The Opioid Crisis: Treating Our Nations Veterans

Joseph G. Liberto, M.D.
Associate Chief of Staff for Education
VA Maryland Health Care System

No relevant financial relationships or conflicts of interest. No discussion of off-label use of drugs or devices.

The presentation is the personal opinion of the presenter and does not reflect the official views of the Department of Veterans Affairs or any other Federal Agency.
• Epidemiology of Opioid Overdose, SUD and Chronic Pain
• Pharmacology of Opioids and Treatment of Opioid Use Disorders/ Overdose
• Assessing Veterans
• VHA Initiatives to Address the Opioid Epidemic
Overdose Deaths Involving Opioids: 3 Waves

1) Natural and semi-synthetic opioid deaths increased 4-fold from 1999 to 2011; Methadone rate increased 6-fold from 1999 to 2007

2) Heroin death rate increased over 5-fold since 2011

3) Synthetic opioid (excluding methadone) death rate increased more than 6-fold from 2013 to 2016

* Provisional counts for 2017 are based on data available through 12/17 but are not yet finalized

United States (2017)

• More than 47,000 Americans Died of an Opioid Overdose (~ 130 per day)

• Approximately 1.7 Million have an Opioid Use Disorder related to Opioid Pain Relievers

• Approximately 650,000 have a Opioid Use Disorder related to heroin

1Since an intoxication death may involve more than one substance, counts of deaths related to specific substances do not sum to the total number of deaths.

2Includes deaths caused by benzodiazepines and related drugs with similar sedative effects.
Opioid Overdoses as the Tip of the Iceberg

For every 1 prescription or illicit opioid overdose death in 2015 there were...

- 18 people who had a substance use disorder involving heroin
- 62 people who had a substance use disorder involving prescription opioids
- 377 people who misused prescription opioids in the past year
- 2,946 people who used prescription opioids in the past year

Results from the 2015 National Survey of Drug Use and Health, as reported by
<table>
<thead>
<tr>
<th>Age Group</th>
<th>Alcohol Use Disorder</th>
<th>Daily Cigarette Use</th>
<th>Prescription Drug Misuse</th>
<th>Drug Use Disorder</th>
<th>Substance Use Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25 Veterans</td>
<td>11.5</td>
<td>26.3</td>
<td>14.1</td>
<td>5.4</td>
<td>14.7</td>
</tr>
<tr>
<td>18-25 Civilians</td>
<td>12.6</td>
<td>15.7</td>
<td>13.3</td>
<td>5.9</td>
<td>15.8</td>
</tr>
<tr>
<td>26-34 Veterans</td>
<td>6.7</td>
<td>23.2</td>
<td>6.9</td>
<td>1.2</td>
<td>7.6</td>
</tr>
<tr>
<td>26-34 Civilians</td>
<td>6.9</td>
<td>17</td>
<td>7.9</td>
<td>2.4</td>
<td>8.4</td>
</tr>
<tr>
<td>35-49 Veterans</td>
<td>5.3</td>
<td>23.5</td>
<td>6.1</td>
<td>2.1</td>
<td>6.1</td>
</tr>
<tr>
<td>35-49 Civilians</td>
<td>4.6</td>
<td>17.5</td>
<td>5.5</td>
<td>1.4</td>
<td>5.6</td>
</tr>
<tr>
<td>50+ Veterans</td>
<td>2.8</td>
<td>17.6</td>
<td>2.2</td>
<td>0.9</td>
<td>3.6</td>
</tr>
<tr>
<td>50+ Civilians</td>
<td>1.5</td>
<td>11.1</td>
<td>1.9</td>
<td>0.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Age Adjusted Veterans</td>
<td>4.8</td>
<td>21.0</td>
<td>5.0</td>
<td>1.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Age Adjusted Civilians</td>
<td>4.1</td>
<td>14.5</td>
<td>4.8</td>
<td>1.4</td>
<td>5.0</td>
</tr>
<tr>
<td>Age Group</td>
<td>Alcohol Use Disorder</td>
<td>Daily Cigarette Use</td>
<td>Prescription Drug Misuse</td>
<td>Drug Use Disorder</td>
<td>Substance Use Disorder</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>--------------------------</td>
<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>18-25 Veterans</td>
<td>24.7</td>
<td>33.4</td>
<td>18.3</td>
<td>10.2</td>
<td>30.1</td>
</tr>
<tr>
<td>18-25 Civilians</td>
<td>20.5</td>
<td>18.0</td>
<td>15.7</td>
<td>10.1</td>
<td>25.4</td>
</tr>
<tr>
<td>26-34 Veterans</td>
<td>15.3</td>
<td>27.3</td>
<td>9.7</td>
<td>4.9</td>
<td>17.8</td>
</tr>
<tr>
<td>26-34 Civilians</td>
<td>15.5</td>
<td>20.8</td>
<td>10.1</td>
<td>5.3</td>
<td>18.3</td>
</tr>
<tr>
<td>35-49 Veterans</td>
<td>10.8</td>
<td>25.7</td>
<td>6.0</td>
<td>3.3</td>
<td>12.6</td>
</tr>
<tr>
<td>35-49 Civilians</td>
<td>9.9</td>
<td>18.4</td>
<td>5.9</td>
<td>2.7</td>
<td>11.5</td>
</tr>
<tr>
<td>50 – 65 Veterans</td>
<td>6.7</td>
<td>20.7</td>
<td>2.7</td>
<td>1.3</td>
<td>7.5</td>
</tr>
<tr>
<td>50 – 65 Civilians</td>
<td>6.2</td>
<td>15.8</td>
<td>3.2</td>
<td>1.2</td>
<td>6.9</td>
</tr>
<tr>
<td>65+ Veterans</td>
<td>2.8</td>
<td>7.2</td>
<td>0.6</td>
<td>0.1</td>
<td>2.9</td>
</tr>
<tr>
<td>65+ Civilians</td>
<td>2.4</td>
<td>8.3</td>
<td>1.2</td>
<td>0.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Age Adjusted Veterans</td>
<td>6.6</td>
<td>16.5</td>
<td>3.0</td>
<td>1.5</td>
<td>7.4</td>
</tr>
<tr>
<td>Age Adjusted Civilians</td>
<td>6.0</td>
<td>13.5</td>
<td>3.4</td>
<td>1.4</td>
<td>6.8</td>
</tr>
</tbody>
</table>
Risk Factors for Overdose and OUD

Risk factors are related to:
- Opioid prescribing
- Interaction with other medication/drugs
- Medical comorbidities
- Mental health comorbidities

“Opioid dosage was the factor most consistently analyzed and also associated with increased risk of overdose. Other risk factors include concurrent use of sedative hypnotics, use of extended-release/long-acting opioids, and the presence of substance use and other mental health disorder comorbidities.”

Review of 15 articles published between 2007 and 2015 that examined risk factors for fatal and nonfatal overdose in patients receiving opioid analgesics.
Veterans: Risk Factors for Overdose/Suicide

Odds Ratios for Overdose/Suicide-Related Events

Each additional MG of opioid dose: Risk increased by 0.3% (100 MG: 30% increase in risk)
<90 day and >90 day prescription: Risks same

<table>
<thead>
<tr>
<th></th>
<th>Medical comorbidity</th>
<th>Psychiatric comorbidity</th>
<th>SUD</th>
<th>Healthcare utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzo+</td>
<td>1.4</td>
<td>4.8</td>
<td>8.1</td>
<td>16.6</td>
</tr>
<tr>
<td>HIV</td>
<td>2.2</td>
<td>5.8</td>
<td>5.3</td>
<td>11.2</td>
</tr>
<tr>
<td>Elec. Dis.</td>
<td>2</td>
<td>5.7</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Liver dis</td>
<td>2.2</td>
<td>8.1</td>
<td></td>
<td>18.5</td>
</tr>
<tr>
<td>Other Neuro</td>
<td>2.1</td>
<td>8</td>
<td></td>
<td>23.1</td>
</tr>
<tr>
<td>PTSD</td>
<td>2.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bipolar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other MH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stimulant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedative UD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP MH Tx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detox</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OD/suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

STORM Analysis: Oliva et. al. Psych. Services 2017
Current prevalence

General Adults in US – 1.8% m, 5.2% w

Vietnam - 15.2%m 8.1% w

Gulf War – 12.1%

OEF/ OIF – 13.8%

source: US Dept of Veterans Affairs
Traumatic Brain Injury
Medical Comorbidity - Prevalence of Pain in Veterans (US population)

Chronic pain is more common in Veterans than in non-veterans and more often severe.

- 66% of Veterans vs. 56% of non-veterans with pain in prior 3 month
- Severe pain in Veterans is 40% more common than in non-Veterans
- Most common pain conditions: musculoskeletal pain (joint 44%, back 33%, neck 1%)

Severe Pain

Pain which occurs "most days" or "every day" and bothers the individual "a lot,"

Severe Pain by Age: Veterans vs Nonveterans

Severe Pain by Sex: Veterans vs Nonveterans
Chronic pain in Veterans receiving care in VHA is often severe and in the context of mental health comorbidities.

- 60% of Veterans from Middle East conflicts with chronic pain, up to 75% in women Veterans.
- More than 2 Mil Veterans with chronic pain diagnosis (In 2012, 1/3 on opioids).

- MH and Pain conditions increased in prevalence from 2008 to 2015.
- Increase in pain scores/pain severity.

Pain in Veterans (in VHA):
1 in 3 with chronic pain diagnosis
1 in 5 with persistent pain
1 in 10 with severe persistent pain
• ~ 25% of patients prescribed opioids for chronic pain misuse them
• ~ 10% of those that misuse prescribed opioids develop an Opioid Use Disorder
• ~ 5% who misuse prescribed opioids transition to heroin

National Institute on Drug Abuse (2017)
• Almost 4 out of every 5 patients who died from overdose/suicide were prescribed doses < 90 MEDD
• Almost 3 out of every 4 overdose/suicide deaths were among patients with MH/SUD diagnoses
• More than 1 out of every 2 deaths were among patients with MH/SUD diagnoses prescribed < 90 MEDD
• Epidemiology of Opioid Overdose, SUD and Chronic Pain
• Pharmacology of Opioids and Treatment of Opioid Use Disorders/ Overdose
• Assessing Veterans
• VHA Initiatives to Address the Opioid Epidemic
## Common Opioids

### Schedule II

<table>
<thead>
<tr>
<th>Opioid</th>
<th>Brand Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxycodone</td>
<td>Percodan®, Tylox®, Roxicet®, OxyContin®</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>Norco®, Vicodin®, Lortab®, Lorcet®</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>Duragesic®, Actiq®</td>
</tr>
<tr>
<td>Carfentany</td>
<td>Wildnil®</td>
</tr>
<tr>
<td>Meperidine</td>
<td>Demerol®</td>
</tr>
<tr>
<td>Morphine</td>
<td>MS Contin®, Oramorph®</td>
</tr>
<tr>
<td>Methadone</td>
<td>Dolophine®</td>
</tr>
</tbody>
</table>

### Schedule III

<table>
<thead>
<tr>
<th>Opioid</th>
<th>Brand Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>Tylenol® #3, #4</td>
</tr>
<tr>
<td></td>
<td>APAP/Codeine #2,#3,#4</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>Suboxone®, Zubsov®, Butrans®, Bunavail®, Suboxone®, Sublocade®, Cizdol®</td>
</tr>
</tbody>
</table>
HEROIN, FENTANYL, CARFENTANYL (Schedule I)

Kensington Police Service
Opioid Receptor Types

• Delta (DOP)
• Kappa (KOP)

• Mu (MOP)
• Nociceptin (NOP)
# Opioid Drug Effects

## Acute Use Effects:

<table>
<thead>
<tr>
<th>Euphoria</th>
<th>Vomiting</th>
<th>Constricted Pupils</th>
<th>Depressed Respiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drowsiness</td>
<td>Decreased Pain Sensation</td>
<td>Decreased Awareness</td>
<td>Decreased Consciousness</td>
</tr>
</tbody>
</table>

## Chronic Use Effects:

<table>
<thead>
<tr>
<th>Physical dependence</th>
<th>Psychological dependence</th>
<th>Lethargy</th>
<th>Constipation</th>
</tr>
</thead>
</table>

## Large Dose Effects:

<table>
<thead>
<tr>
<th>Non-Responsive</th>
<th>Pinpoint Pupils</th>
<th>If Severe Anoxia Pupils May Dilate</th>
<th>Bradycardia &amp; Hypotension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Cyanotic</td>
<td>Skeletal Muscle Flaccid</td>
<td>Pulmonary edema in ~50%</td>
<td>Slow or Absent Respiration</td>
</tr>
</tbody>
</table>
It feels good
To fit in
To feel different
To experiment
To relieve boredom
As a “social lubricant”
To enhance performance
To relieve pain
To “self medicate”

Welsh
• Reward/Reinforcement is in part controlled by mu receptors in the:
  – Ventral Tegmental Area (VTA) and
  – Nucleus Accumbens with projections to
  – Prefrontal Cortex

NIDA
ADDICTION IS TREATABLE!!!
TRADITIONAL VIEW OF TREATMENT OUTCOMES

“Before” Using “Dirty” Criminal

“After” Not Using “Clean” Recovered

Welsh
Excess Negative Consequences With No Improvement In Function

No Negative Consequences With Great Improvement In Function

Absolute use may or may not correlate with this

Welsh
GOALS OF TREATMENT

➢ **Individual**
  ➢ Total abstinence
  ➢ Reduction in alcohol or drug consumption that will allow the person to better function in all facets of life.
  ➢ Reduction in harm from substance use

➢ **Societal**
  ➢ Reduction in crime, violence, family discord, accidents, spread of HIV and other infectious diseases associated with the use of needles, and other health complications.
Psychotherapy

- 12 Step Facilitation
- Motivational Enhancement Therapy (MET)
- Cognitive Behavioral Therapy (CBT)
Opioid Agonist Treatment Outcomes

- 67% of patients on methadone who entered a detoxification protocol were using heroin 6-12 months later (Milby)

- Of 105 patients who discontinued methadone treatment, 82% resumed intravenous drug use by 12 months (Ball)

- 88% used opiates 3 months after buprenorphine detoxification (Gandhi)
Mortality Per 1000 People

in methadone treatment

out of methadone treatment

Sordo, et al. 2017
Mortality Per 1000 People

In Buprenorphine Treatment

Out of Buprenorphine Treatment

Sordo, et al. 2017
Opioid Agonist Treatment Outcomes

- Decrease mortality
- Decrease acquisition of HIV infection and hepatitis
- Decrease crime
- Decrease illicit-substance use
- Improve social functioning
- Increase the rate of retention in treatment
- Increase compliance with HIV medication regiment
FDA Approved

- Methadone (Methadose; Dolophine)
- Buprenorphine (Suboxone; Suboxone Film; Subutex; Bunavail; Zubsolv; Sublocade)
- Naltrexone (Trexan; Vivitrol)
- Levo-alpha-acetylmethadol (ORLAAM)
Function at Receptors: Full Opioid Agonists

Mu receptor | Full agonist binding ...

1. fully activates the mu receptor
2. is highly reinforcing
3. is the most abused opioid receptor type
4. substances include heroin, oxycodone, codeine, etc
# Opioid Drug Effects

## Acute Use Effects:

<table>
<thead>
<tr>
<th>Euphoria</th>
<th>Vomiting</th>
<th>Constricted Pupils</th>
<th>Depressed Respiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drowsiness</td>
<td>Decreased Pain Sensation</td>
<td>Decreased Awareness</td>
<td>Decreased Consciousness</td>
</tr>
</tbody>
</table>

## Chronic Use Effects:

<table>
<thead>
<tr>
<th>Physical dependence</th>
<th>Psychological dependence</th>
<th>Lethargy</th>
<th>Constipation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical dependence</td>
<td>Psychological dependence</td>
<td>Lethargy</td>
<td>Constipation</td>
</tr>
</tbody>
</table>

## Large Dose Effects:

<table>
<thead>
<tr>
<th>Non-Responsive</th>
<th>Pinpoint Pupils</th>
<th>If Severe Anoxia Pupils May Dilate</th>
<th>Bradycardia &amp; Hypotension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Cyanotic</td>
<td>Skeletal Muscle Flaccid</td>
<td>Pulmonary edema in ~50%</td>
<td>Slow or Absent Respiration</td>
</tr>
</tbody>
</table>
Function at Receptors: Partial Agonists

- **Mu receptor**
- **Partial agonist binding ...**

1. **less activation** at the receptor site
2. is relatively less reinforcing
3. is a less abused opioid type
4. includes buprenorphine

Center for Substance Abuse Treatment
Function at Receptors: Opioid Antagonists

- **Mu receptor**
- **Antagonist binding** ...

1. occupies *without* activating
2. is not reinforcing
3. blocks agonist opioid receptors
4. includes naloxone (IV, SC, IM) and naltrexone (PO)
Partial Agonist: Ceiling Effect

- **Full Agonist**
  - (heroin, oxycodone)
  - Maximum opioid agonist effect is never achieved

- **Partial Agonist**
  - (buprenorphine)
  - Increasing activity at increased doses

- **Full Antagonist**
  - (naloxone, naltrexone)

Opioid effect, sedation, respiratory depression

Efficacy

% Efficacy

Log Dose of Opioid
• Epidemiology of Opioid Overdose, SUD and Chronic Pain
• Pharmacology of Opioids and Treatment of Opioid Use Disorders/Overdose
• Assessing Veterans
• VHA Initiatives to Address the Opioid Epidemic
• Family and Social history
  – What was it like growing up, abuse, parental occupations, sibling distribution, education, employment, relationships, off-spring, legal history.

• Substance History
  – Ask about each substance, manor of use, length of use, current use, highest use, longest time without using, date last used, medical complications of use, History of DTs, Seizures, past treatments

• Military History
  – ??
Military History

– Would it be ok if I talked with you about your military experience?
  • When and Where did you serve and in what branch?
  • What type of work did you do while in the service?
  • Did you have any illnesses or injuries while in the service?
  • If yes, “Can you tell me more about that”
16 million served: ~ 500,000 surviving Veterans

Noise Exposure
Ionizing Radiation
Occupational (job-related) Hazards
Extreme Cold Injury
Mustard Gas
5.7 million served: ~ 2.25 million surviving Veterans

Extreme Cold Injury
Occupational (job-related) Hazards
Noise

Veterans Benefits Administration
Vietnam War (1961-1975)

8.7 million served: ~ 7.25 million surviving Veterans

Diseases related to Agent Orange
Hearing Problems Caused by Noise
Occupational (job-related) Hazards
Hepatitis C (Substance Abuse)

Veterans Benefits Administration
Gulf War and Iraq War Era (1990- )

~ 5.4 million surviving Veterans

- First Gulf War
- Second Gulf War
- Global War on Terrorism
- Operation Active Endeavour
- Operation Iraqi Freedom
- Operation Enduring Freedom
- Operation New Dawn
Sand, Dust and Particulate
Depleted Uranium
Oil Well Fires
Sulfur Fire
Burn Pit Smoke
Chemical and Biological Weapons
Chemical Agent Resistant Coating Paint
Chromium
Pesticides
Extreme Heat Related Injuries
Explosions
Toxic Embedded Fragments
Noise
Infectious Diseases
Occupational (job-related) Hazards
Traumatic amputations
Blast Injury
Traumatic Brain Injury
(PTSD/MST)
Combat Stressors

• Losing Friends
• Not Seeing Successes
• Using Deadly Force
• Being Injured
• Seeing, Smelling, Tasting Death and Destruction
• Collateral Damage
• IED Threat
• Green on Blue Violence (Friend vs. Enemy)
OUTLINE

• Epidemiology of Opioid Overdose, SUD and Chronic Pain
• Pharmacology of Opioids and Treatment of Opioid Use Disorders/Overdose
• Assessing Veterans
• VHA Initiatives to Address the Opioid Epidemic
The VA Opioid Safety Initiatives (OSI)

• Opioid Safety Initiatives (OSI) Aims
  – Reduce over-reliance on opioid analgesics for pain management.
  – Safe and effective use of opioid therapy when clinically indicated.
  – Improve access to lifesaving medication assisted treatment for opioid use disorder

• Comprehensive OSI strategy includes
  – Provider education; Academic Detailing.
  – Access to non-pharmacological modalities, incl. behavioral and CIH modalities.

• OSI Dashboard
  • Totality of opioid use visible within VA.
  • Provides feedback to stakeholders at VA facilities regarding key opioid parameters.

Gellad, Good CB, and Shulkin. JAMA Intern Med. 2017 May 1;177:611-2
The VA Opioid Safety Initiatives
Paradigm Shift in Pain Care

• **Paradigm shift away from opioid therapy** for non-end-of-life pain management.
  – There is no completely safe opioid dose threshold below which there are no risks for adverse outcomes.
  – Even a short-term use of low dose opioids may result in addiction.
  – Realization that any initial, short-term functional benefit will likely not be sustained in most patients.
  – Prolonged use of opioids, especially in higher doses, may lead to central sensitization and increase in pain over time (*Opioid Induced Hyperalgesia*).
  – Patients on opioids may actually experience a functional decline in the long term, measured by factors like returning to employment.

• **Paradigm shift towards multimodal and integrated team-based pain care (biopsychosocial interdisciplinary care)**
Recommendation 1:

“We recommend against initiation of long-term opioid therapy. We recommend **alternatives to opioid therapy** such as self-management strategies and other non-pharmacological treatments. When pharmacologic therapies are used, we recommend **non-opioids over opioids**.”
• Initiation and Continuation of Opioids (cont’d)

  – Recommendation against opioid therapy in patients < 30 years of age, in patients with active substance use disorder, and in combination with benzos.

• Risk Mitigation

  – Recommendation for risk mitigation strategies, including Informed Consent, UDT, PDMP, Overdose education and Naloxone prescribing.

  – Assess for Suicide risk

  – Evaluate benefits and risks at least every 3 months.

https://www.healthquality.va.gov/guidelines/Pain/cot/
• Type, Dose, Follow-up, and Taper of Opioids

  – If prescribing opioids: **short duration and lowest dosage**.
  – **No dosage is safe**; Strong rec against of opioids to > 90 MEDD.
  – **Avoid long-acting opioids for acute pain, as prn, or upon initiation** of opioid therapy.
  – Opioid dosage **reduction should be individualized** to patient.
    Avoid sudden reductions; **taper slowly** if opioid risk > benefit,
  – For **OUD**, offer medication assisted treatment (MAT).

• Opioid Therapy for Acute Pain

  – **Acute pain**: use alternatives to opioids; use multimodal pain care, if opioids prescribe for ≤ 3-5 days.
Pain Management - Beyond Opioids...
Non-Pharmacological Pain Treatments in VHA

VA State of the Art Conference Nov. 2016: Evidence-based non-pharmacological approaches for MSK pain management
- Evidence to support CIH and conventional therapies.
- Provision of multi-modal therapies accessible from Primary Care.

VHA Directive 1137: Advancing Complementary and Integrative Health (May 2017)
- List 1: Approaches with published evidence of promising or potential benefit.
  - Acupuncture
  - Massage Therapy
  - Tai Chi
  - Meditation
  - Yoga
  - Clinical Hypnosis
  - Biofeedback
  - Guided Imagery

- Chiropractic Care approved as a covered benefit in VHA in 2004 and is part of VA whole health care.
- To be made available across the system, if recommended by the Veteran’s health care team.
Stepped Care Model for Pain Management (SCM-PM)

Foundational Step: Self-Care/Self-Management
- Broad approach.

Primary Care (PACT) = Medical Home
- Coordinated care and a long-term healing relationship, instead of episodic care based on illness
- Primary Care Mental Health Integration (PCMHI) at all facilities

CARA Legislation:
- Full implementation of the SCM-PM
- Pain Management Teams at all facilities
Aims to improve access to lifesaving medication assisted treatment for opioid use disorder by bringing appropriate evidence-based medication, monitoring, and brief counseling to the points of care where patients with opioid use disorder are most likely to be seen.

These settings include Pain Management clinics, Primary Care, and Mental Health Clinics.

In a stepped care model, care for stabilized and less complex patients can be provided in these primary clinics.
VHA Stepped Care

- Pain Management Teams must include providers with addiction expertise to allow for integrated access to OUD evaluation and treatment.
- **Medication Assisted Treatment (MAT):**
  - Buprenorphine/naloxone
  - Methadone (through Opioid Treatment Program)
  - Naltrexone (Extended-release injectable only)
- **Steppe Care for Opioid Use Disorder**
  - Training began in August 2018

Buprenorphine in SCOUTT level one clinics

Buprenorphine for Opioid Use Disorder*

*Includes patients with a diagnosis of OUD seen in the implementation clinic. Excludes patients seen in Clinic Stop 523 and/or prescribed buprenorphine in non-implementation clinics.
Overdose Education and Naloxone Distribution - OEND

- **Overdose Education (OE)**
  - How to *prevent, recognize, and respond* to an opioid overdose.

- **Naloxone Distribution (ND)**
  - FDA approved as *naloxone auto injector and nasal spray*.
  - *Dispense and train* patient and caregiver/family.

- **Target patient populations: OUD and prescribed opioids.**

- **Naloxone to be offered widely, low threshold for prescribing.**
  - Factors that increase risk for opioid overdose include h/o overdose, h/o SUD, higher opioid dosages (≥50 MMED), or concurrent benzodiazepine use. Offer to patients with recent opioid discontinuations or during tapering of opioids.

- **No cost to Veterans.**

- **Rapid Naloxone Initiative: first responders, AED (defibrillator) cabinets.**
Provider Education: Academic Detailing

- **In-person** educational outreach
- Evidence-based information and tools
- Pharmacists skilled in persuasive communication
- Trusted and useful *relationship* with providers
- Training/provider tools
- > 28,000 outreach visits (June 30, 2018)
- Multiple campaigns, examples: Pain Management, Opioid Safety Initiative, Opioid Use Disorder (OUD), Insomnia; Psychotropic Drug Safety Initiative (PDSI), incl. benzodiazepines.

AD Exposure and Naloxone Prescribing
VA Academic Detailing Educational Materials

Pain/Opioid Safety Initiative

Marijuana: Natural – Safe, Right?
Classification: Patient Factsheet
File Name: Marijuana Use: Patient Discussion Tool
IB&P Number: IB 10-927, P96009

Slowly Stopping Opioid Medications
Helpful Tips to Getting Off Your Opioid Successfully
Classification: Patient Factsheet
File Name: Pain – Patient – Slowly Stopping Opioids
IB&P Number: IB 10-1016, P96864

Pain
New Ways to Treat a Common Problem
Classification: Patient Factsheet
File Name: Pain – Patient – Pain Information Guide
IB&P Number: IB 10-1017, P96865

Opioid Use Disorder

Provider Materials

Classification: Provider Educational Guide
File Name: OUD – Provider AD – Educational Guide
IB&P Number: IB 10-933, P96813

Opioid Use Disorder Identification and Management of Opioid Use Disorder
Classification: Provider Quick Reference Guide
File Name: OUD – Provider AD – Quick Reference Guide
IB&P Number: IB 10-932, P96812

Patient Materials

Opioids: Do You Know the Truth About Opioid Use Disorder?
Classification: Patient Brochure
File Name: OUD – Patient AD – Direct to Consumer Brochure
IB&P Number: IB 10-937, P96829

Opioid Overdose Education and Naloxone Distribution

Provider Materials

Opioid Overdose Education and Naloxone Distribution
Classification: Provider Quick Reference Guide
File Name: OEND – Provider – Quick Reference Guide
IB&P Number: IB 10-788, P96798

Provider DVD: VA Opioid Overdose Rescue with Naloxone
Classification: DVD
File Name: OEND – Patient – Provider DVD: VA Opioid Overdose Rescue with Naloxone
IB&P Number: IB 10-770, P96764

Patient Materials

Naloxone Instructions

Naloxone Nasal Spray 4 mg Instructions – Pocket Card
Classification: Patient Brochure
File Name: OEND – Patient – OEND Patient Brochure – Pocket Card
IB&P Number: IB 10-526, P96868

Naloxone Overdose Rescue with Naloxone: Auto-Injector Kit Instructions, v1
Classification: Patient Brochure
File Name: OEND – Patient – Naloxone Kit Instructions – Auto-Injector, v1
IB&P Number: IB 10-917, P96762

Internet: VA PBM Academic Detailing Public Internet Site LINK
Opioid Therapy Risk Report – OTRR

• Tool optimized for Primary Care Aligned teams: review their panel for all patients on long-term opioids
• Multitude of factors that potentially increase risk incl. MH diagnoses
  
  • Opioid risk mitigation parameters including last PDMP check
  
  • Updated nightly
  
  • Individual report includes Visual display
    • Opioid dosage
    • Pain score (severity)
  
  • LTOT definition: opioid dispensed in the last 90 days and total days supply ≥ 90 days in the past 180 days
| Patient Name | Patient ID | Date of Birth | Age | Gender | Health | Last 30 Days | EQOL | Check Date | EQOL | Check From | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date | EQOL | Check Date |
|--------------|------------|---------------|-----|--------|--------|--------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|
| DOT_099     | 1          | 1/1/1996      | 55  | M      | Avg Health | 45             | 31  | 2           | 14%  | 2/26/2018   | 60   | 12/7/2018   | 12/11/2018 |
| DOT_040     | 5          | 1/1/1992      | 69  | M      | Avg Health | 12             | 24  | 1           | 3%    | 2/26/2018   | 60   | 1/20/2018   | 1/20/2018   |
Stratification Tool for Opioid Risk Mitigation – STORM

- Predicts individual risk of overdose or suicide-related health events or death in the next year
- For patients on opioids and when considering opioid therapy.
- Identifies patients at-risk for opioid overdose-/suicide-related adverse events.
- Provides patient-centered opioid risk mitigation strategies, targeted at risk level.
<table>
<thead>
<tr>
<th>Patient Information</th>
<th>Relevant Diagnoses</th>
<th>Relevant Medications</th>
<th>Risk Mitigation Strategies</th>
<th>Neuro-Pharmaceutical Pain Tx</th>
<th>Care Providers</th>
<th>Recent Appointments</th>
<th>Upcoming Appointments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>Medical Lymphoma</td>
<td>Anxiety, Bipolar Illness Failure</td>
<td>PRECASAULIN, Dr. DiMeglio Sedation Medications (Consider Tonger) ZOLPIDEM, Dr. DiMeglio CLONAZAPAM, Dr. DiMeglio</td>
<td>PUMP, Psychosocial Assessment, Psychosocial Tx, Suicide Safety Plan, Taper/Minimize Sactiva Rx, Timely follow-up (90 D), Timely UDS (1 Year)</td>
<td>Occupational Therapy</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/16/2019</td>
<td>1/28/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/28/2019</td>
<td>12/23/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/15/2019</td>
<td>4/15/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/15/2018</td>
<td>12/15/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pain Clinic</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Specialty Therapy</td>
<td>Other Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Recent</td>
<td>OtherRecent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/22/2016</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/9/2017</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRO, URO-Med, Mental Health Clinic - Ind</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/1/2016</td>
<td>Mental Health Clinic - Ind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Information</th>
<th>Relevant Diagnoses</th>
<th>Relevant Medications</th>
<th>Risk Mitigation Strategies</th>
<th>Neuro-Pharmaceutical Pain Tx</th>
<th>Care Providers</th>
<th>Recent Appointments</th>
<th>Upcoming Appointments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>Medical Lymphoma</td>
<td>Anxiety, Bipolar Illness Failure</td>
<td>PRECASAULIN, Dr. DiMeglio Sedation Medications (Consider Tonger) ZOLPIDEM, Dr. DiMeglio CLONAZAPAM, Dr. DiMeglio</td>
<td>PUMP, Psychosocial Assessment, Psychosocial Tx, Suicide Safety Plan, Taper/Minimize Sactiva Rx, Timely follow-up (90 D), Timely UDS (1 Year)</td>
<td>Occupational Therapy</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/16/2019</td>
<td>1/28/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/28/2019</td>
<td>12/23/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/15/2019</td>
<td>4/15/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/15/2018</td>
<td>12/15/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pain Clinic</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Specialty Therapy</td>
<td>Other Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Recent</td>
<td>OtherRecent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/22/2016</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/9/2017</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRO, URO-Med, Mental Health Clinic - Ind</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/1/2016</td>
<td>Mental Health Clinic - Ind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Information</th>
<th>Relevant Diagnoses</th>
<th>Relevant Medications</th>
<th>Risk Mitigation Strategies</th>
<th>Neuro-Pharmaceutical Pain Tx</th>
<th>Care Providers</th>
<th>Recent Appointments</th>
<th>Upcoming Appointments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>Medical Lymphoma</td>
<td>Anxiety, Bipolar Illness Failure</td>
<td>PRECASAULIN, Dr. DiMeglio Sedation Medications (Consider Tonger) ZOLPIDEM, Dr. DiMeglio CLONAZAPAM, Dr. DiMeglio</td>
<td>PUMP, Psychosocial Assessment, Psychosocial Tx, Suicide Safety Plan, Taper/Minimize Sactiva Rx, Timely follow-up (90 D), Timely UDS (1 Year)</td>
<td>Occupational Therapy</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/16/2019</td>
<td>1/28/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/28/2019</td>
<td>12/23/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/15/2019</td>
<td>4/15/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/15/2018</td>
<td>12/15/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pain Clinic</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Specialty Therapy</td>
<td>Other Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Recent</td>
<td>OtherRecent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/22/2016</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/9/2017</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRO, URO-Med, Mental Health Clinic - Ind</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/1/2016</td>
<td>Mental Health Clinic - Ind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Information</th>
<th>Relevant Diagnoses</th>
<th>Relevant Medications</th>
<th>Risk Mitigation Strategies</th>
<th>Neuro-Pharmaceutical Pain Tx</th>
<th>Care Providers</th>
<th>Recent Appointments</th>
<th>Upcoming Appointments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>Medical Lymphoma</td>
<td>Anxiety, Bipolar Illness Failure</td>
<td>PRECASAULIN, Dr. DiMeglio Sedation Medications (Consider Tonger) ZOLPIDEM, Dr. DiMeglio CLONAZAPAM, Dr. DiMeglio</td>
<td>PUMP, Psychosocial Assessment, Psychosocial Tx, Suicide Safety Plan, Taper/Minimize Sactiva Rx, Timely follow-up (90 D), Timely UDS (1 Year)</td>
<td>Occupational Therapy</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/16/2019</td>
<td>1/28/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/28/2019</td>
<td>12/23/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/15/2019</td>
<td>4/15/2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/15/2018</td>
<td>12/15/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pain Clinic</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Specialty Therapy</td>
<td>Other Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other Recent</td>
<td>OtherRecent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/22/2016</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/9/2017</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRO, URO-Med, Mental Health Clinic - Ind</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/1/2016</td>
<td>Mental Health Clinic - Ind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIH Appointment</td>
<td>MIH Appointment</td>
</tr>
</tbody>
</table>
Reduction in Opioid Prescribing in VHA

Decline in Prescription Opioids Attributable to Decreases in Long-Term Use: A Retrospective Study in the Veterans Health Administration 2010–2016

Hadlandsmyth et al, J Gen Intern Med 2018

![Graph showing the prevalence of opioid prescribing by calendar year and long-term use type from 2010 to 2016.](image-url)
Opioid Use Disorder (OUD) Medication for VHA Treated Veterans with OUD

Starting in FY14, Extended-Release Naltrexone was counted as a medication assisted treatment for OUD.
Co-occurring mental illness is associated with increased risk of suicidal thoughts and behaviors in opioid-dependent individuals. (Demidenko-2017, Gen Hosp Psychiatry)

Internal VHA data show that Veterans were at increased risk of unintentional overdose or suicide death (all manner of suicide, not just overdose) within the first six months of starting or stopping prescription opioid pain medicine. (Sordo et al-2017, BMJ)
• Patients with chronic pain are twice as likely as those without chronic pain to die of suicide (Tang & Crane- 2006, Psychol Med)
  – Risk increases with the intensity of pain (Ilgen et al-2010, Suicide & Life)
  – Risk increases with opioid analgesic dose (Ilgen-2016, Pain)

• Patients with opioid use disorder are 13 times more likely to die of suicide than the general population (Wilcox et al-2004, Drug Alc Dep)
  – VHA-treated Veterans are ~7 times more likely to be diagnosed with OUD than the commercially insured population (Baser et al-2014, Pain Practice)
Ways You Can Help Prevent Suicide in Veterans with Pain, Opioid Use, or Opioid Use Disorder (OUD)

• Assess for suicide risk among all Veterans with opioid use
• Assess for opioid use among Veterans at risk for suicide
• Access the Opioid Safety Initiative Toolkit (https://www.va.gov/painmanagement/opioid_safety_initiative_osi.asp)
• Direct Veterans to the VHA’s online opioid safety information:
• Provide additional support, treatment, and wrap around services during transition periods on and off opioid therapy for pain and medication for OUD
• Ensure that Veterans considered for or receiving opioid pain medication are screened for illicit substances and other prescriptions per treatment guidelines.

• Address and treat co-occurring psychiatric conditions in Veterans who have attempted suicide or are at risk for suicide.

• Encourage medication treatment for opioid use disorder which reduces the risk of suicide.
  – Treatment with buprenorphine may benefit those with depression and OUD

• Provide opioid overdose education and naloxone for overdose reversal to Veterans and their family members
Special THANKS

- Chris Buser, LCSW-C, BCD
- Karen Drexler, MD
- Sarah Reading, MD
- Friedhelm Sandbrink, MD
- Christopher Welsh, MD
- VA Center for Medication Safety
- VA National Mental Health Program - Substance Use Disorders
- VA Pharmacy Benefits Management Services
- VA Program Evaluation Research Center
- VA Program for Pain Management
- VA Office of Academic Affiliations
National Suicide Prevention Hotline
(1-800-273-TALK)

Treatment Referral HELPLINE
(1-800-662-HELP)
Joseph G. Liberto, MD
Associate Chief of Staff, Education
VA Maryland Health Care System
Joseph.Liberto@va.gov