

Data-Based Case Reviews of Patients with Opioid Related Risk Factors as a Tool to Prevent Overdose and Suicide

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Poll question #1

I am primarily attending because I'm interested in:

- Suicide prevention
- Pain management and opioid therapy
- Implementation of new clinical initiatives
- Other

Please check all that apply

Poll question #2

How much experience do you have with STORM

- None
- A little
- Some
- Quite a bit

Opioid prescribing and overdose or suicide-related events

VHA is committed to enhancing the safe and efficacious care of Veterans exposed to opioids

VIEWPOINT

Addressing the Opioid Epidemic in the United States: Lessons From the VA

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Office of the Under Secretary for Health, US Department of Veterans Affairs, Washington, DC.

Over the past 15 years, more than 400 000 people in the United States have died from prescription opioids,¹ and millions have experienced adverse consequences.^{2,3} The misuse of prescription opioids has contributed to a dramatic increase in heroin and fentanyl overdoses. Patients treated in the health care system are a part of Veterans Affairs' response to the epidemic. Chronic pain impacts 20% of VA patients, complicated by high rates of comorbidities such as substance use disorders and post-traumatic stress disorder.⁴ In 2009, the VA established a national office to coordinate and improve pain management practices, and in 2011, developed standardized metrics for opioid use across the system. Nonetheless, by 2012, nearly 25% of veterans receiving outpatient care in the VA were receiving an opioid.

In 2013, the VA launched the Opioid Safety Initiative (OSI), the first of several system-wide initiatives to address opioid overuse. By leveraging the department's data capabilities and organization, these initiatives reduced the use of opioid medications and improved the safety of opioid prescribing, while expanding alternative pain therapies (Figure). By mid-2016 compared with mid-2012, the number of veterans dispensed an opioid each quarter had decreased by 172 000, or about 25%. Moreover, there were 57 000 (47%) fewer patients receiving concomitant opioids and benzodiazepines and 22 000 (36%) fewer patients receiving daily opioid dosages of more than 100 morphine-milligram equivalents, both measures of potentially unsafe opioid use. Between 2010 and 2015, the rate of

Strategies to Address the Opioid Epidemic
The VA has employed 4 broad strategies to address the opioid epidemic: education, pain management, risk mitigation, and addiction treatment (eTable in the Supplement).

Pain Management

Improving pain management is a cornerstone of the VA's comprehensive efforts to reduce the risks associated with opioid prescribing.⁴ In 2009, the VA issued a policy directive for stepped pain treatment, emphasizing interdisciplinary teamwork as a delivery model for pain management. Additionally, the department expanded complementary and integrative medicine and access to nonopioid pharmacologic (eg, topical gels) and nonpharmacologic (eg, acupuncture) pain therapy. The VA also expanded mini-residency programs and telemedicine consult capabilities for primary care clinicians to improve their management of pain.

Risk Mitigation

The VA implemented several strategies to support and track risk mitigation activities for opioid therapy (eTable in the Supplement). A key component of the Opioid

Gellad WF, Good CB, and Shulkin DJ. JAMA Intern Med. 2017 May 1;177(5):611-612

S.T.O.P. P.A.I.N. – 8 VA Best Practices

S – Stepped Care Model for Opioid Use Disorder & Pain

T – Treatment alternatives/Complementary care

O – Ongoing monitoring of usage

P – Practice Guidelines

P – Prescription monitoring

A – Academic Detailing

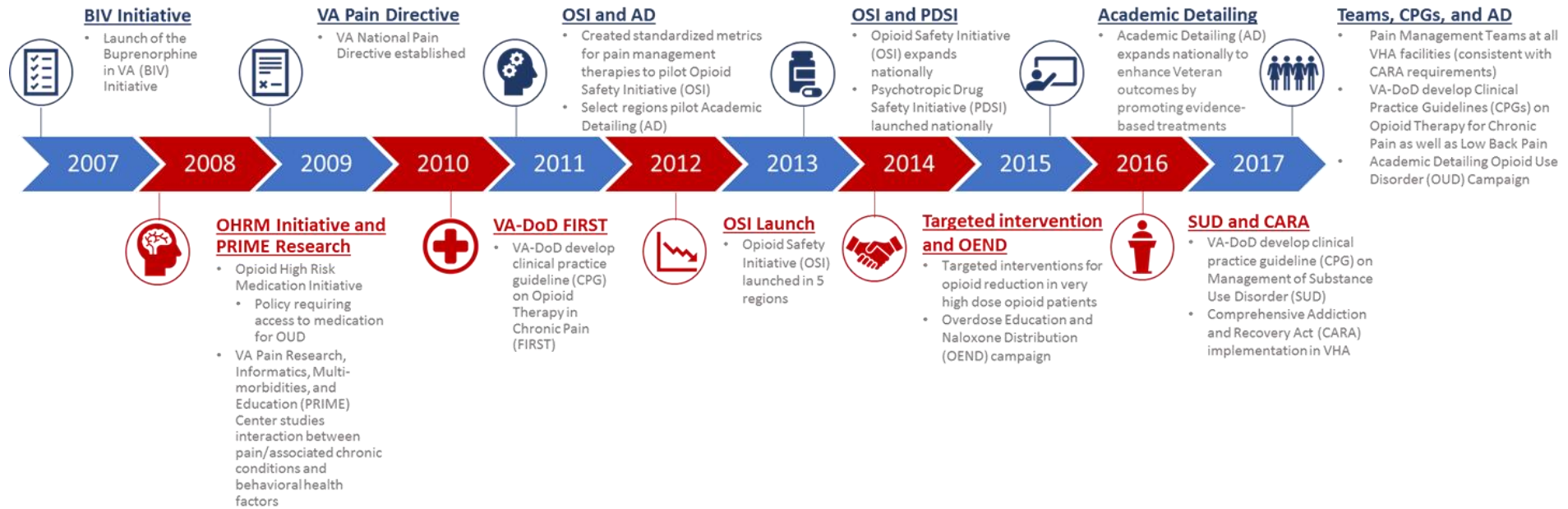
I – Informed Consent

N – Naloxone distribution

<https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2934>



VA Opioid Safety Initiative (OSI) Timeline



But...

External reviews continue to argue that VA struggles with reducing risk and improving opioid safety.



United States Government Accountability Office
Report to Congressional Committees

May 2018

VA HEALTH CARE

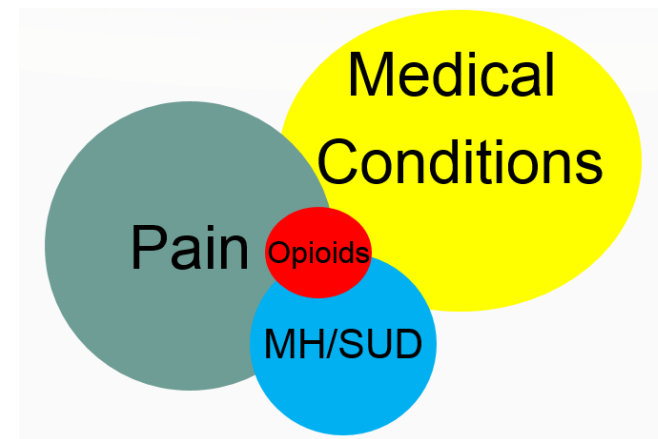
Progress Made
Towards Improving
Opioid Safety, but
Further Efforts to
Assess Progress and
Reduce Risk Are
Needed

Extending the Opioid Safety Initiative

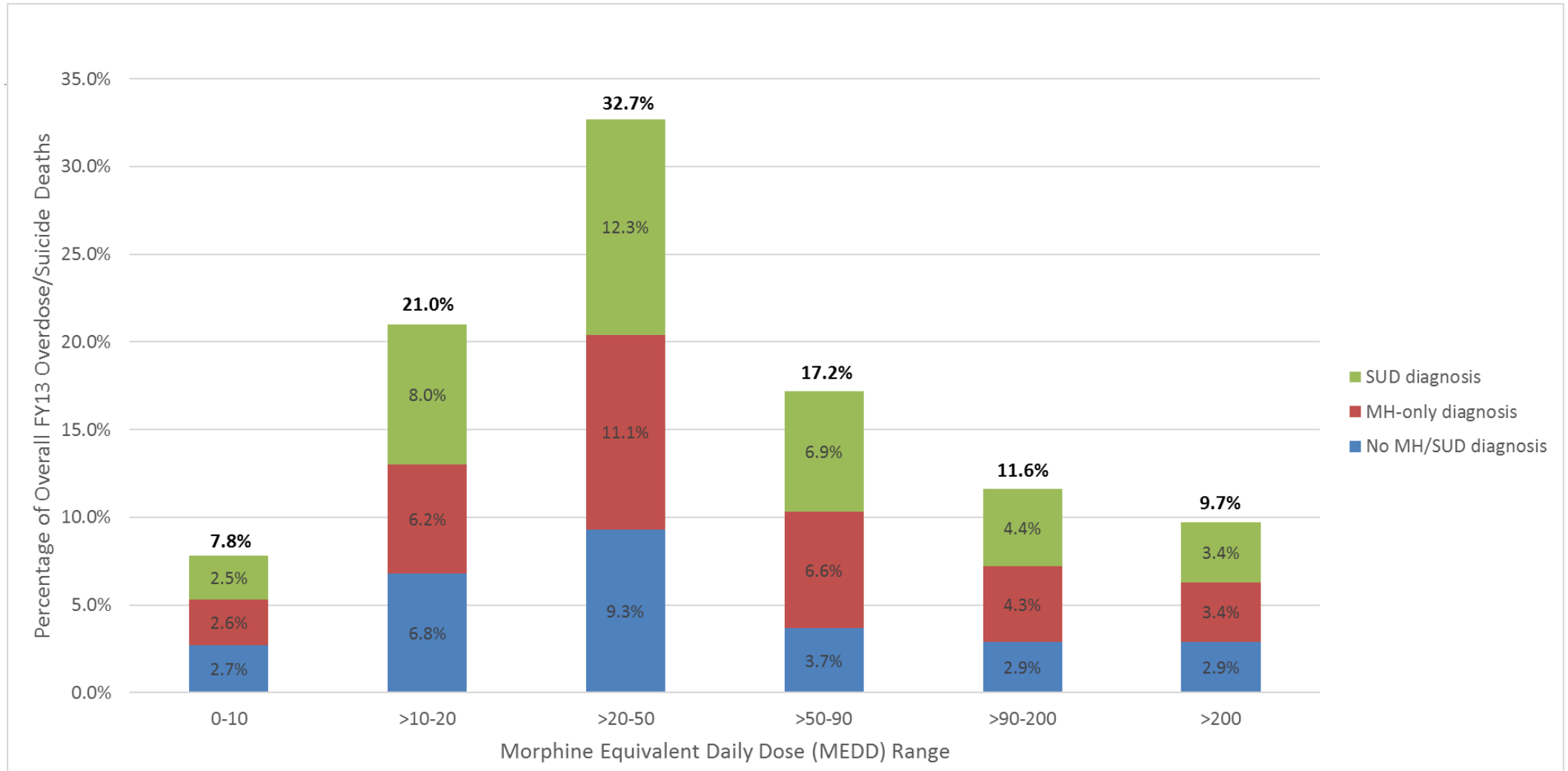
- Initial Opioid Safety Initiative efforts focused on improving opioid prescribing practices, making the prescription safer
- Huge improvements in opioid prescribing practice have been made through efforts across the system:
 - Fewer opioid prescriptions
 - Less high dose prescribing
 - Less co-prescribing with benzodiazepines
 - More universal precautions
 - Informed consent
 - Urine Drug Screening
 - Prescription Drug Monitoring Program checks

Extending the Opioid Safety Initiative

- But patients are still dying of overdose and suicide
 - Overall overdose and suicide rates among VA patients are still high, even if rates are declining among patients receiving VA opioid prescriptions
 - Most of the patients who die of overdose or suicide are receiving low to moderate dose opioid prescriptions
- Need to go beyond the prescriptions to address the biopsychosocial factors that contribute to suicide and overdose mortality, addiction and other adverse events



FY2013 Overdose/Suicide Mortality



Experience with predictive model-driven clinical review for reducing mortality

- REACH VET Model estimates risk of a suicide death in the next month
- Top 0.1% of patients based at each facility each month receive:
 - Case review
 - Out-reach phone call
- Initial evaluation found reductions in all-cause mortality in first 3-6 months:
 - 1.1% versus 1.6% in comparison to pre-time frame
 - 1.1% versus 2.2% in comparison to patients from top 0.1%-0.5%
 - Fewer inpatient admissions and ED visits, more outpatient mental health visits
 - Fewer missed appointments and more safety plans
- Suggests that targeting extra clinical attention to those with modeled risk has substantial clinical and health care system benefits

What should VA do next?

The STORM model and Dashboard

What is the STORM risk model?

- Uses demographic, diagnostic, pharmacy, and health care utilization data from the Corporate Data Warehouse
- Predicts risk of overdose or suicide-related health care events or death in the next year and generates patient-specific risk score
- Parameters from model are applied to Veteran health care data and updated nightly to create individual estimates of risk in STORM
- Detailed background and data on the STORM risk model:
 - Oliva EM, Bowe T, Tavakoli S, Martins S, Lewis ET, Paik M, Wiechers I, Henderson P, Harvey M, Avoundjian T, Medhanie A, Trafton JA. [Development and applications of the Veterans Health Administration's Stratification Tool for Opioid Risk Mitigation \(STORM\) to improve opioid safety and prevent overdose and suicide](#). Psychol Serv. 2017 Feb;14(1):34-49.

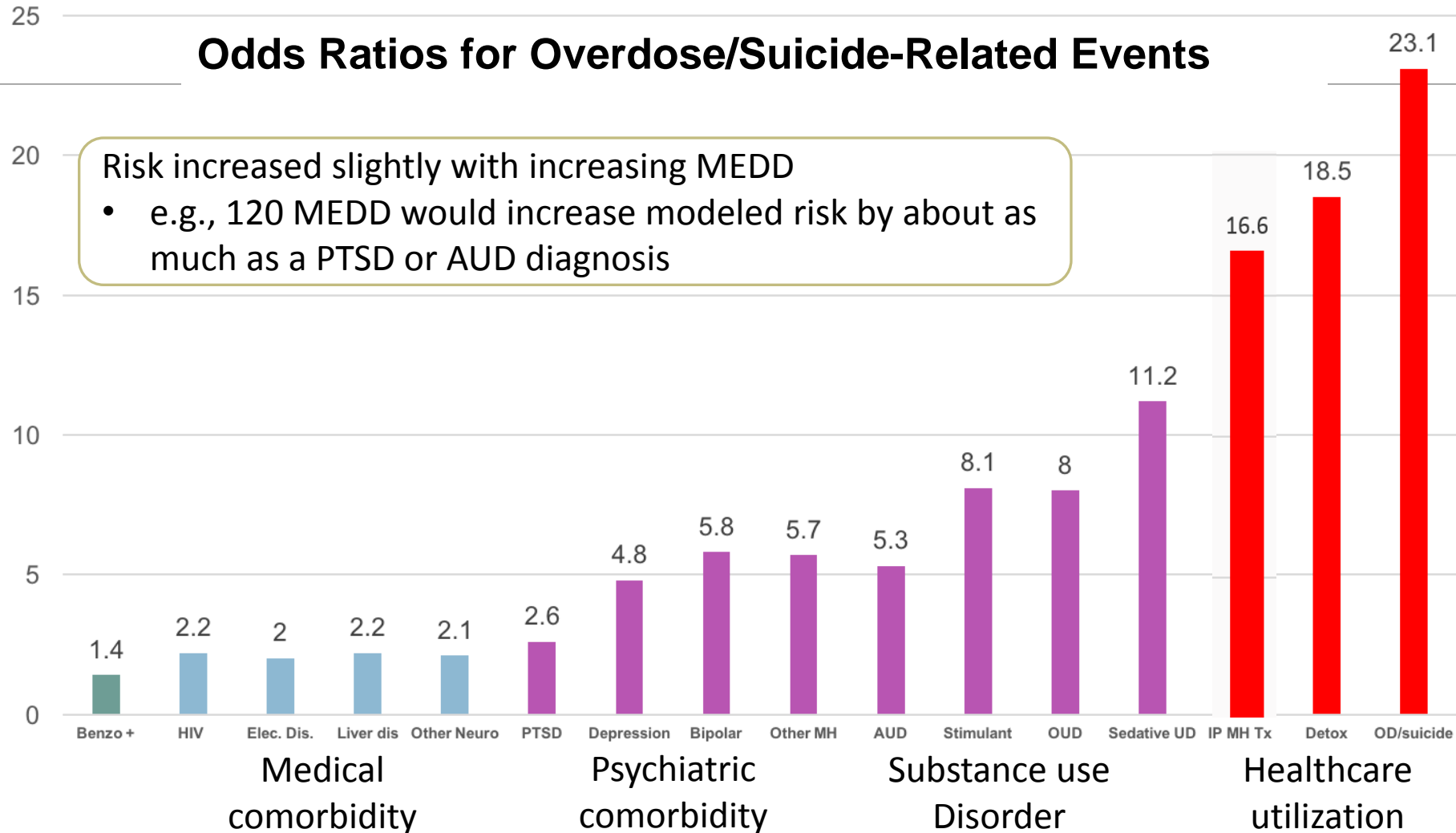
Interpreting the STORM Risk Score

- The risk score is designed to help understand Veteran risk level to support treatment planning
- Risk factors are often not changeable, so the goal should not be to change estimated risk
- The goal should be to design a treatment plan that addresses risk factors and is appropriate for the patient's risk level
 - For example, higher risk patients may need more monitoring, more risk mitigation intervention, care coordination between services, and higher intensity of care

Strong diagnostic and health care event risk factors for overdose or suicide-related events

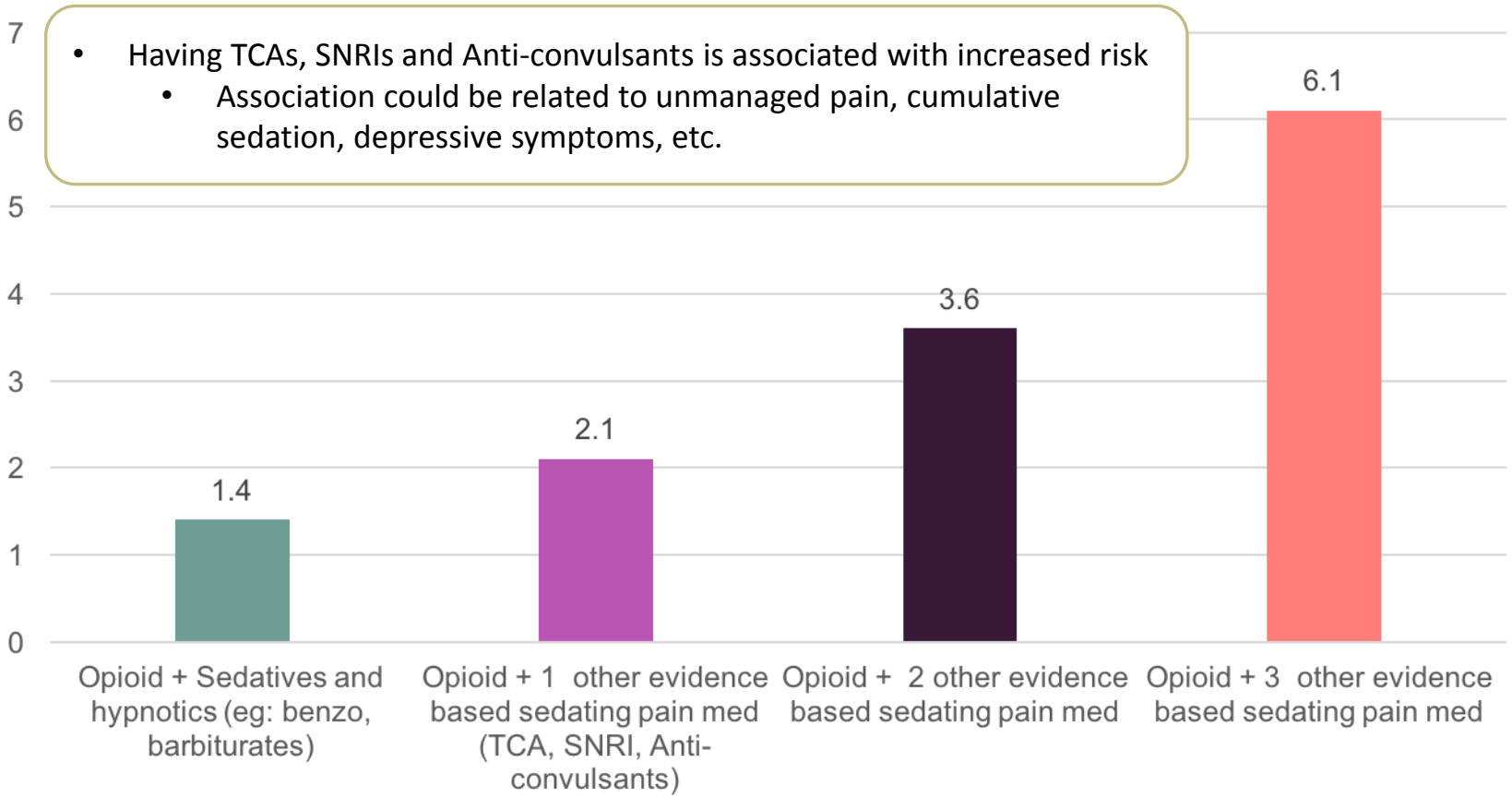
Risk factor	Odds Ratio	Model Parameter
● Prior overdose or suicide-related event	23.1	2.62
● Detoxification treatment	18.5	.06
● Inpatient mental health treatment	16.6	1.0
● Sedative use disorder diagnosis	11.2	.23
● Stimulant use disorder diagnosis	8.1	.73
● Opioid use disorder diagnosis	8.0	.31
● Mixed substance use disorder	8.0	.33
● Cannabis use disorder	5.9	.27
● Bipolar disorder	5.8	.82
● Alcohol use disorder	5.3	.36
● Other mental health disorder	5.7	.73
● Major Depression	4.8	.61
● Emergency Department visit	3.4	.72
● Fall or accident	2.9	.44
● PTSD	2.6	.34
● Tobacco use disorder	2.2	.18
● AIDS	2.2	.20
● Liver Disease	2.2	.15
● Other neurological disorder	2.1	.18
● Electrolyte disorders	2.0	.19

MH/SUD and Non-Opioid Related Factors Have Higher Odds Ratios than Opioid-Related Factors in VHA Predictive Model



High Odds Ratios for Other Evidence-Based Sedating Pain Medications

Odds Ratios for Overdose/Suicide-Related Events



Risk scores for patients with no opioid prescription

- If a patient has **no active opioid prescription** the report will calculate 3 “hypothetical” STORM risk scores
 - On the STORM look-up report a patient’s risk factor information is combined with hypothetical prescription information assuming prescription of a low (20 MEDD), medium (50 MEDD), or high (90 MEDD) dose of a short-acting opioid analgesic
- If a patient has no active opioid prescription and an **opioid use disorder**, the report will calculate a “hypothetical” STORM risk score. These patients are their own category in STORM.
 - The STORM model includes information on opioid dose and prescription type in the model. We do not have any information on the dose of opioids consumed by patients taking them illicitly.
 - To calculate the hypothetical score, STORM assumes that a patient with an opioid use disorder is consuming a high dose of short-acting opioids daily, estimated as 90 MEDD in the model.

What is the STORM dashboard?

Clinical decision support tool updated nightly that:

**Identifies patients at-risk for
overdose-/suicide-related adverse events**

**Provides patient-centered opioid risk
mitigation strategies**

Key features of STORM

Estimates an individual patient's risk for an overdose-/suicide-related adverse event or death based on predictive models

- Patients with active opioid prescriptions
- Patients with an opioid use disorder diagnosis in the past year
- Hypothetical risk for patients considering initiating opioid therapy

Provides patient-centered opioid risk mitigation strategies by displaying:

- Risk factors that place patients at-risk (e.g., co-Rx benzodiazepines, previous adverse events, mental health and medical diagnoses, opioid dose)
- Risk mitigation strategies, including non-pharmacological treatment options, employed and/or to be considered
- Patients' upcoming appointments and current providers to facilitate care coordination

Note: changes made to the patient medical record/CPRS will not display until the next day. Use STORM in conjunction with CPRS for most up to date clinical information.

Accessing STORM

- Hyperlink in the CPRS Tools Menu
- STORM Dashboard Hyperlink:
- https://spsites.cdw.va.gov/sites/OMHO_PsychPharm/Pages/Real-Time-STORM-Dashboard.aspx

STORM Home Page

Welcome to the Stratification Tool for Opioid Risk Mitigation (STORM) Home Page!

Reports:

- STORM Summary Report
- **STORM Patient Detail Report**

Click here for de-identified version

Click here for quick view patient report

- STORM SSN Look-Up Report

Supporting Materials

Other Resources

- Opioid Overdose Education & Naloxone Distribution (OEND)
- Opioid Metrics Report

? About
STORM

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Permissions

? User Guides

? Definitions

STORM Patient Detail Report

➤ [Main Page](#)




STORM: Patient Detail Dashboard Stratification Tool for Opioid Risk Mitigation

New Feature! Relevant diagnosis are now hyperlinked to display the ICD code and source.

[Home](#) [About](#) [Definitions](#) [Contact Us](#) [Quick View Report](#) [Export this view](#) [Set Custom View](#)

Total Patients: 5 Last Update: 12/18/17

Patient Information	What factors contribute to my patient's risk?		How to better manage my patient's risk		How can I follow-up with this patient?																																																						
	Relevant Diagnoses	Relevant Medications	Risk Mitigation Strategies	Non-pharmacological Pain Tx	Care Providers	Recent Appts	Upcoming Appts																																																				
ZZTEST,CPRS THIRTY FIVE FIVE Last Four: 93.82 Age: 54 Gender: M Risk: Suicide or Overdose (1 yr) Very High - Active Opioid Rx 24% RIOSORD :Score:5 Risk Class:1 Active Stations • (512) Maryland HCS (Baltimore MD) Chart Review Note	Substance Use Disorder Alcohol Cannabis Nicotine Sedative Mental Health Depression PTSD Medical Congestive Heart Failure Hypertension Weight loss	Opioid TRAMADOL • Dr Zivago Sedating Medication GABAPENTIN • Dr Zivago	 <table border="0"> <tr><td>MEDD <= 90**</td><td><input checked="" type="checkbox"/></td><td>15.0</td></tr> <tr><td>Naloxone Kit</td><td><input type="checkbox"/></td><td></td></tr> <tr><td>Opioid Signed Informed Consent</td><td><input type="checkbox"/></td><td></td></tr> <tr><td>Timely Follow-up</td><td><input checked="" type="checkbox"/></td><td>12/12/2017</td></tr> <tr><td>Timely UDS</td><td><input checked="" type="checkbox"/></td><td>11/29/2017</td></tr> <tr><td>Psychosocial Assessment</td><td><input checked="" type="checkbox"/></td><td>11/30/2017</td></tr> <tr><td>Psychosocial Tx</td><td><input checked="" type="checkbox"/></td><td>7/6/2017</td></tr> <tr><td>Bowel Regimen</td><td><input checked="" type="checkbox"/></td><td></td></tr> <tr><td>PDMP</td><td><input checked="" type="checkbox"/></td><td>7/5/2017</td></tr> <tr><td>Data-based Opioid Risk Review</td><td><input type="checkbox"/></td><td></td></tr> <tr><td>Safety Plan</td><td><input checked="" type="checkbox"/></td><td>12/4/2017</td></tr> <tr><td>Active SUD Tx</td><td><input checked="" type="checkbox"/></td><td>12/4/2017</td></tr> </table>	MEDD <= 90**	<input checked="" type="checkbox"/>	15.0	Naloxone Kit	<input type="checkbox"/>		Opioid Signed Informed Consent	<input type="checkbox"/>		Timely Follow-up	<input checked="" type="checkbox"/>	12/12/2017	Timely UDS	<input checked="" type="checkbox"/>	11/29/2017	Psychosocial Assessment	<input checked="" type="checkbox"/>	11/30/2017	Psychosocial Tx	<input checked="" type="checkbox"/>	7/6/2017	Bowel Regimen	<input checked="" type="checkbox"/>		PDMP	<input checked="" type="checkbox"/>	7/5/2017	Data-based Opioid Risk Review	<input type="checkbox"/>		Safety Plan	<input checked="" type="checkbox"/>	12/4/2017	Active SUD Tx	<input checked="" type="checkbox"/>	12/4/2017	<table border="0"> <tr><td>Active Therapies</td><td><input type="checkbox"/></td></tr> <tr><td>CIH Therapies</td><td><input type="checkbox"/></td></tr> <tr><td>Chiropractic Care</td><td><input type="checkbox"/></td></tr> <tr><td>Occupational Therapy</td><td><input type="checkbox"/></td></tr> <tr><td>Pain Clinic</td><td><input type="checkbox"/></td></tr> <tr><td>Physical Therapy</td><td><input type="checkbox"/></td></tr> <tr><td>Specialty Therapy</td><td><input type="checkbox"/></td></tr> <tr><td>Other Therapy</td><td><input type="checkbox"/></td></tr> </table>	Active Therapies	<input type="checkbox"/>	CIH Therapies	<input type="checkbox"/>	Chiropractic Care	<input type="checkbox"/>	Occupational Therapy	<input type="checkbox"/>	Pain Clinic	<input type="checkbox"/>	Physical Therapy	<input type="checkbox"/>	Specialty Therapy	<input type="checkbox"/>	Other Therapy	<input type="checkbox"/>	BHIP TEAM: • Bt Mh Team 3 MH Tx Coordinator: • Mhtc,Ima Opioid Prescriber: • Prescriber,Ima PACT Team: • Bt Pact Team Twelve Primary Care Provider: • Pcp,Ima	Other • 12/6/2017 Telephone Mh Primary Care • 11/19/2017 Primary Care/Medicine Specialty Pain None Mental Health • 12/2/2017 Mental Health Clinic - Ind	Other • 12/16/2017 GI Endoscopy Primary Care • 12/18/2017 Primary Care/Medicine Specialty Pain None Mental Health • 1/6/2018 Mental Health Clinic - Ind
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Contributing Risk Factors

Patient Information and Risk of Suicide/Overdose

Risk Mitigation Management

Care team & Follow-up

STORM Risk Mitigation Strategies support implementation of policy initiatives to reduce opioid risks

- Informed Consent for Chronic Opioid Therapy
- Prescription Drug Monitoring Program Checks
- Urine drug screening during opioid therapy
- Safety planning
- Medication assisted therapy for opioid use disorders
- Opioid Overdose Education and Naloxone Distribution

VHA Notice 2018-08: Conduct of Data-Based Case Reviews of Patients with Opioid-Related Risk Factors

Key Points of Notice 2018-08

- Link: https://vaww.va.gov/vhapublications/ViewPublication.asp?pub_ID=6366
- This notice extends the efforts of the Opioid Safety Initiative
 - Data-based case reviews can be conducted in lieu of OSI reviews at facility discretion
- This notice meets the mandates in the Comprehensive Addiction and Recovery Act of 2016, Title IX, Subtitle A, Section 911(a)(2)
- Patient information may be reviewed in the medical record and any clinical decision support tool
- Data-based case reviews do not replace universal precautions or clinical discretion

Data-based Risk Review

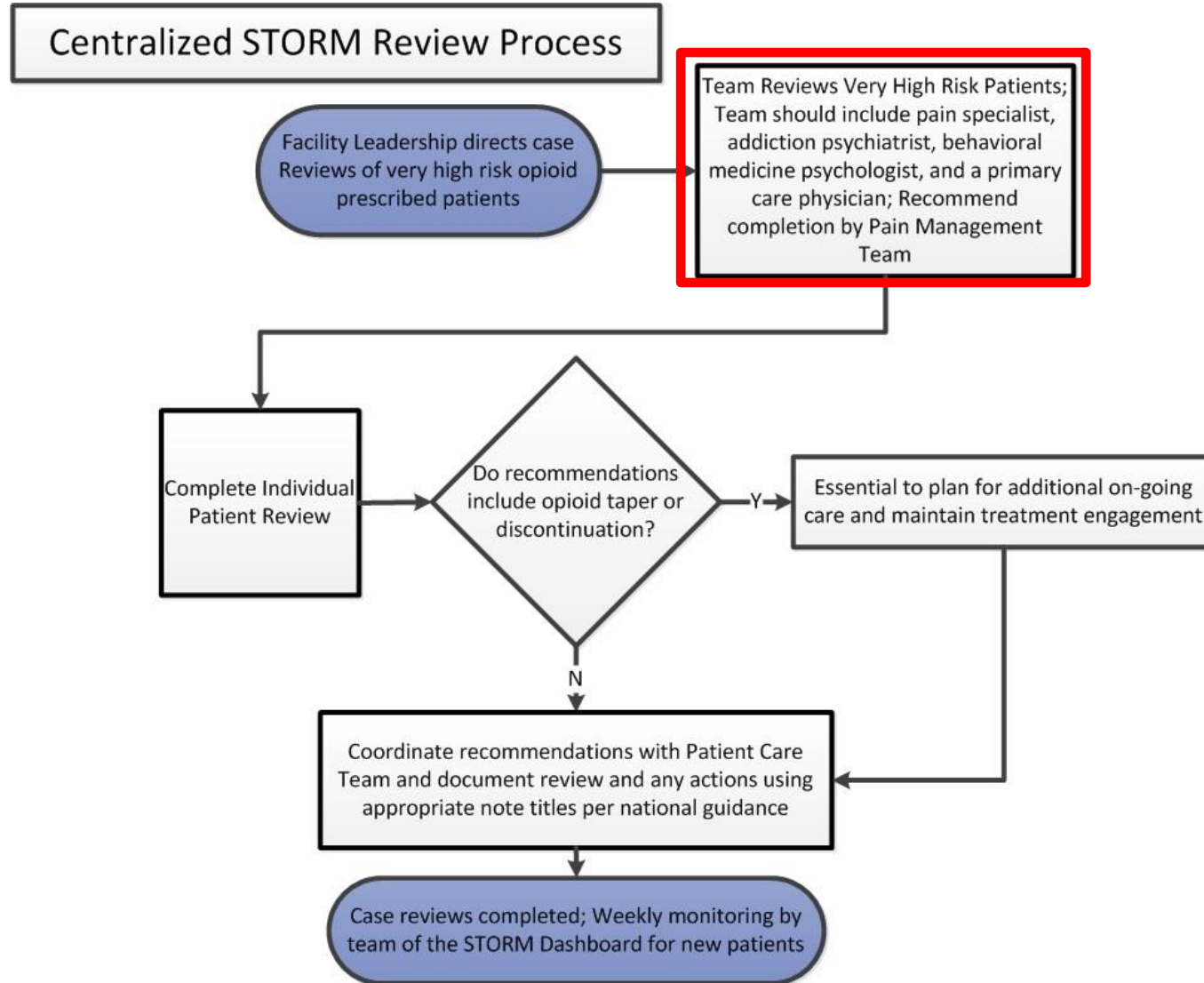
- These data-based risk review efforts are designed to focus attention on whole patient needs and encourage collaborative treatment planning, particularly across primary care, mental health, and pain management providers
 - Two populations addressed:
 - Patients estimated to be at very high risk of overdose or suicide based on predictive models
 - Patients considering new initiation of opioid therapy
- Continue to encourage safe prescribing practices, but extend efforts to ensure engagement with mental health, substance use disorder treatment, suicide prevention, specialty pain, and rehabilitative services (e.g., PT, OT, homeless) as needed
 - Additionally increase awareness of cross-facility care and clarify care responsibilities

Required Data-Based Case Reviews

Centralized Review of Patients on opioid therapy at Very High Risk for an Adverse Event

Point of Care review of patients with new opioid prescribing prior to initiation

Centralized Review Process



Who conducts interdisciplinary reviews?

- Interdisciplinary Pain Management Teams:
 - [Mandated in 10N Memorandum](#)
 - Comprehensive Addiction and Recovery Act (CARA) Requirements from Section 911(c) Pain Management Team Facility Report, dated May 22, 2017

OR

- Opioid Safety Initiative review teams with interdisciplinary representation
- Facility leadership should ensure that staff on teams have training, adequate dedicated time, and appropriate representation

Why is interdisciplinary review so important?

- Veterans suffer more commonly from chronic pain than Non-Veterans, and their pain is more often severe and complex, and often associated with psychiatric and medical comorbidities
- Suicide and overdose prevention includes timely access to pain management with integrated behavioral therapies and mental health and addiction expertise as appropriate
- Coordination between the different clinical areas is essential to promote efficient use of resources and smooth transition of the Veteran between the care areas

Commonly observed challenges

Siloed pain management and mental health care

- Effective non-opioid treatments for chronic pain and mental health conditions include psychotropic prescribing, psychosocial treatment, and integrated health approaches
- Functional goal/recovery focus is key to effective treatment planning and patient management
- Biopsychosocial factors and sleep problems complicate treatment of both pain and mental health/SUD
- Provider collaboration on treatment planning is key to optimizing psychotropic prescribing, avoiding conflicting plans, and preventing patients from falling through gaps in perceived clinical responsibility

Commonly observed challenges

Transient patients receiving care at multiple locations

- Incomplete awareness of care being received elsewhere
- Confusion around on-going management plans/assigned providers
 - Multiple PACT/BHIP team assignments
- Gaps in management during patient moves
- Duplicative prescriptions

Common complaint: “We haven’t seen this patient (on my panel) in years!”

Commonly observed challenges

- Lack of patient engagement in treatment for known substance use disorder and mental health conditions
- Lack of focus on suicide risk in pain-focused settings and lack of focus on overdose risk in mental health-focused settings

Example Very High Risk patient profile

Older white male

Extensive medical comorbidity

SUD including opioid use disorder and depression

Recent history of suicidal ideation, sedative overdose and falls

Multiple active opioid prescriptions from different providers within a facility

Multiple active prescriptions for same psychotropic across facilities

No MH/SUD care in last 10 months and none scheduled

What can you do?

Resolve duplicative prescribing across providers and facilities and converge on a single medication plan

Reengage patient in MH and SUD care and consider medication assisted therapy

Provide overdose education and naloxone and review safety plan with patient

Suicide prevention and opioid safety are not separate

Example Very High Risk patient profile

Diagnosed polysubstance use disorder, including opioid use disorders

- No active engagement in SUD treatment or MAT

Mental health comorbidities

- Bipolar and PTSD
- No upcoming MH appts

Low opioid dose

- Tramadol 5 mg
- But no informed consent, OEND, PDMP checks, or UDS

Sedative overdose in the last year

Medical Comorbidities

- Liver disease

What can you do?

Encourage engagement in mental health and SUD treatment

Review psychotropic prescribing to minimize overdose risk, provide overdose education

Ensure on-going monitoring of substance use and proactive coordinated care management

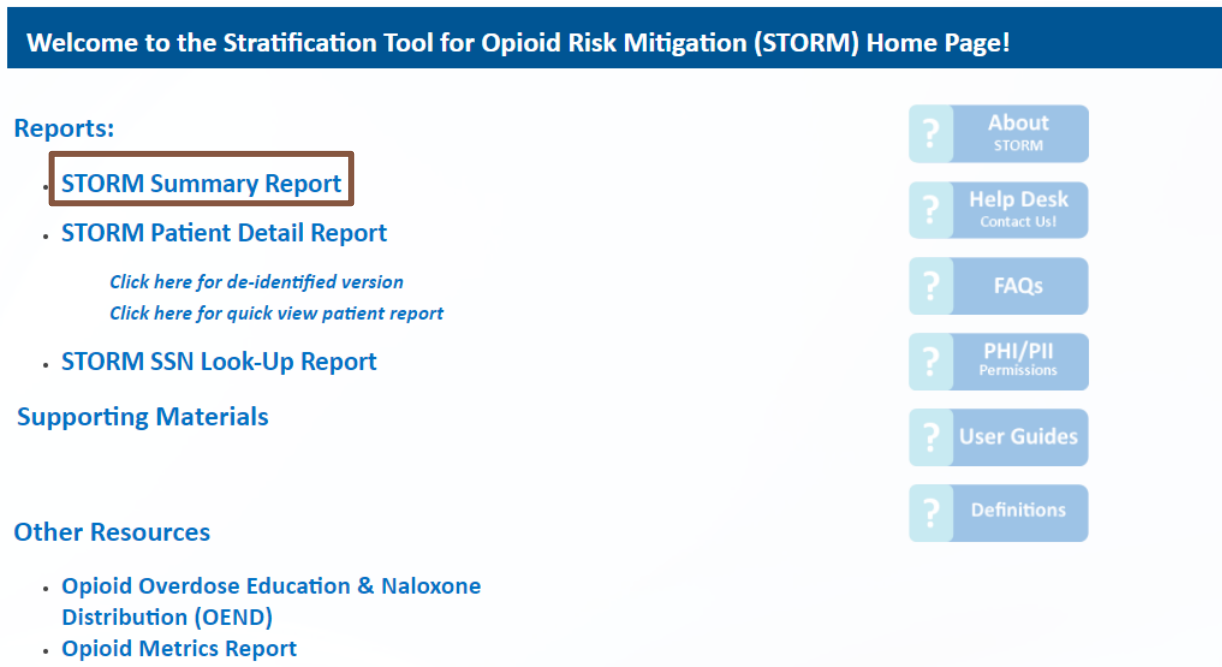
The low dose was initiated because of the patient's risks

STORM & Patients with Opioid Use Disorders

- STORM is also designed to facilitate care for patients with opioid use disorders (OUD)
- Patients with OUD have elevated risk of overdose or suicide; these patients have a 12% annual rate of overdose or suicide-related events
- Patients with an OUD diagnosis in the last year without an active opioid prescription are broken out into a “OUD patients (Elevated Risk)” category
- Implementation of medication assisted treatment for these patients is monitored by the SUD16 measure on the Mental Health Domain of SAIL and by the Psychotropic Drug Safety Initiative (Phase III)

STORM Summary Report

- Presents data at the national, facility, and provider level
- Identifies patients who might benefit from specific risk mitigation strategies
- Allows tracking of implementation of data-based case reviews



The screenshot shows the STORM Home Page with a dark blue header containing the text "Welcome to the Stratification Tool for Opioid Risk Mitigation (STORM) Home Page!". Below the header, the page is organized into several sections. On the left, under the heading "Reports:", there is a list of report options: "STORM Summary Report" (highlighted with a red border), "STORM Patient Detail Report" (with sub-links for de-identified and quick view versions), and "STORM SSN Look-Up Report". Below this is the "Supporting Materials" section, followed by "Other Resources" which includes "Opioid Overdose Education & Naloxone Distribution (OEND)" and "Opioid Metrics Report". On the right side of the page, there is a vertical column of six light blue buttons, each with a question mark icon and text: "About STORM", "Help Desk Contact Us!", "FAQs", "PHI/PII Permissions", "User Guides", and "Definitions".

Welcome to the Stratification Tool for Opioid Risk Mitigation (STORM) Home Page!

Reports:

- **STORM Summary Report**
- STORM Patient Detail Report
 - Click here for de-identified version*
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Other Resources

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- Opioid Metrics Report

Navigation links:

- ? About STORM
- ? Help Desk Contact Us!
- ? FAQs
- ? PHI/PII Permissions
- ? User Guides
- ? Definitions

STORM Summary Report



STORM Summary Report *BETA* Stratification Tool for Opioid Risk Mitigation

This report has been revamped to improve efficiency and accuracy. If you experience any issues please contact us.

Data displayed has a 1-2 day lag from CPRS entry. This report is to be used along with the electronic medical record and direct discussion with the patient to help facilitate decision-making.

[Home](#) | [Definitions](#) | [Contact Us](#) | [Save/Share Current View](#)

To access STORM SSN-level Reports you will need to ensure you have PHI/PII access: [Request SSN Access](#)

Facility X — All Providers/Teams

STORM Cohort+ Summary	Risk Category**	Patients	Active Opioid	OID Dx		
Facility X Active Patients: 60,274	OID Patients (Elevated Risk)	532	0	532		
	VeryHigh	20	20	8		
Risk Mitigation Strategies	Risk Category**	National Score (%)	Score (%)	Numerator	Denominator	Actionable (# Not Met)
Minimize MEDD (<=90)	VeryHigh	93.2	80.0	16	20	4
Naloxone Kit	OID Patients (Elevated Risk)	30.5	20.9	111	532	421
	VeryHigh	18.9	10.0	2	20	18
Opioid Informed Consent	VeryHigh	56.3	85.7	6	7	1

Click here to generate a list of patients for review

Short-Cut to List of Very High Risk Patients That Need Review

Risk Mitigation Strategies	Risk Group**	National Score (%)	Score (%)	Numerator	Denominator	Actionable (# Not Met)
Minimize MEDD (<=90)	Very High	93.9	77.8	14	18	4
Naloxone Kit	OID Patients (Elevated Risk)	33.2	23.7	122	515	393
	Very High	22.1	22.2	4	18	14
Opioid Informed Consent	Very High	75.2	100.0	8	8	0
Timely Follow-Up	Very High	82.7	72.2	13	18	5
Timely Drug Screen	OID Patients (Elevated Risk)	47.3	48.2	248	515	267
	Very High	54.0	72.2	13	18	5
Psychosocial Assessment	OID Patients (Elevated Risk)	56.8	66.6	343	515	172
	Very High	55.9	94.4	17	18	1
Psychosocial Tx	OID Patients (Elevated Risk)	81.2	78.6	405	515	110
	Very High	76.7	94.4	17	18	1
Bowel Regimen	Very High	30.2	50.0	9	18	9
PDMP	Very High	50.7	94.4	17	18	1
Data-based Opioid Risk Review	OID Patients (Elevated Risk)	0.1	0.0	0	515	515
	Very High	1.0	5.6	1	18	17



Very high risk “actionable patients” links directly to the patient view of just those very high risk patients who do not have a review documented in the last 12 months

Required Data-Based Case Reviews

Centralized Review of Patients on opioid therapy at Very High Risk for an Adverse Event

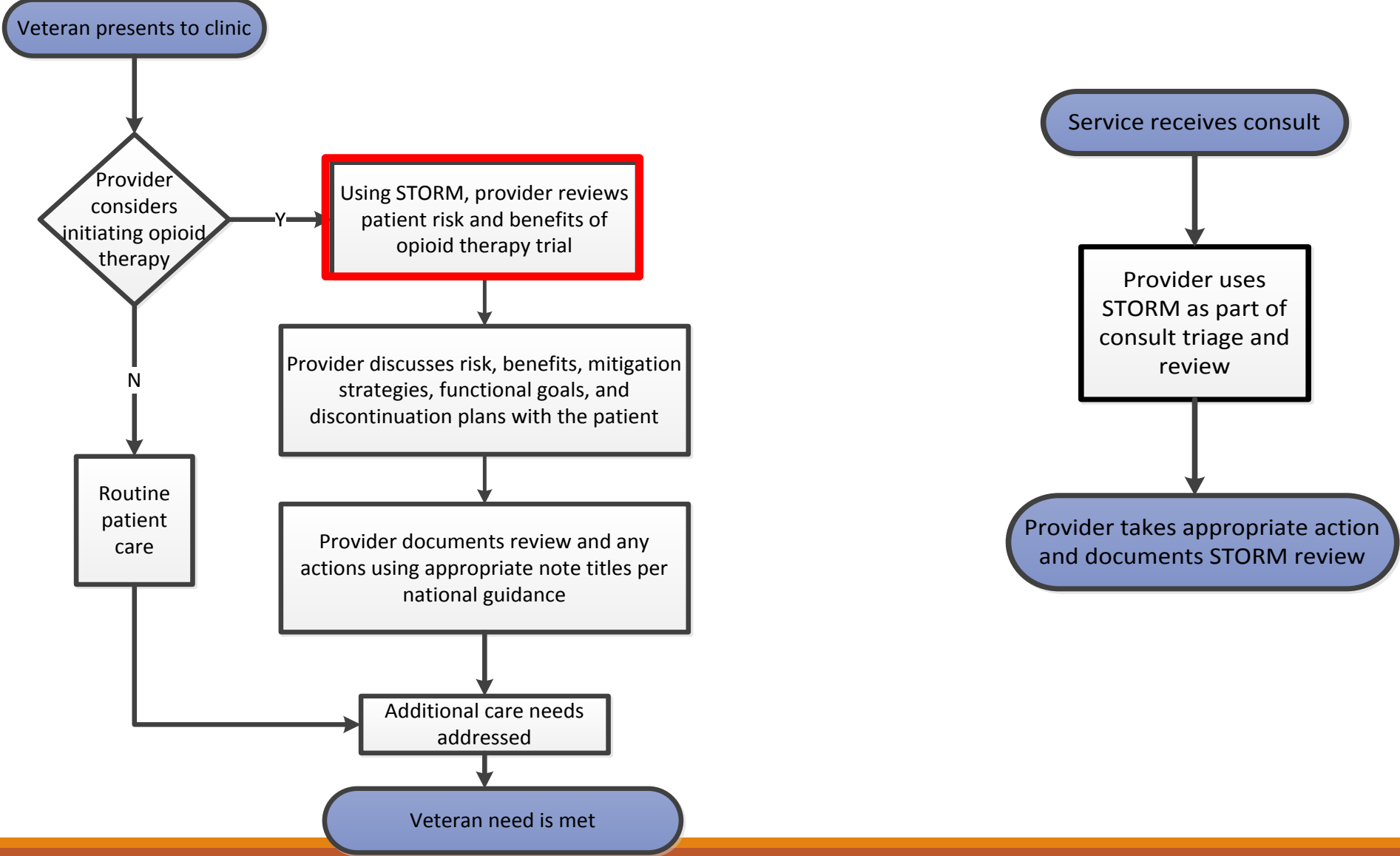
Point of Care review of patients with new opioid prescribing prior to initiation

CARA Mandate for Point of Care Reviews

Title IX, Subtitle A, Section 911(a)(2) of the Comprehensive Addiction and Recovery Act (CARA):

The Secretary shall establish guidance that **each health care provider of the Department of Veterans Affairs, before initiating opioid therapy to treat a patient as part of the comprehensive assessment conducted by the health care provider**, use the Opioid Therapy Risk Report tool of the Department of Veterans Affairs (or any subsequent tool), which shall include information from the prescription drug monitoring program of each participating State as applicable, that includes the most recent information to date relating to the patient that accessed such program to **assess the risk for adverse outcomes of opioid therapy for the patient**, including the concurrent use of controlled substances such as benzodiazepines, as part of the comprehensive assessment conducted by the health care provider.

Point of Care Review Process



SSN Look-up Report

- This report can be used to complete the data-based case reviews *prior to initiation*, meeting the mandate in CARA
- For patients with no active opioid prescription, it displays hypothetical overdose/suicide risk score estimates based on low, medium, or high opioid doses
- Supports risk-benefit discussions, patient-centered pain management, and safety planning before opioid therapy is started

Point of Care Review Using the STORM SSN Look-up Report

Welcome to the Stratification Tool for Opioid Risk Mitigation (STORM) Home Page!

Reports:

- STORM Summary Report
- STORM Patient Detail Report
- Click here for de-identified version*
- Click here for quick view patient report*
- **STORM SSN Look-Up Report**

Supporting Materials

Other Resources

- Opioid Overdose Education & Naloxone Distribution (OEND)
- Opioid Metrics Report

Navigation Links:

- ? About STORM
- ? Help Desk Contact Us!
- ? FAQs
- ? PHI/PII Permissions
- ? User Guides
- ? Definitions

Patient SSN Look-up Report



STORM SSN Look-up Report 2.0 *BETA* Stratification Tool for Opioid Risk Mitigation

Data displayed has a 1-2 day lag from CPRS entry. This report is to be used along with the electronic medical record and direct discussion with the patient to help facilitate decisions.

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Enter SSN to view patient's:

- Current Suicide Risk
- Predicted opioid-related suicide/overdose risk
- Opioid-related risk mitigation strategies
- Potential non-pharmacological treatments
- Recent or upcoming appointments
- Current providers

Are you considering co-prescribing an opioid and a benzodiazepine?
Assess your patient's risk and information about co-prescribing.

Can't see patient data?
Click [here](#) to troubleshoot.

[STORM Summary Report](#)

[STORM Patient Detail Report](#) (default view is for very high risk patients)

Parameters

SSN (with or without hyphens)

SSN Look-up Report: Main Display

STORM SSN Look-up Report 2.0

Stratification Tool for Opioid Risk Mitigation

Data displayed has a 1-2 day lag from CPRS entry. This report is to be used along with the electronic medical record and direct discussion with the patient to help facilitate decision-making.

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PATIENT NAME [REDACTED] **No Known Active Opioid Exposure**

SSN [REDACTED]

[Chart Review Note](#)

Suicide Risk and Current High Risk Flags

STORM Model Risk Estimates (Hypothetical)	REACH VET	High Risk Flags
<i>Suicide-related event or overdose in the next year</i>	Currently Identified in REACH VET: No	High Risk For Suicide: No
If MEDD = 10 High (9.3%)	In REACH VET in the past 15 months: No	Behavioral: Yes
If MEDD = 50 High (9.7%)		Missing Patient: No
If MEDD = 90 High (10.2%)		
<i>Suicide-related event, overdose, fall or accident in the next 3 years</i>		
If MEDD = 10 Medium (17.7%)		
If MEDD = 50 Medium (18.5%)		
If MEDD = 90 Medium (19.3%)		

What factors contribute to my patients STORM risk score?

What interventions might better manage my patient's risk?

Last VA Contact [Stop Cox](#)

Diagnosis Dx included	Medications	Risk Mitigation Strategies	Non-pharmacological Pain Tx
Mental Health		MEDD <= 90** <input type="checkbox"/>	Active Therapies <input type="checkbox"/>
• Bipolar		Naloxone Kit <input type="checkbox"/>	CH Therapies <input type="checkbox"/>
• Bipolar I		Opioid Informed Consent <input type="checkbox"/>	Chiropractic Care <input type="checkbox"/>
• Depression		Timely Follow-up <input type="checkbox"/>	Occupational Therapy <input type="checkbox"/>
• Other MH Disorders		Timely UDS <input type="checkbox"/>	Pain Clinic <input type="checkbox"/>
• Personality disorder		Psychosocial Assessment <input type="checkbox"/>	Physical Therapy <input type="checkbox"/>
• Serious Mental Illness		Psychosocial Tx <input checked="" type="checkbox"/> xxx	Specialty Therapy <input type="checkbox"/>
• Suicide Attempt or Ideation		Bowel Regimen <input type="checkbox"/>	Other Therapy <input type="checkbox"/>
Substance Use Disorder		PDMP <input type="checkbox"/>	
• Alcohol		Data-based Opioid Risk Review <input type="checkbox"/>	
• Cannabis		Safety Plan <input checked="" type="checkbox"/> xxx	
• Substance Use Disorder		Active SUD Tx <input type="checkbox"/>	
		Medication Assisted Therapy <input type="checkbox"/>	

Future Appointments: (544) Columbia, SC
Mental Health
Other
Primary Care

Assigned Providers: Columbia, SC HCS
xxxxxxxx

Risk Assessment section: Patient's predicted and clinical suicide risk information, including high risk flags

Factors contributing to patient's risk

Risk mitigation strategies that help manage patient's risk

Additional supplemental information is displayed below the main display

Relevant providers for follow-up and care coordination

Documenting Data-Based Case Reviews

- STORM has a 'chart review note' feature that will create a summary of the patient's data in a document that the clinician can copy, paste, and annotate in a CPRS note
- Use a note title that complies with the guidance in the STORM Notice and Supplementary Materials and meets facility needs



STORM CPRS Note

Documenting Data-Based Case Reviews

Patient Detail Report

Patient Information

ZZTEST,CPRS THIRTY FIVE FIVE
Last Four: 9382
Age: 54
Gender: M

Risk: Suicide or Overdose (1 yr)
Very High - Active Opioid Rx
24%

RIOSORD : Score: 5 Risk Class: 1

Active Stations

- (512) Maryland HCS (Baltimore MD)

[Chart Review Note](#)

SSN Look-Up Report

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MOUSE, MICKEY **Active Opioid Rx + Current OUD Dx**

111-22-9333

[Chart Review Note](#)

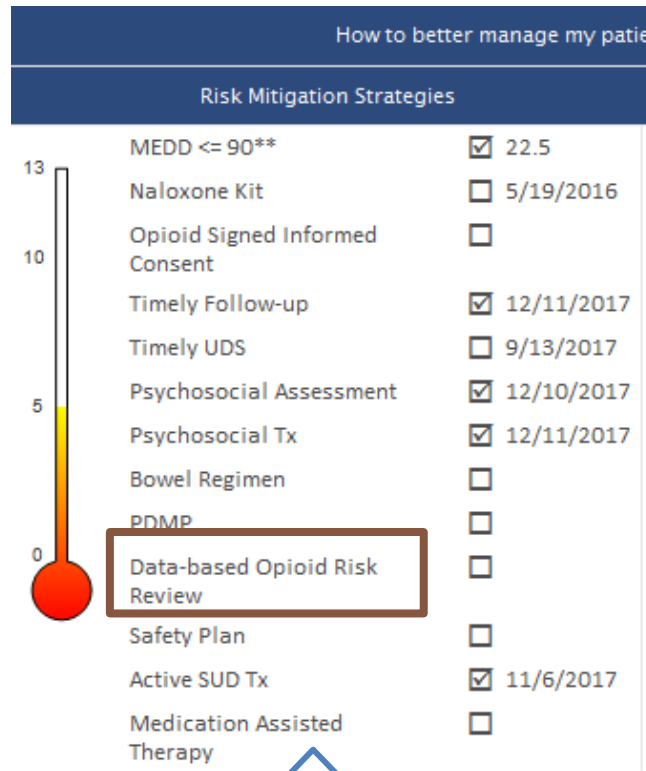
Suicide Risk and Current High Risk Flags

STORM Model Risk Estimates	REACH VET	High Risk Flags
Suicide-related event or overdose in the next year Low - Active Opioid Rx (1%)	Currently Identified in REACH VET: No In REACH VET in the past 15 months: No	High Risk For Suicide: No Behavioral: No Missing Patient: No
Suicide-related event, overdose, fall or accident in the next 3 years Medium - Active Opioid Rx (16%)		

RIOSORD Risk Class : 3

Track Successfully Documented Reviews

Patient Detail Report and SSN Look-Up



Summary Report

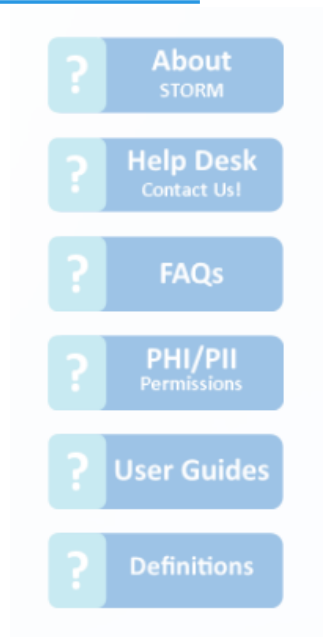
Risk Mitigation Strategies	Risk Group**	National Score (%)	Score (%)	Numerator	Denominator	Actionable (# Not Met)
Minimize MEDD (<=90)	Very High	93.9	77.8	14	18	4
Naloxone Kit	OU D Patients (Elevated Risk)	33.2	23.7	122	515	393
	Very High	22.1	22.2	4	18	14
Opioid Informed Consent	Very High	75.2	100.0	8	8	0
Timely Follow-Up	Very High	82.7	72.2	13	18	5
Timely Drug Screen	OU D Patients (Elevated Risk)	47.3	48.2	248	515	267
	Very High	54.0	72.2	13	18	5
Psychosocial Assessment	OU D Patients (Elevated Risk)	56.8	66.6	343	515	172
	Very High	55.9	94.4	17	18	1
Psychosocial Tx	OU D Patients (Elevated Risk)	81.2	78.6	405	515	110
	Very High	76.7	94.4	17	18	1
Bowel Regimen	Very High	30.2	50.0	9	18	9
PDMP	Very High	50.7	94.4	17	18	1
Data-based Opioid Risk Review	OU D Patients (Elevated Risk)	0.1	0.0	0	515	515
	Very High	1.0	5.6	1	18	17

When a patient has a note in CPRS with a qualifying note title, the box will be checked on the Patient Detail Report and SSN Look-Up Report. The patient will also be in the numerator of the risk mitigation strategy on the Summary Report.

Implementation Support

- Links on the main STORM page:

https://spsites.cdw.va.gov/sites/OMHO_PsychPharm/Pages/Real-Time-STORM-Dashboard.aspx



- STORM Implementation SharePoint: <https://vaww.portal2.va.gov/sites/PERC/STORM/SitePages/Start.aspx>
- STORM Help Desk: V21PALSTORMteam@va.gov
- VHA STORM Listserv:
 - Contact Amy.O'Donnell@va.gov to be added to the listserv

Implementation Support: Academic Detailing

- Provider materials
- Patient materials
- PDMP map
- Data resources from AD and others
- Additional resources: research studies, presentations, links

<https://vaww.portal2.va.gov/sites/ad/SitePages/Campaigns.aspx>



Implementation Support in Development

- Monthly collaborative call
 - Schedule posted on the [STORM Implementation SharePoint](#) site
- Additional FAQs and training and briefing materials
- Implementation toolkit
- Collaborative listserv

How will implementation of centralized review be monitored?

Numerator: Patients in the denominator who have a note including “Data-based” and “Opioid Risk Review” in the title in their medical records within the last 4 quarters

Denominator: Patients with an opioid prescription who are in the “Very High – Opioid Patients” risk category in STORM for at least 7 days in the last quarter. The 7-day criterion insures that a process of consistent reviews on at least a weekly basis will identify all patients in the metric denominator.

How will implementation of point of care reviews be monitored?

Numerator: Patients in the denominator who have a note including “Data-based” and “Opioid Risk Review” in the title in their medical records since January 1, 2018

Denominator: Patients receiving an outpatient opioid analgesic prescription in the index quarter who have received no prior outpatient opioid analgesic prescriptions since January 1, 2017

As in VHA Directive 1306, patients will be excluded from the denominator if:

- Their only opioid prescription is for a 5-day supply or less without refills
- The patient is enrolled in Hospice Care

The goal of data-based opioid risk reviews is to **review the patient** not the prescription

Need to go beyond a check of the risk of the prescription itself.

Do not focus on changing the patient's modeled risk score.

You cannot change many of the factors that contribute to the risk score.

Do focus on optimizing the patient's treatment plan, using risk mitigation interventions and considering alternative or augmentative options.

You can do your part to ensure the patient receives the safest, most appropriate care.

Most very high risk patients have complex mental health issues.

Collaborative treatment planning across providers, services and facilities should be a key goal for comprehensively addressing risk.

Summary

- VA's needs to continue to work toward ensuring patients' pain care is as safe and effective as possible
- Predictive modeling may be an effective way to target patients for clinical interventions
- The STORM model and dashboards facilitate prioritizing patients for clinical review:
 - Pre-initiation reviews should facilitate risk-benefit discussions and design of a treatment plan, and, opioid trial (if appropriate) that optimizes safety and effectiveness
- We expect that at most facilities implementation will require engaging new types of providers in Opioid Safety efforts and clarifying protocols for care coordination across services

Poll question #3

After this talk, how convinced are you that data-based risk reviews are an important component of suicide prevention?

- Very convinced
- Somewhat convinced
- A little convinced
- Not convinced

Questions/Comments?

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