Agency Priority Goal Action Plan

Veteran Suicide Prevention

Goal Leaders:

Dr. Keita Franklin, Director for Suicide Prevention, Office of Mental Health and Suicide Prevention

Dr. David Carroll, Executive Director, Office of Mental Health and Suicide Prevention
Overview

Goal Statement

• The Veterans Health Administration (VHA) will proactively identify and provide interventions for at-risk Veterans, both those using VHA care and those using other care systems, to prevent suicide and overdose death. VHA will increase the use of interventions for Veterans at-risk for suicide through the use of predictive modeling and enhanced engagement strategies.

  • By September 30, 2019, the percent of Veterans targeted through predictive modeling algorithms within the VHA system that receive core recommended interventions will increase to 90% from the baseline of 57%. FY19Q2 value: 87% (up from 78% in FY19Q1)

  • By September 30, 2019, VA has partnered with Health and Human Services (HHS)/Substance Abuse and Mental Health Services Administration (SAMHSA) and 17 cities in a “Mayor’s Challenge” to develop community plans to end Veteran suicide outside the VHA system. FY19Q2 value: 24 cities and 7 states.
Overview

Challenge

• While interventions to reduce the likelihood of suicide and overdose have been developed, they do no good unless they reach the people who need them at the right time.

Opportunity

• VA is using advanced analytics combined with clinical interventions to identify people most likely in need of preventive intervention and connect them with services.
  • Within VA, we mine electronic medical record data to identify patients at greatest risk of overdose or suicide events or death. Computer systems are used to provide lists of patients estimated to be at high risk paired with key information about the patient’s clinical case and suggestions for interventions to address risks. Clinicians and care coordinators use these computer systems to target clinical interventions and outreach to those with high estimated risk.
  • To help Veterans not enrolled in VA care, we are examining data to identify the Veteran populations at greatest risk and the organizations with which they engage. Partnering with Health and Human Services/SAMHSA and 17 cities through the Mayor’s Challenge and Governor’s Challenge, VA is working collaboratively based on data to develop community action plans to end Veteran suicide.
Goal Structure for Targeting Patients Receiving VA Health Care:

- Within VA, efforts to target interventions to high risk patients focus on use of two predictive models:
  1. Recovery Engagement and Coordination for Health – Veterans Enhanced Treatment (REACH VET), which identifies patients at statistical risk of death by suicide in the next month; and
  2. The Stratification Tool for Opioid Risk Mitigation (STORM), which identifies patients at statistical risk of overdose or suicide-related health care events or death in the next year.

- Patients identified as within the top risk tier at their facility based on the REACH VET model are expected to receive a care review and outreach intervention from a personally assigned care provider.

- Patients receiving opioid prescriptions who are identified as very high risk based on the STORM model are expected to receive guideline recommended risk mitigation interventions, including written informed consent, Prescription Drug Monitoring Program checks, and urine drug screening.
Strategies for Targeting Patients Receiving VA Health Care:

- Improve clinical implementation of core recommended interventions for patients predicted to be at high risk of suicide or overdose.
- Improve predictive models to more reliably and accurately identify Veterans at risk.
- Enhance data systems to enable more complex data mining and analysis and higher performance clinical decision support systems.
- Expand clinical capacity for provision of risk intervention through the Mental Health Hiring Initiative and restructuring of care practices.
Goal Structure & Strategies (3 of 4)

Goal Structure for Targeting Veterans Not Receiving VA Health Care:

• Veteran suicide is an important public health issue impacting Veterans and communities nationally. Of Veterans who die by suicide, 70% are not recently engaged in VHA health care. Ending Veteran suicide will take coordinated, bundled, up stream approaches that fit the unique needs and opportunities within communities and are beyond the scope of VA alone.

• SAMHSA is uniquely positioned and empowered to work directly with states and communities to address suicide. We have partnered with SAMHSA to host a Mayor’s and Governor’s Challenge aimed at developing local action plans focused on ending Veteran suicide.
Strategies for Targeting Veterans **Not Receiving** VA Health Care:

- As part of the Mayor’s and Governor’s Challenges, we will develop community strategic action plans that can be implemented at the local level to end Veteran suicide.
  - Integrate Veteran suicide prevention into the values, culture, leadership, and work of a broad range of organizations and programs with a role in supporting suicide prevention activities.
  - Establish effective, sustainable, and collaborative suicide prevention programs for Veterans at the national, state/territorial, tribal, and local levels.
  - Pursue and sustain public-private partnerships to advance Veterans suicide prevention.
  - Develop, implement, and evaluate communication efforts designed to reach Veterans.
• Summary of Progress – FY 19 Q2 (1 of 2)

• VA continues to expand Suicide Prevention programming to benefit all Veterans
  • In June 2018, VA released the National Strategy to Prevent Veteran Suicide

• Key indicators are on target:
  • The Mayor’s Challenge launched in 7 initial cities, added 16 more, for total of 24 cities
    • Cities: Albuquerque, NM; Atlanta, GA; Austin, TX; Billings, MT; Charlotte, NC; Clarksville, TN; Columbus, OH; Detroit, MI; Helena, MT; Hillsborough County, FL; Houston, TX; Jacksonville, FL; Kansas City, MO; Las Vegas, NV; Los Angeles, CA; Manchester, NH; Oklahoma City, OK; Phoenix, AZ; Reno, NV; Richmond, VA; Suffolk County, NY; Topeka, KS; Tulsa, OK; Warwick, RI
    • States: Arizona, Colorado, Kansas, Montana, New Hampshire, Texas, Virginia
  • VA is hiring additional mental health clinicians to serve Veterans in need
    • Met goal of net increase of 1000 FTE by end of CY18
    • Continuing hiring efforts to address on-going growth in patient demand
• VA continues to expand Suicide Prevention programming to benefit all Veterans

• Key indicators are on target:
  • VA is steadily increasing the clinical use of predictive analytics
    • Predictive analytics are utilized as part of the STORM and REACH-VET clinical programs throughout the VHA.
  • Predictive analytics are being continuously improved
    • VHA has multiple initiatives aimed at developing additional predictors and is finalizing second-generation REACHVET and STORM predictive models.
    • Partnering with DoD to incorporate relevant DoD information as predictors and to develop novel outreach focused predictive analytics in support of Presidential Executive Order 13822.
Key Milestones (1 of 5)

- Improve clinical implementation of core recommended interventions for Veterans predicted to be at high risk of suicide or overdose

<table>
<thead>
<tr>
<th>Key Milestones</th>
<th>Milestone Due Date</th>
<th>Milestone Status</th>
<th>Change from Last Quarter</th>
<th>Owner</th>
<th>Anticipated Barriers or Other Issues Related to Milestone Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide guidance and tools on models of care delivery using predictive model-based targeting of at risk patients</td>
<td>March 2018, and on-going</td>
<td>Implemented on schedule with ongoing support and updates</td>
<td>OMHSP</td>
<td>None at this time.</td>
<td></td>
</tr>
<tr>
<td>Provide technical assistance and clinical facilitation to VA health care systems to improve implementation of practices</td>
<td>March, 2018 and on-going</td>
<td>Implemented on schedule with ongoing support and updates</td>
<td>OMHSP</td>
<td>None at this time.</td>
<td></td>
</tr>
<tr>
<td>Develop and disseminate provider educational materials and programs on recommended interventions</td>
<td>April, 2018 and on-going</td>
<td>Implemented on schedule with ongoing support and updates</td>
<td>OMHSP</td>
<td>None at this time.</td>
<td></td>
</tr>
<tr>
<td>Provide implementation monitoring tools to help facilities track and trouble-shoot practice implementation</td>
<td>June, 2018 and on-going</td>
<td>Implemented on schedule with ongoing support and updates</td>
<td>OMHSP</td>
<td>None at this time.</td>
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</table>
### Key Milestones (2 of 5)

- Improve predictive models to more reliably and accurately identify Veterans at risk

<table>
<thead>
<tr>
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<th>Change from Last Quarter</th>
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<th>Anticipated Barriers or Other Issues Related to Milestone Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update REACH VET model on more recent outcome data</td>
<td>Sept, 2018 and on-going</td>
<td>On Track</td>
<td></td>
<td>OMHSP</td>
<td>Multiple models have been developed and are being refined and optimized for clinical implementation.</td>
</tr>
<tr>
<td>Update STORM model on more recent outcome data</td>
<td>June, 2018 and on-going</td>
<td>On Track</td>
<td></td>
<td>OMHSP</td>
<td>Multiple models have been developed and are being refined and optimized for clinical implementation.</td>
</tr>
<tr>
<td>Define and calculate new candidate predictors for REACH VET and STORM models</td>
<td>Sept, 2018 and on-going</td>
<td>On Track</td>
<td></td>
<td>OMHSP</td>
<td>New candidate predictors based on VA/DOD clinical practice guidelines for SP and Opioid Safety have defined and calculated. Ongoing efforts to identify additional predictors continues.</td>
</tr>
<tr>
<td>Recode REACH VET and STORM decision-support systems to utilize updated models</td>
<td>Dec, 2018</td>
<td>In Progress</td>
<td>April 2019</td>
<td>OMHSP</td>
<td>Redesigning coding and databases to facilitate implementation of predictive models generally for use in clinical care. This will improve performance and reduce maintenance for both REACH VET and STORM, and enable OMHSP to implement other predictive models more rapidly and efficiently. Coding predictors for second-generation REACHVET models into decision support.</td>
</tr>
</tbody>
</table>
### Key Milestones (3 of 5)

- Enhance data systems to enable more complex data mining and analysis and higher performance clinical decision support systems

<table>
<thead>
<tr>
<th>Milestone Summary</th>
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<tbody>
<tr>
<td><strong>Key Milestones</strong></td>
<td><strong>Milestone</strong></td>
</tr>
<tr>
<td>Development and reporting platform for VA decision-support systems</td>
<td>Sept, 2018</td>
</tr>
<tr>
<td>Migrate REACH VET and STORM to a customized platform</td>
<td>June 30, 2018</td>
</tr>
<tr>
<td>Develop a platform for data analysis and decision support processing on the Dept of Energy supercomputer</td>
<td>Sept, 2018</td>
</tr>
<tr>
<td>Incorporate newly derived data elements from the supercomputer environment into VA suicide prevention decision support systems</td>
<td>March 2019</td>
</tr>
</tbody>
</table>
Key Milestones (4 of 5)

- Expand clinical capacity for provision of risk intervention through the MH Hiring Initiative and restructuring of care practices.

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<th>Anticipated Barriers or Other Issues Related to Milestone Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide strategic planning support for facilities to guide mental health and suicide prevention team staffing plans</td>
<td>Feb, 2018</td>
<td>Complete</td>
<td></td>
<td>OMHSP</td>
<td>None at this time.</td>
</tr>
<tr>
<td>Provide technical assistance to facilities with recruitment and retention challenges</td>
<td>Feb, 2018 and on-going</td>
<td>Initiated on time and ongoing</td>
<td></td>
<td>OMHSP</td>
<td>Competing priorities for technical assistance staff may limit available resources. Due to facilities with staffing challenges, providing technical assistance will be ongoing.</td>
</tr>
<tr>
<td>Monitor progress towards net gain of 1000 MH Full Time Equivalent (FTE), with focus, on SPT, PCMHI, and outpatient clinical FTE</td>
<td>Feb, 2018</td>
<td>Complete</td>
<td></td>
<td>OMHSP</td>
<td>Net Mental Health FTE reached 1000.</td>
</tr>
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</table>
### Key Milestones (5 of 5)

- As part of the Mayor’s Challenge develop community strategic action plans that can be implemented at the local level to end Veteran suicide for all Veterans.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Select initial 8 cities</td>
<td>January 2018</td>
<td>Complete</td>
<td></td>
<td>OMHSP</td>
<td>None at this time.</td>
</tr>
<tr>
<td>Conduct Policy Academy for city teams</td>
<td>March 2018</td>
<td>Complete</td>
<td></td>
<td>OMHSP</td>
<td>None at this time.</td>
</tr>
<tr>
<td>Develop community specific plans to end suicide</td>
<td>March 2018- June 2018</td>
<td>Complete</td>
<td></td>
<td>OMHSP</td>
<td>None at this time.</td>
</tr>
<tr>
<td>Implement plans and submit follow up reports</td>
<td>March -August 2018</td>
<td>Complete</td>
<td></td>
<td>OMHSP</td>
<td>Initial plans implemented and reports complete. Overall implementation is continuously improved and ongoing.</td>
</tr>
<tr>
<td>Launch second wave of cities in the Challenge</td>
<td>June 2018</td>
<td>Complete</td>
<td></td>
<td>OMHSP</td>
<td>16 cities selected, for total of 24 cities within the Mayor’s Challenge</td>
</tr>
<tr>
<td>Complete second wave of cities and added states in Governor’s Challenge</td>
<td>February 2019 and ongoing</td>
<td>On Track</td>
<td></td>
<td>OMHSP</td>
<td>24 cities and 7 states in progress for next few years of training and technical assistance. Policy Academy completed in Feb. 2019 for 7 Governor’s Challenge states. Policy Academy completed for 15 of 24 Mayor’s Challenge cities.</td>
</tr>
</tbody>
</table>
Key Indicators

Percent of Veterans targeted through predictive modeling algorithms within the VHA system that receive core recommended interventions:

- FY18Q2: 55%
- FY18Q3: 61%
- FY18Q4: 67%
- FY19Q1: 73%
- FY19Q2: 78%
- FY19Q3: 84%
- FY19Q4: 90%

Target: 59% 68% 78% 84.10% 86.90% 84% 90%
Actual: 55% 61% 67% 73% 78%
Key Indicators

# of cities partnering as part of the Mayor’s Challenge to develop community plans to end Veteran suicide outside the VHA system
Data Accuracy and Reliability (1 of 2)

Data on whether targeted patient populations receive recommended interventions are based on data elements within the VA Corporate Data Warehouse (CDW). Data from CDW is extracted nightly from the VA’s Electronic Health Record (EHR), and includes information entered by clinicians regarding the care delivered to Veterans during health care encounters. This includes prescriptions written, procedures conducted and diagnoses treated. VA has on-going data quality validations underway to ensure proper data transmission and accuracy of the data tables.

However, data is limited by accuracy and completeness of clinical coding; if clinicians make errors in documenting care in the medical record (e.g. picking an incorrect diagnostic code or procedure code in their data entry), the database will reflect those errors. Likewise, some interventions are supposed to be documented in the EHR using specific structured notes or documentation templates.

If care is delivered but documented using generic clinical notes, these interventions may not be identified in the data warehouse. VHA employs clinical coding experts that work with clinical staff to improve clinical coding, and provides trainings to encourage use of standardized documentation practices to mitigate these data limitations.
High risk patients are identified using predictive models developed on VA data. Information on the validation and limitations of these models have been published:


Leadership

Oversight and Program Management
Dr. David Carroll, Executive Director, Office of Mental Health and Suicide Prevention (OMHSP)
Dr. Keita Franklin, Director for Suicide Prevention, OMHSP

Internal Milestones Lead
Dr. Jodie Trafton, OMHSP

Data Lead
Dr. Susan Strickland, OMHSP

External Milestones Lead
Wendy Lakso, OMHSP
Additional Information

**Contributing Programs**

Organizations:

- Cities participating in the Mayor’s Challenge

Regulations:

- Comprehensive Addiction and Recovery Act of 2016

Policies:

- VHA Directive 1306, Querying State Prescription Drug Monitoring Programs
- VHA Directive 1005, Informed Consent for Long-term Opioid therapy for Pain
- VHA Handbook 1160, Uniform Mental Health Services

Other Federal Activities:

- Health and Human Services/SAMHSA
- Department of Defense
- Department of Energy
- Department of Homeland Security
Additional Information

Stakeholder / Congressional Consultations

- Congressional consultations
- The Veteran
- Veteran Service Organizations
- Community Partners