were fantastic, with 80% engagement and significant reductions in Agoraphobic Avoidance (down 86.4%) and Distress (down 51.1), depression (PHQ9 down 45.8%) and Anxiety (GAD7 down 55.1%)

Development Phase and Timeline - Next Steps

Next 30 days:
Plan a deployment of gameChange for VA populations at risk of suicidal ideation.

Next 60 days:
Pilot study month 1 - would measure response to digital outreach for enrollment eligibility, and then would measure ongoing engagement in the program.

Next 90 days:
Pilot study month 2 - would continue to measure engagement in the program, and post-program would measure agreed upon clinical endpoints.

Spotlight Monthly News
- About to launch 6-VA Site CRADA of gameChange for veteran populations with PTSD & agoraphobic avoidance.

Televeda

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Televeda
televeda.com

Innovation Phase:
*Discover

Project Overview
Project Hózhó is designed to prevent suicide amongst Navajo Veterans by promoting social connectedness and community healing through traditional healing practices.

White House / VA Suicide Prevention Strategic Alignment
- Addressing underserved diverse populations
- Address health disparity
- Address community based interventions and support services
- Promote awareness and education by integrating holistic patient-centered approach

Problem We Are Solving
- Access Address health disparity
- Access to underserved populations
- Empower Native American Veterans and families
- Community based holistic interventions
- Awareness and education support services

Coordination & Communication
- Hosted virtual community events (music, cooking classes, yoga, virtual bingo).
- Working to expand tasking with Arizona Dept. of Veteran Services (digital training/devices)
- Received a congratulatory letter from Senator Kyrsten Sinema.

*Initial ideation and imagination of potential solutions

Progress Update (Deliverables & Milestones)
The Project will measure our success through a combination of the following metrics: 1) number of participants recruited; 2) attendance to track retention and engagement; 3) tracking access to VA resources used by users through our application; 4) track upstream factors (e.g., loneliness, depression, mood), including working with IHS and VA clinics for suicide-screenings before and after the implementation of Project Hózhó; and 5) comparing outcomes between communities already receiving our services with communities before they receive our programming.

Development Phase and Timeline - Next Steps

Next 30 days:
Awaiting feedback

Next 60 days:
Awaiting feedback

Next 90 days:
Awaiting feedback

Spotlight Monthly News
- Supporting the Library of Congress, Veterans History Project, for collecting oral stories of Native American veterans.
- Providing digital devices and training to 3 out of 22 tribes in the state Arizona through a contract with the Arizona Department of Veteran Services.
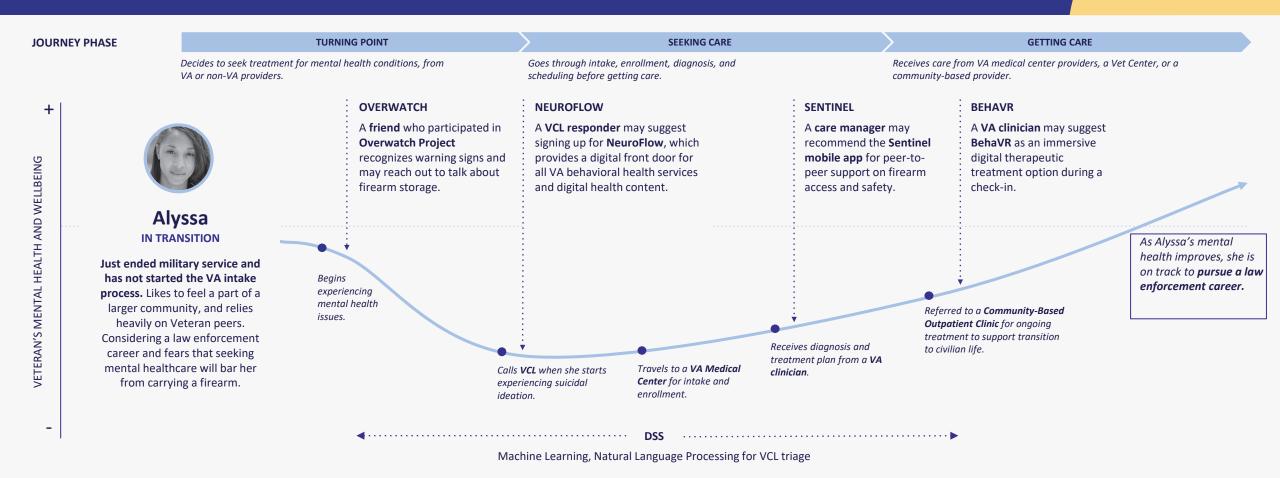
MISSION DAYBREAK

Journey of a Veteran in transition

These maps illustrate how Veterans could encounter relevant Mission Daybreak solutions as part of their journey to accessing mental health care, as well as how these prioritized solutions may contribute to positive experiences and outcomes.

MISSION DAYBREAK

JOURNEY PHASE

TURNING POINT

SEEKING CARE

GETTING CARE

Decides to seek treatment for mental health conditions, from VA or non-VA providers.

Goes through intake, enrollment, diagnosis, and scheduling before getting care.

Receives care from VA medical center providers, a Vet Center, or a community-based provider.

VETERAN'S MENTAL HEALTH AND WELLBEING

+

−

OVERWATCH

A **friend** who participated in **Overwatch Project** recognizes warning signs and may reach out to talk about firearm storage.

NEUROFLOW

A **VCL responder** may suggest signing up for **NeuroFlow**, which provides a digital front door for all VA behavioral health services and digital health content.

SENTINEL

A **care manager** may recommend the **Sentinel mobile app** for peer-to-peer support on firearm access and safety.

BEHAVR

A **VA clinician** may suggest BehaVR as an immersive digital therapeutic treatment option during a check-in.

Alyssa
IN TRANSITION

Just ended military service and has not started the VA intake process. Likes to feel a part of a larger community, and relies heavily on Veteran peers. Considering a law enforcement career and fears that seeking mental healthcare will bar her from carrying a firearm.

Begins experiencing mental health issues.

*Calls **VCL** when she starts experiencing suicidal ideation.*

*Travels to a **VA Medical Center** for intake and enrollment.*

*Receives diagnosis and treatment plan from a **VA clinician**.*

*Referred to a **Community-Based Outpatient Clinic** for ongoing treatment to support transition to civilian life.*

*As Alyssa's mental health improves, she is on track to **pursue a law enforcement career**.*

DSS

Machine Learning, Natural Language Processing for VCL triage

POTENTIAL FOR IMPACT

By integrating promising solutions from Mission Daybreak across the Veteran ecosystem, Veterans will have increased access to high-quality, tailored services across the continuum of care. These innovative solutions better equip Veterans, their support systems, and their care providers to proactively address their specific needs.
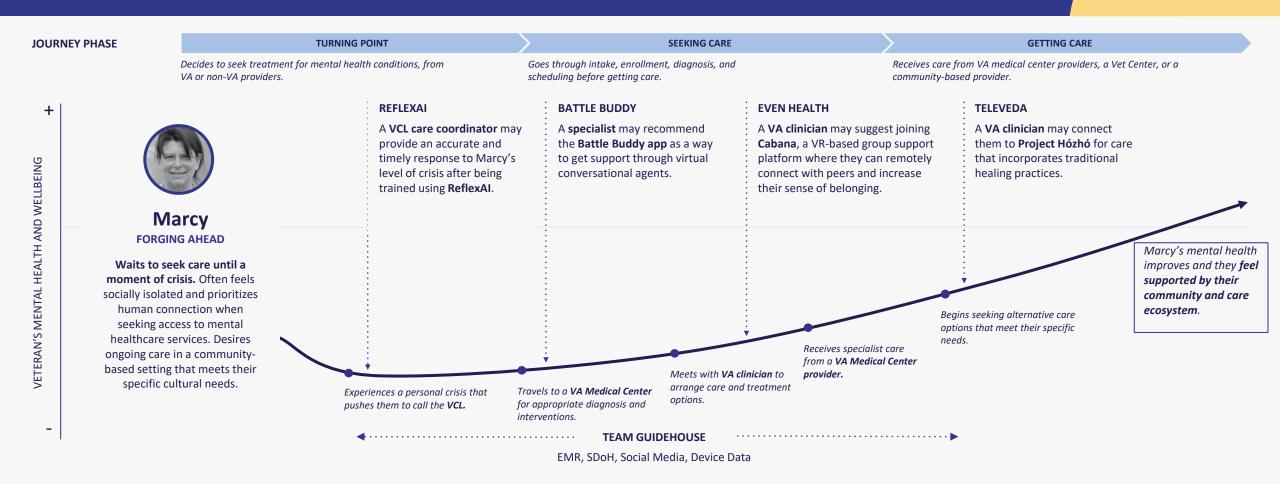
*Note: These Veteran journeys are for illustrative purposes only.
Journey stages and mental health personas have been adapted from Veteran Access to Mental Health Services, 2016.*

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Journey of a Veteran in transition

These maps illustrate how Veterans could encounter relevant Mission Daybreak solutions as part of their journey to accessing mental health care, as well as how these prioritized solutions may contribute to positive experiences and outcomes.

MISSION DAYBREAK

JOURNEY PHASE	TURNING POINT	SEEKING CARE	GETTING CARE
	Decides to seek treatment for mental health conditions, from VA or non-VA providers.	Goes through intake, enrollment, diagnosis, and scheduling before getting care.	Receives care from VA medical center providers, a Vet Center, or a community-based provider.

VETERAN'S MENTAL HEALTH AND WELLBEING

+

REFLEXAI

A **VCL care coordinator** may provide an accurate and timely response to Marcy's level of crisis after being trained using **ReflexAI**.

BATTLE BUDDY

A **specialist** may recommend the **Battle Buddy app** as a way to get support through virtual conversational agents.

EVEN HEALTH

A **VA clinician** may suggest joining **Cabana**, a VR-based group support platform where they can remotely connect with peers and increase their sense of belonging.

TELEVEDA

A **VA clinician** may connect them to **Project Hózhó** for care that incorporates traditional healing practices.

Marcy
FORGING AHEAD

Waits to seek care until a moment of crisis. Often feels socially isolated and prioritizes human connection when seeking access to mental healthcare services. Desires ongoing care in a community-based setting that meets their specific cultural needs.

*Marcy's mental health improves and they **feel supported by their community and care ecosystem**.*

Experiences a personal crisis that pushes them to call the **VCL.**

Travels to a **VA Medical Center** for appropriate diagnosis and interventions.

Meets with **VA clinician** to arrange care and treatment options.

Receives specialist care from a **VA Medical Center provider.**

Begins seeking alternative care options that meet their specific needs.

-

TEAM GUIDEHOUSE

EMR, SDoH, Social Media, Device Data

POTENTIAL FOR IMPACT

By integrating promising solutions from Mission Daybreak across the Veteran ecosystem, Veterans will have increased access to high-quality, tailored services across the continuum of care. These innovative solutions better equip Veterans, their support systems, and their care providers to proactively address their specific needs.

Note: These Veteran journeys are for illustrative purposes only.
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Mission Daybreak Solver Roadmap

Summary of anticipated team milestones and deliverables on a 30-, 60-, and 90-day timeframe. Stage 1 solutions have been prioritized for technology pilots, while Stage 2 solutions are in development and carrying out additional HCD.

MISSION DAYBREAK

⭐ **MILESTONE**

	Solution	July	August	September
STAGE 1 SOLUTIONS (PILOTING)	**BehaVR**	Aligning on how to dovetail our 6 site CRADA with clinical leaders (attended VA Immersive Summit)		CRADA underway-near completion
	ReflexAI	Contracting process complete/initial implementation of ReflexAI training tools at Veterans Crisis Line (in final stages) and complete kickoff with VA stakeholders		Ongoing simulations and feedback gathering from VCL stakeholders/Tech implementation
	NeuroFlow	BHL acquisition/expansion of BHL's capabilities at existing VA customer sites by using NeuroFlow's core product		Ongoing technical integration between BHL and NeuroFlow
	Team Guidehouse	Platform iteration and readiness for pilot integration with VAMC EHR		Anticipate collaboration stakeholders on clinical pathways
	Overwatch	Ongoing training of user base/new 2-3 campaign concept for engagement in TX market		Proposed plan to launch TX market campaign w/agency in high population of Veterans
STAGE 2 SOLUTIONS (HCD)	**Televeda**	Design narrative intervention IRB with Lakota Tribe in progress		Begin Lakota research study recruitment and program planning, led by BHCAIH
	Sentinel	Complete app beta testing and user feedback and incorporate into product		Anticipate roll out and launch of Sentinel
	BraveMind	Prototype repeatable, interactive virtual-human content and start human-centered design to gather feedback on content.		Create safety planning content and continue human-centered design testing

VA | U.S. Department of Veterans Affairs

Thank You for Your Time Today

Amanda Lienau, Ph.D.
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Link to Mission Daybreak Resources

VA Innovation Project Sharing

Virtual Reality Projects

Dr. Anne Lord Bailey, PharmD

Director, Clinical Tech Innovation and VA Immersive Lead
Office of Healthcare Innovation and Learning, VHA

Disclaimer: No VA endorsement is intended by this presentation

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LEARNING OBJECTIVES

- **Define** immersive technology and other relevant terms
- **Share** the current state of Immersive Technology use in VA
- **Discuss** the rationale for leveraging Immersive Technology in health care
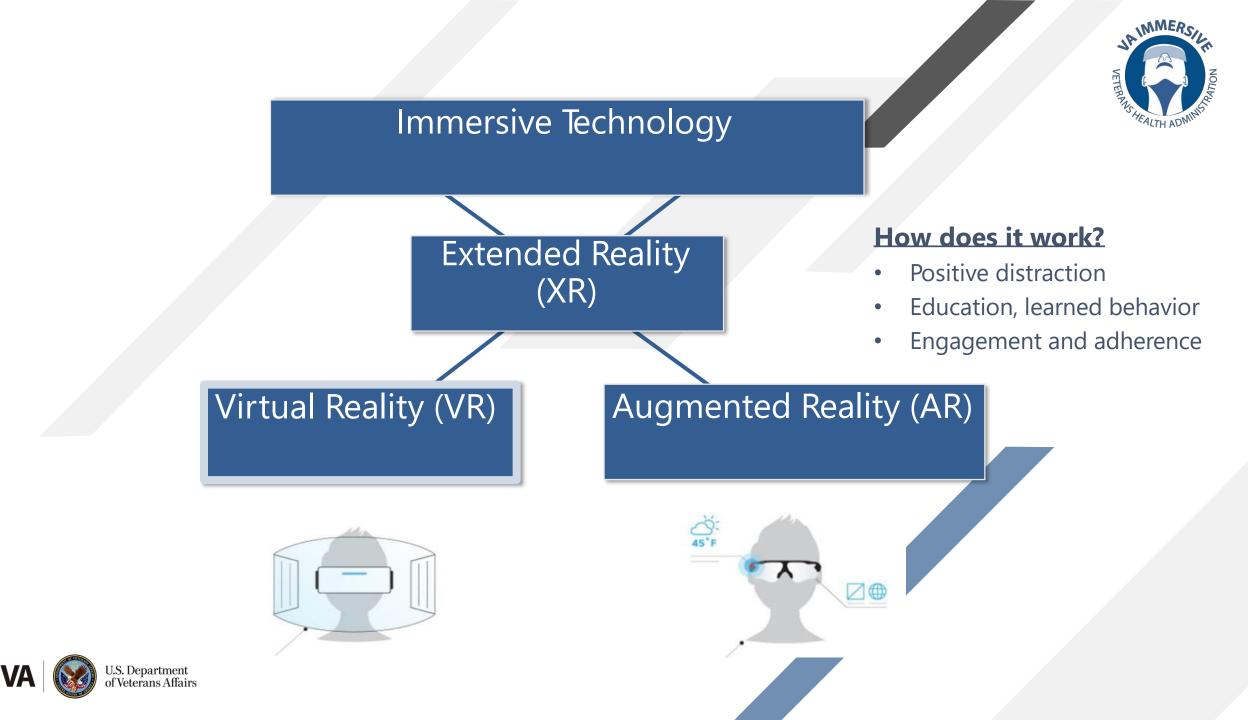
[Butch Phillips Video](#)

[Roger Miller Video](#)
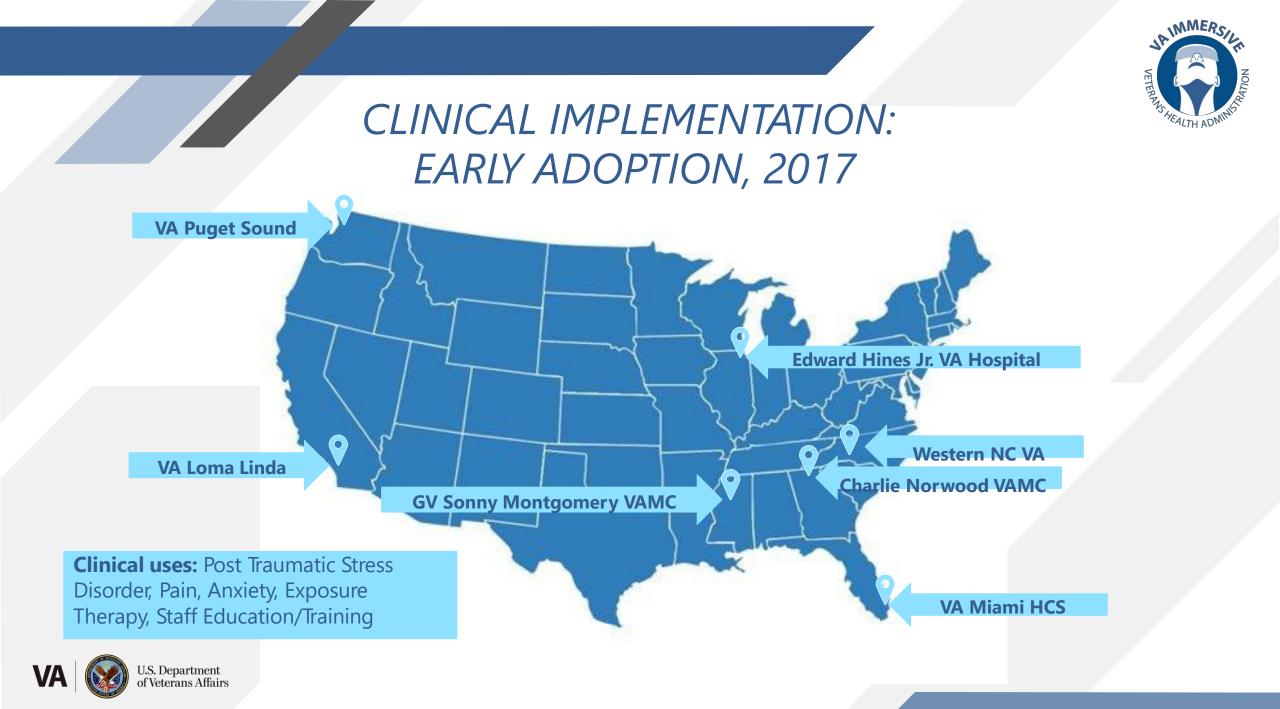
CURRENT STATE OF IMMERSIVE TECHNOLOGY IN VA

CLINICAL IMPLEMENTATION:
EARLY ADOPTION, 2017

VA IMMERSIVE
VETERANS HEALTH ADMINISTRATION

VA Puget Sound

Edward Hines Jr. VA Hospital

Western NC VA

Charlie Norwood VAMC

VA Loma Linda

GV Sonny Montgomery VAMC

Clinical uses: Post Traumatic Stress Disorder, Pain, Anxiety, Exposure Therapy, Staff Education/Training

VA Miami HCS

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CLINICAL IMPLEMENTATION:
EXPANSIVE GROWTH, 2023

Guam   American Samoa   Puerto Rico

ENGAGEMENT

- Over 2,040 frontline staff and leaders representing more than 170 VA sites of care

- 40+ use cases

- 18 pilots in 120 unique Medical Centers in 44 States

ACTIVE USE CASES

- Suicide prevention
- Spinal cord injury and disease
- Anxiety
- Depression
- Social isolation
- Substance Use Disorder
- Addiction recovery
- PTSD
- Phantom limb pain
- Pain management (acute, chronic, acute on chronic)

- Physical, occupational, recreation therapy
- Procedural use
- Low vision rehabilitation
- Falls risk assessment
- Neurological assessment
- Palliative care
- Creative Arts therapy
- Facilities management
- New employee orientation
- Pre-surgical planning

- Empathy training
- Employee wellness
- Employee education
- Firearms safety
- Stress Reduction, Relaxation, and Positive Distraction
- Women's Health

VA IMMERSIVE
VETERANS HEALTH ADMINISTRATION

VA | U.S. Department of Veterans Affairs

*This is not an all-inclusive list

STAFF TRAINING AND EDUCATION

Prevention of Sexual Harassment

• Assault and Harassment Prevention Office

• 14 sites

Inpatient Discharge Experience

• Veterans Experience Office

• 10 sites

Firearms Safety Training

• Office of Mental Health and Suicide Prevention

• 4 sites

Rationale for Use

- Evidence exists to support use
  - Decades of academic research
  - Growing body of implementation evidence
- Engagement and adherence
- Increasingly native technology

Evidence to Support

Literature Review, Updated July 2023

- Health Care

- Physical Rehabilitation

- Mental Health

- Peer Support

- Pain Management

- Pulmonary Rehabilitation

- Training and Education

Benefits:

- **User engagement**

- **Cost savings**

- **Access to care**

- **Improvement in outcomes**

- **Scalability of remote technology**

- **Data collection**

- **Standardization of care**

Barriers:

- **Access to technology**

- **Limited training and education available**

- **Ease of design**

Engagement and Adherence

- Veteran eXpeRience (VXR) Demo Days: Orlando, FL and Sheridan, WY

- 65 Veteran participants

- 63% had never used VR before

- Average experience rating: 8.0, with 10 being life-changing

- 94% said it was easy to use or very easy to use

- 91% said they'd like more VR incorporated into care at the hospital/clinic and into care at home

Native Technology

FORT BELVOIR, Va. — The Army's mixed reality goggle is headed to soldiers in a three-step process in which developers expect two early versions released next year will help with redesigns for a third version to roll out across the Army.

The Integrated Visual Augmentation System, or IVAS, is a nearly $22 billion program that the Army is developing to bring night vision, thermal vision, tactical edge computing and the situational awareness of a fighter pilot down to the lowest-level infantry soldier. The device will likely be the most advanced single technology ever fielded exclusively to the close-combat, squad-level soldier in military history.

XR RESOURCES

*Playbook and Intro Guide is available in a public version

DIFFUSION MARKETPLACE

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VA | Office of Healthcare Innovation and Learning

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www.innovation.va.gov

VA Immersive

Defining a New Reality in Health Care

QUESTIONS?

VAImmersive@va.gov

DHA Innovation Project Sharing

Mr. Terry Dover

Assistant Program Manager, Product Support, DOD Healthcare Management System Modernization (DHMSM) PMO, DHA

Ms. Naomi Escoffery

Acting Deputy DAD, Acquisition and Sustainment/DHA Chief Accelerator Officer/DHA Innovation PM/Lead Category Manager and DoD Medical Co-Lead, and Assistant Director, Support, DHA

DHA Innovation Project Sharing: Digital First

Mr. Terry Dover & Ms. Naomi Escoffery

September 18, 2023

Learning Objective Slide

1. Understanding of Digital Front Door efforts to include seeking resources, tools, and community engagement in activities to build health (Physical, Mental, Emotional, Spiritual, Social, Environment/Occupation, Nutrition, and Medical Care and Prevention)

2. Bring together leaders and health professionals to share insights on the latest data innovation trends and technologies that have been adopted by Defense Health Agency (DHA).

3. Foster collaboration and partnerships between Veterans Affairs (VA)/DHA stakeholders and network or military medical treatment facilities (MTF) leaders.

4. Identify areas in healthcare where additional data innovation is needed to drive positive change

Our Why

THE EVOLUTION OF

HEALTH CARE

WAVE 2
DIGITALIZATION

Person

WAVE 0
LEGACY
HEALTH
SYSTEM

WAVE 3
CONVERGED
ECOSYSTEMS

DHA Accelerator

Providers

Patient

WAVE 1
DIGITIZE

Providers
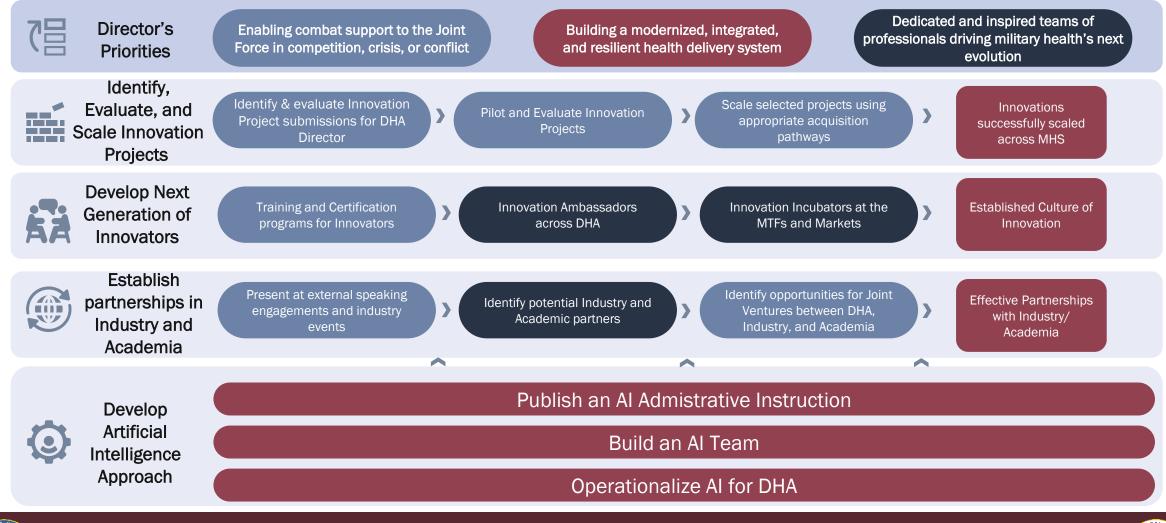
DHA Innovation Strategy – Director's Priorities

Director's Priorities

- Enabling combat support to the Joint Force in competition, crisis, or conflict
- Building a modernized, integrated, and resilient health delivery system
- Dedicated and inspired teams of professionals driving military health's next evolution

Identify, Evaluate, and Scale Innovation Projects

Identify & evaluate Innovation Project submissions for DHA Director › Pilot and Evaluate Innovation Projects › Scale selected projects using appropriate acquisition pathways › Innovations successfully scaled across MHS

Develop Next Generation of Innovators

Training and Certification programs for Innovators › Innovation Ambassadors across DHA › Innovation Incubators at the MTFs and Markets › Established Culture of Innovation

Establish partnerships in Industry and Academia

Present at external speaking engagements and industry events › Identify potential Industry and Academic partners › Identify opportunities for Joint Ventures between DHA, Industry, and Academia › Effective Partnerships with Industry/ Academia

Develop Artificial Intelligence Approach

- Publish an AI Admistrative Instruction
- Build an AI Team
- Operationalize AI for DHA

Chairman of the Joint Chiefs of Staff notes "there is a significant risk that the United States will 'lose without fighting,'" continuing, "Adversary institutions are outpacing U. S. force development, design, and modernization efforts, which are *too slow and too costly* to reverse this ["losing without fighting"] trend by 2030." Joint Concept for Competing Joint Chiefs of Staff, *Joint Concept for Competing* (Washington , DC: Joint Chiefs of Staff, 2023), viii Joint Concept for Competing

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DHA's Innovation Alignment to Joint Concept for Competing

- **Willingness to expend effort.** A willingness to engage in deeper, more thorough thinking is important for critical thinking, even when the effort may not initially seem useful. *(Develop Next Generation of Innovators)*

- **Active fair-mindedness.** Making special effort to find out whether one's ideas will work by imagining what is wrong with them is a good way to be fair-minded. Using the same standards, regardless of the issue or who supports a position is another fair-mindedness quality. (*Establish Partnerships with Industry and Academia)*

- **Ego detachment.** Keeping reasoning separate from self-esteem helps guard against being caught up in being on the right side of an argument or rationalizing why failure was out of one's control. *(Develop Next Generation of Innovators)*

- **Uncertainty tolerance.** Believing it is fine not to know something is a positive characteristic. Yet, motivation to resolve uncertainty, once recognized, is even more important. Thinking through problems, instead of using minimal cues to interpret a situation incorrectly, is an advantage. (*Establish Partnerships with Industry and Academia)*
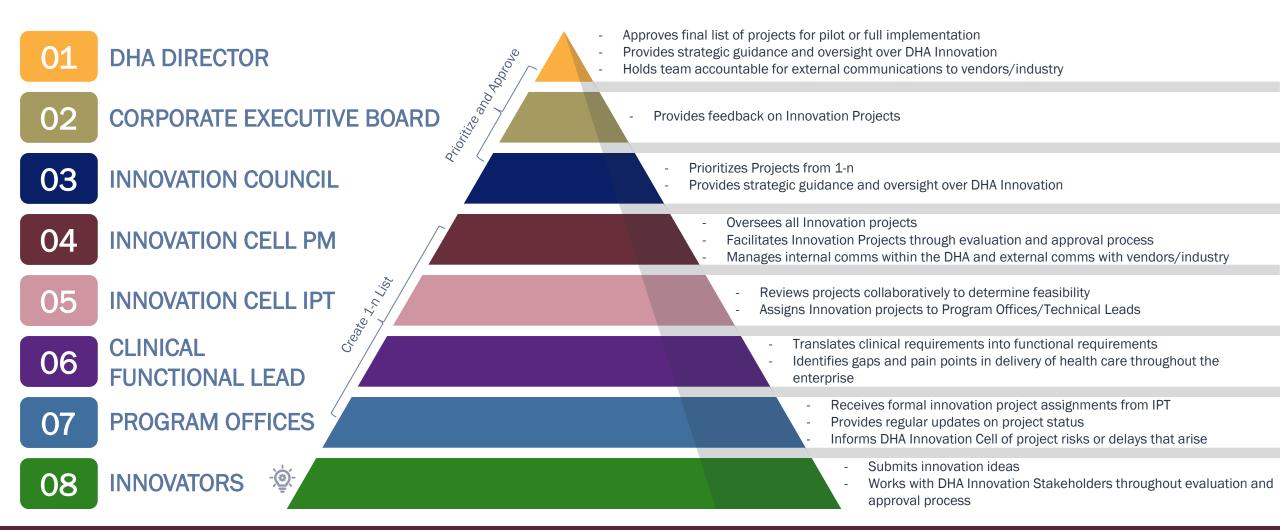
- **Persistence.** If one line of thought or action is not working, then finding another line may work. *(Develop Next Generation of Innovators)*

- **Openness.** Being open to different and multiple possibilities leads to better decisions. (*Establish Partnerships with Industry and Academia)*

- **Commitment retraction.** Willing to change beliefs about a preferred solution or a problem viewpoint is an attitude that has positive effects. *(Identify, Evaluate, and Scale Innovation Projects)*

- **Process flexibility.** Realize that standard processes will not work for novel, ill-defined, or complex problems. Adapting or discovering a new way to think may help reach a solution. *(Identify, Evaluate, and Scale Innovation Projects)*

- **Willingness to learn.** It is natural for leaders to feel an expectation to have the knowledge and experience to perform well. Being willing to engage in learning is adaptive. One expert characteristic is that they understand what they know and what they need to learn. *(Develop Next Generation of Innovators)*

Sharing insights on the latest data innovation trends and technologies

01 DHA DIRECTOR
- Approves final list of projects for pilot or full implementation
- Provides strategic guidance and oversight over DHA Innovation
- Holds team accountable for external communications to vendors/industry

02 CORPORATE EXECUTIVE BOARD
- Provides feedback on Innovation Projects

03 INNOVATION COUNCIL
- Prioritizes Projects from 1-n
- Provides strategic guidance and oversight over DHA Innovation

04 INNOVATION CELL PM
- Oversees all Innovation projects
- Facilitates Innovation Projects through evaluation and approval process
- Manages internal comms within the DHA and external comms with vendors/industry

05 INNOVATION CELL IPT
- Reviews projects collaboratively to determine feasibility
- Assigns Innovation projects to Program Offices/Technical Leads

06 CLINICAL FUNCTIONAL LEAD
- Translates clinical requirements into functional requirements
- Identifies gaps and pain points in delivery of health care throughout the enterprise

07 PROGRAM OFFICES
- Receives formal innovation project assignments from IPT
- Provides regular updates on project status
- Informs DHA Innovation Cell of project risks or delays that arise

08 INNOVATORS
- Submits innovation ideas
- Works with DHA Innovation Stakeholders throughout evaluation and approval process

Prioritize and Approve

Create 1-n List

The Next Wave of Healthcare

Digital First

- Utilizing technology that "meets the patients where they are"
- Improving patient care and experience
- Providing flexible health care options
- Ensuring real-time information exchange
- Increasing patient satisfaction through ready, reliable care

People Centered

- Treating the whole person with case management techniques
- Focusing on tailored treatment plans
- Streamlining patient portals and user experiences
- Keeping the patient experience at the forefront
- Empowering patients to take charge of their healthcare

Integrated System of Care

- Allowing patients to easily access their records
- Creating simplified patient experiences
- Enhancing collaboration between clinicians
- Developing multi-faceted approaches to treatments
- Delivering more comprehensive healthcare options for patients

What Innovation means for DHA

- **Technology** that will bring **value**, that we can **implement quickly,** and that we can **scale across our system**.

- **Innovative Technology** in support of **enterprise performance** that significantly **improves** the **performance** of the organization.

- The **DHA Innovation Cell** is identifying **transformative ideas and technologies** to apply to our entire health care enterprise.
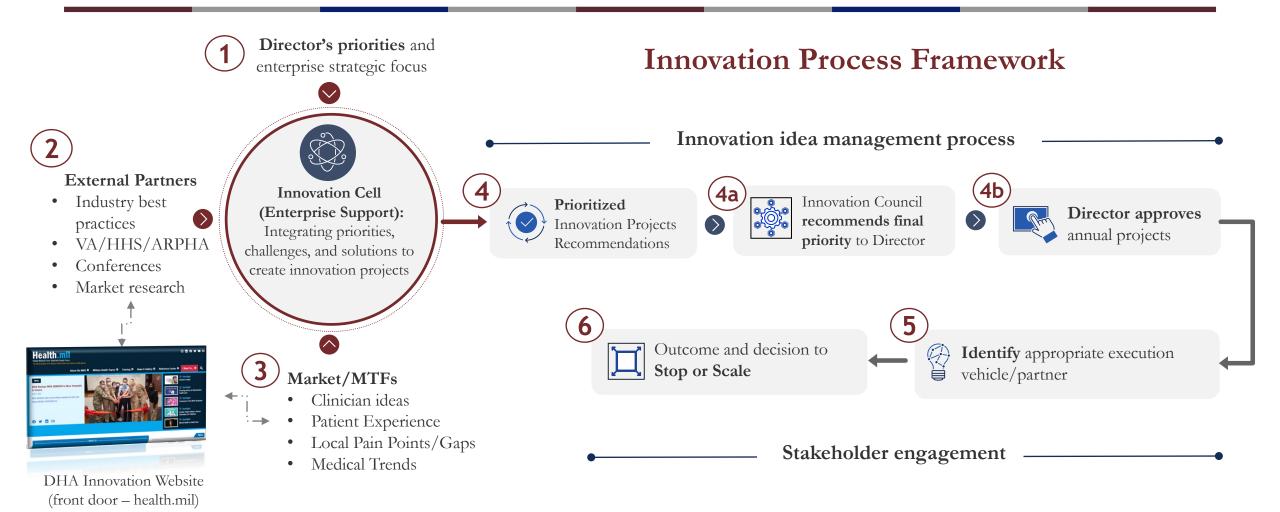
Digital First

Primary Care

Behavioral Health

DHA Building World-Class Innovation

Innovation Process Framework

1 **Director's priorities** and enterprise strategic focus

2 **External Partners**
- Industry best practices
- VA/HHS/ARPHA
- Conferences
- Market research

Innovation Cell (Enterprise Support): Integrating priorities, challenges, and solutions to create innovation projects

DHA Innovation Website (front door – health.mil)

3 **Market/MTFs**
- Clinician ideas
- Patient Experience
- Local Pain Points/Gaps
- Medical Trends

Innovation idea management process

4 **Prioritized** Innovation Projects Recommendations

4a Innovation Council **recommends final priority** to Director

4b **Director approves** annual projects

6 Outcome and decision to **Stop or Scale**

5 **Identify** appropriate execution vehicle/partner

Stakeholder engagement

Improving Health and Building Readiness. Anytime, Anywhere — Always

DHA Innovation Ecosystem Realized

Innovation Suite
Evolving to a networked, automated ecosystem where data is cloud-based, and any event can be seen and acted on by everyone simultaneously

Data Integration
Requires a single, real-time, integrated view of data across all sources, geographies, and offices to connect data with the questions people are trying to ask

Financial Mgmt. (Budget & Execution)
Optimize taxpayer dollars and make fiscally-informed decisions to enable readiness

Acquisition
Acquire goods/services to meet mission needs and in compliance with the controls of the Federal Acquisition Regulation (FAR)

Policy
Guidelines and mandates implemented by governance bodies through protocol that impacts decision-making

Information Technology
Application of technology to operate the organization on a broad scale in adherence to security and privacy protocols

Personnel
A structured, competency-based human capital planning approach to the civilian workforce's readiness

Successfully embedding digital technology to innovate the DHA starts with creating increased visibility and transparency across the end-to-end organization

the functional foundation of DHA

Extraordinary experiences ordinary and exceptional outcomes routine

Improving health and building readiness

Improving Health and Building Readiness. Anytime, Anywhere — Always

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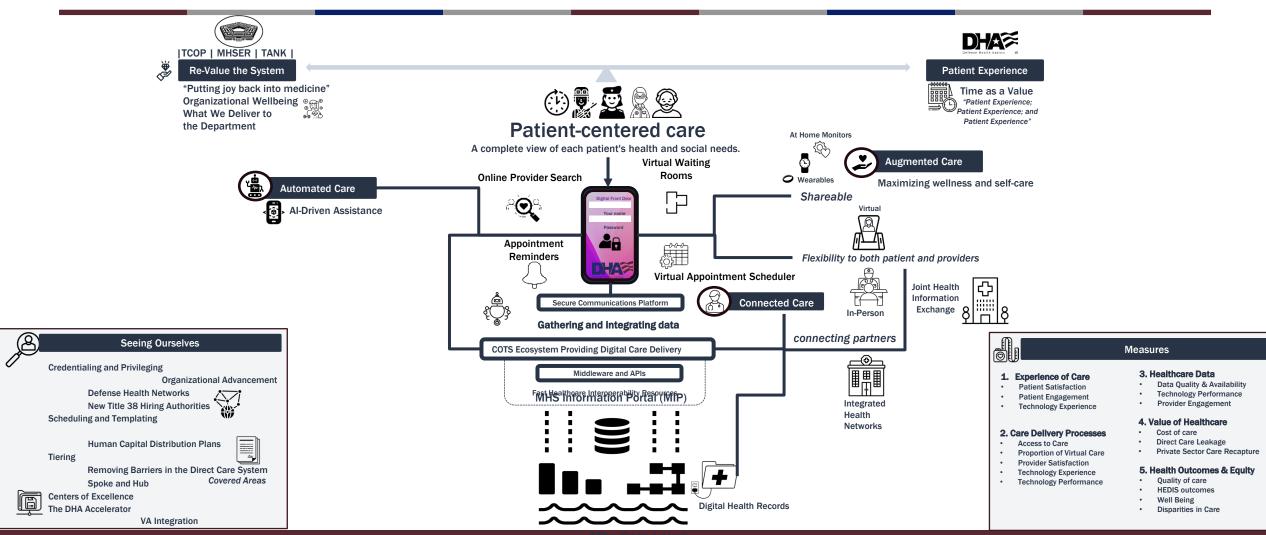
DHA Digital Front Door

Automated Care
Connected Care
Augmented Care

Accessible | Convenient | Personalized | Effective | Holistic

|TCOP | MHSER | TANK |

Re-Value the System

"Putting joy back into medicine"
Organizational Wellbeing
What We Deliver to
the Department

DHA

Patient Experience

Time as a Value
*"Patient Experience;
Patient Experience; and
Patient Experience"*

Patient-centered care
A complete view of each patient's health and social needs.

At Home Monitors

Augmented Care

Maximizing wellness and self-care

Wearables

Online Provider Search

Virtual Waiting
Rooms

Automated Care

AI-Driven Assistance

Digital Front Door
Your name
Password
DHA

Shareable

Virtual

Flexibility to both patient and providers

Appointment
Reminders

Virtual Appointment Scheduler

Secure Communications Platform

Connected Care

In-Person

Joint Health
Information
Exchange

Gathering and integrating data

connecting partners

COTS Ecosystem Providing Digital Care Delivery

Middleware and APIs

Fast Healthcare Interoperability Resources)

MHS Information Portal (MIP)

Integrated
Health
Networks

Digital Health Records

"The Data Lake"

Seeing Ourselves

Credentialing and Privileging

Organizational Advancement

Defense Health Networks
New Title 38 Hiring Authorities

Scheduling and Templating

Human Capital Distribution Plans

Tiering

Removing Barriers in the Direct Care System
Spoke and Hub   *Covered Areas*

Centers of Excellence
The DHA Accelerator

VA Integration

Measures

1. Experience of Care
- Patient Satisfaction
- Patient Engagement
- Technology Experience

2. Care Delivery Processes
- Access to Care
- Proportion of Virtual Care
- Provider Satisfaction
- Technology Experience
- Technology Performance

3. Healthcare Data
- Data Quality & Availability
- Technology Performance
- Provider Engagement

4. Value of Healthcare
- Cost of care
- Direct Care Leakage
- Private Sector Care Recapture

5. Health Outcomes & Equity
- Quality of care
- HEDIS outcomes
- Well Being
- Disparities in Care

Improving Health and Building Readiness. Anytime, Anywhere — Always

Clinically-Intelligent
Program Library

- Covering use cases across spectrum of patient needs.

- Services to create new programs to meet MHS specific requirements

Chronic Care

- Asthma
- Behavioral Health
- CHF
- COPD
- Diabetes 2
- Heart Disease
- Hyperlipidemia
- Hypertension
- Kidney Disease

Post Acute and Oncology

- ED Discharge
- Acute MI
- CHF
- COPD
- Generic Discharge
- Pneumonia
- Stroke
- Head & Neck Cancer
- Prostate Cancer
- Breast Cancer

Pre and Post Procedure

- Post-CABG
- Pre-Knee CJR
- Post-Knee CJR
- Pre-Hip CJR
- Post-Hip CJR
- Bariatric
- Colorectal
- Colonoscopy

Prevention, Wellness & Patient Education

- Gaps in Care (Preventive Reminders)
- Lifestyle Management
- Pediatrics
- OBGYN
- Sleep
- Weight
- Nutrition & Fitness
- Text & Email Programs
- Personalized Educational Content System (PECS)

COVID-19

- Employee Screening
- Lab Results
- Pre-Visit Screening
- Quarantine Monitoring
- Visitor Screening
- Vaccine Monitoring
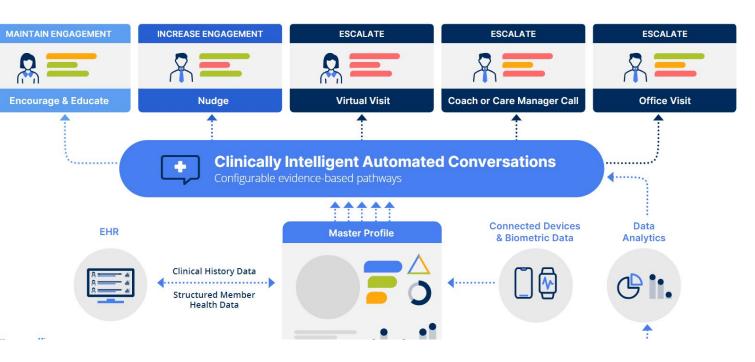
Automating Engagement

Awareness, access, and engagement with healthcare teams will be central to patient experience that increases health and readiness throughout the military community. A hybrid enablement platform ensures:

- Access to automated, intelligent, chat-based check-ins that are engaging, scalable, and can screen service members at scale.

- Identification of medical and behavioral health needs pre- and post-visits with escalations to on-demand access to healthcare teams when needed.

- Efficient healthcare teams operations with EHR integration.

- Proactive care models

Automating engagement
and escalating to care management when necessary

MAINTAIN ENGAGEMENT	INCREASE ENGAGEMENT	ESCALATE	ESCALATE	ESCALATE
Encourage & Educate	Nudge	Virtual Visit	Coach or Care Manager Call	Office Visit

Clinically Intelligent Automated Conversations
Configurable evidence-based pathways

EHR — Clinical History Data / Structured Member Health Data — Master Profile — Connected Devices & Biometric Data — Data Analytics
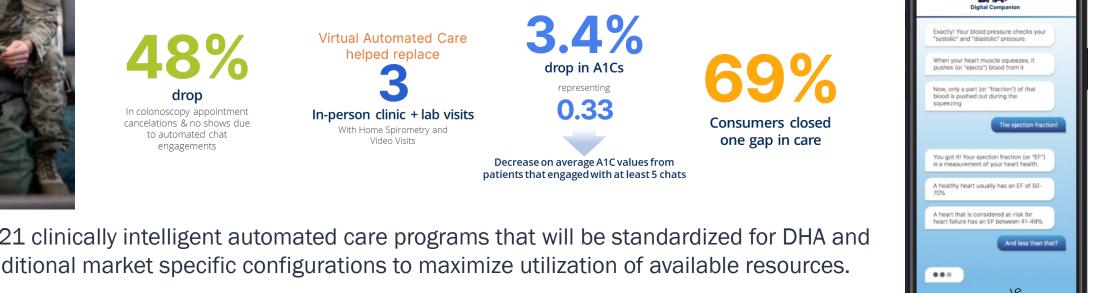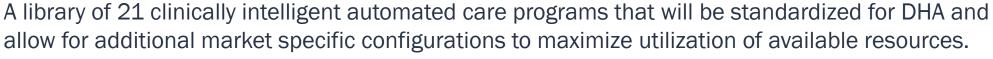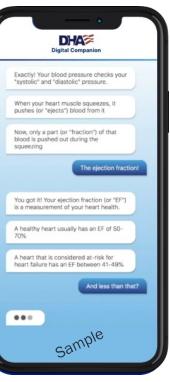
Automated Care Programs

Meeting beneficiaries where they are through automated care programs and intelligent chat, allows for engagement of populations or cohorts at scale and enables programmatic escalations to higher levels of care when needed. This reduces the burdens on the care team and improves patient connectedness and outcomes. Results have included:

48%
drop
In colonoscopy appointment cancelations & no shows due to automated chat engagements

Virtual Automated Care helped replace
3
In-person clinic + lab visits
With Home Spirometry and Video Visits

3.4%
drop in A1Cs
representing
0.33
Decrease on average A1C values from patients that engaged with at least 5 chats

69%
Consumers closed one gap in care

A library of 21 clinically intelligent automated care programs that will be standardized for DHA and allow for additional market specific configurations to maximize utilization of available resources.

Sample

Digital Behavioral Health & Wellness Programs

Clinically validated digital behavioral health programs deliver self guided and coached cognitive behavioral therapy (iCBT). Designed for those expressing mild to moderate signs or symptoms of stress, depression or anxiety, these programs help build resilience and skills for users across the spectrum of acuity.

The opportunity for the MHS is to close the behavioral health resource gap by getting patients into self guided programs

UP TO 80%
Show improvements
in symptoms

56%
Diagnosis-free
at 3 months, among members with a clinical diagnosis of depression or anxiety
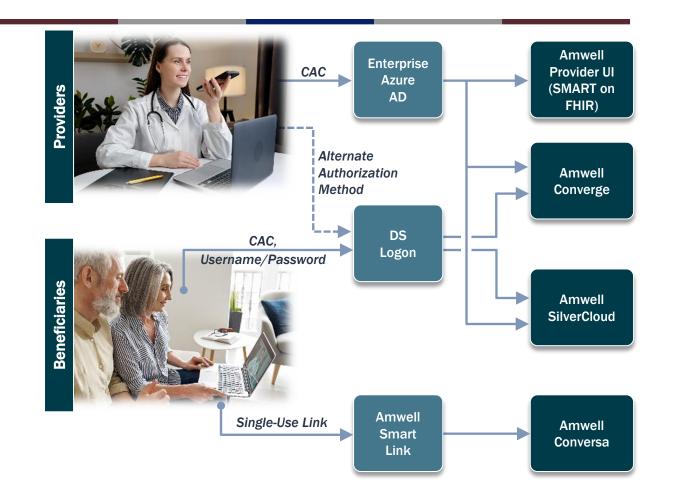
93%
User satisfaction

Portfolio of clinically validated digital behavioral health programs. These include self guided and coached cognitive behavioral health programs across Wellbeing Programs, Family Programs, Mental Health Programs and Chronic condition programs which address the comorbidity of mental health needs associated with chronic disease.

Authentication

- Patients and Providers connecting will need separate authentication approaches

- Intent is to utilize existing MHS-G and Enterprise solutions, meeting DoD/DHA policy, while also simplifying access to support patient access to care

- Test capability will be offered for Patients/Guests to ensure successful authentication (DS Logon) and subsequently perform a technical Audio/Video validation prior to their appointment

- Smart Link supports current MHS VC notification workflows and is required for the Digital First functionality

Providers

CAC → Enterprise Azure AD → Amwell Provider UI (SMART on FHIR)

Alternate Authorization Method

Beneficiaries

CAC, Username/Password → DS Logon → Amwell Converge

Amwell SilverCloud

Single-Use Link → Amwell Smart Link → Amwell Conversa

Creating the Culture of Innovation

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