VA Quality Enhancement Research Initiative for Substance Use Disorders
Implementing Opiate Dependence Treatment

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Baylor College of Medicine
Veterans Health Administration (VA)

US largest integrated healthcare system
4.8M veterans served in FY05
157 medical centers
721 community-based outpatient clinics
21 regions
- Veterans Integrated Service Networks (VISNs)
Objectives of presentation

1. To show how the VHA has used quality enhancement tools to implement detection, diagnosis, and treatment of opiate addiction among chronic pain patients in primary care.

2. To show how continuity of care for addictions has been improved through various techniques.

3. To teach several simple principles of implementation that have been successful for system change and provider education in treating iatrogenic opiate addiction.
Improving Patient Care

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Comparison of Quality of Care for Patients in the Veterans Health Administration and Patients in a National Sample

Steven M. Asch, MD, MPH; Elizabeth A. McGlynn, PhD; Mary M. Hogan, PhD; Rodney A. Hayward, MD; Paul Shekelle, MD, MPH; Lisa Rubenstein, MD, Joan Kaslowsky, BA, John Adams, PhD; and Ene A. Kerr, MD, MPH

21 December 2004 | Volume 141 Issue 12 | Pages 936-945

Background: The Veterans Health Administration (VHA) has introduced an integrated electronic medical record, performance measurement, and other system changes directed at improving care. Recent comparisons with other delivery systems have been limited to a small set of indicators.

Objective: To compare the quality of VHA care with that of care in a national sample by using a comprehensive quality-of-care measure.

Design: Cross-sectional comparison.

Setting: 12 VHA health care systems and 12 communities.

Patients: 996 VHA patients and 992 patients identified through random digit dialing. All were men older than 35 years of age.

Measurements: Between 1997 and 2000, quality was measured by using a chart-based quality indicator consisting of 548 indicators targeting 26 conditions. Results were adjusted for clustering, age, number of visits, and medical conditions.

Results: Patients from the VHA scored significantly higher for adjusted overall quality (67% vs. 51%; difference, 16 percentage points [95% CI, 14 to 18 percentage points]), chronic disease care (72% vs. 69%; difference, 13 percentage points [91% to 17 percentage points]), and preventive care (64% vs. 44%; difference, 20 percentage points [91% to 28 percentage points]), but not for acute care. The VHA advantage was most prominent in processes targeted by VHA performance measurement (86% vs. 43%).

The Veterans Health Administration: Quality, Value, Accountability, and Information as Transforming Strategies for Patient-Centered Care

Jonathan B. Perlin, MD, PhD, MSHA; Robert M. Kolodner, MD; and Robert H. Roswell, MD
VA System: Implementation Assets

National systems for clinical communication
Integrated electronic health record
  Evidence-based treatment guidelines
  Incentivized performance monitoring
Telemedicine outreach
Health Services & Treatment Research
  VA QUERI to get innovative treatments into clinics
QUERI Steps

(1) Select patient populations
    high prevalence / high disease burden

(2) Identify E-B Guidelines/Recommendations

(3) Assess Performance Gaps

(4) Design/Implement Improvement Programs

(5) Evaluate impact on clinical outcomes

(6) Evaluate impact on health-related quality of life
**Guideline Reference**

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<th>View Online</th>
<th>Download Center</th>
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<td>Information</td>
<td>about the SUD guideline</td>
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<td><strong>GUIDELINE</strong></td>
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<td>Complete SUD</td>
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<td><strong>ALGORITHMS</strong></td>
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<td>The SUD-CPG algorithms</td>
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<td><strong>SUMMARY</strong></td>
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<td>- Primary Care</td>
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<td>SUD-Pocket Cards:</td>
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<td>- Primary Care</td>
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<td>- Specialty Care</td>
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<td>- Pharmacotherapy</td>
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<td><strong>KEY POINTS</strong></td>
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<td>- Specialty Care</td>
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## EVIDENCE TABLE

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Sources of Evidence</th>
<th>QE</th>
<th>R</th>
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<tbody>
<tr>
<td>1 Indicate to the patient that treatment is effective.</td>
<td>Gerstein &amp; Harwood, 1990 IOM, 1990</td>
<td>I</td>
<td>A</td>
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<tr>
<td>2 Respect patient preference for the initial psychosocial intervention approach.</td>
<td>Carroll &amp; Schottenfeld, 1997 Crite-Cristoph &amp; Siqueland, 1996 Finney &amp; Moos, 1998</td>
<td>I</td>
<td>A</td>
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<td>3 Consider behavioral marital therapy.</td>
<td>Stanton &amp; Shadish, 1997 O'Farrell, 1993</td>
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<td>6 Consider individual and group drug counseling.</td>
<td>Mercer &amp; Woody, 1999</td>
<td>I</td>
<td>A</td>
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<td>7 Consider motivational enhancement.</td>
<td>Miller et al., 1992</td>
<td>I</td>
<td>A</td>
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<td>8 Consider Twelve-Step facilitation training.</td>
<td>Nowinski et al., 1992 Ouiemte et al., 1997 Tonigan et al., 1996</td>
<td>I</td>
<td>A</td>
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<td>9 Emphasize retention in formal treatment or community support.</td>
<td>Finney &amp; Moos, 1998 Simpson, 1997</td>
<td>I</td>
<td>A</td>
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<td>10 Promote active involvement in Twelve-Step programs.</td>
<td>Humphreys, 1999</td>
<td>II-2</td>
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*QE = Quality of Evidence; R = Recommendation (See Introduction)*
# VHA SUD Diagnoses

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>( \sim n )</th>
<th>per 1000 patients</th>
</tr>
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<tbody>
<tr>
<td>Nicotine Dependence</td>
<td>1,300,000</td>
<td>382</td>
</tr>
<tr>
<td>Other SUD dx</td>
<td>306,800</td>
<td>90</td>
</tr>
<tr>
<td>SUD+Axis I MH Dx**</td>
<td>175,000</td>
<td>51</td>
</tr>
<tr>
<td>SUD Alone</td>
<td>131,800</td>
<td>39</td>
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</tbody>
</table>

**Dual diagnosis = any DSM Axis I mental disorder and either substance abuse or dependence**
From Guidelines to Performance Measures

- Practices recommended by VA Guidelines
- Strongest and most consistent evidence
- Documented variation from desired performance
- Measurable procedure with explicit criteria
- Establish Performance Measure with consequence for not meeting benchmark
- Typical consequence impacts on hospital director’s bonus pay, not provider
3 “Simple” Principles of Implementation

(1) Local latitude on “how” – customizing

(2) Feedback on performance
   • Carefully defined, accurate, local

(3) Accessible supervision or “coaching” from someone with more expertise about improvement

Miller, Sorensen, Selzer, Brigham. JSAT, 2006;21:25-39
1. Improve detection of substance misuse
   Screening & diagnostic follow-up
2. Implement effective SUD cessation treatment
   Methadone, Buprenorphine, Naltrexone (depot)
3. Improve patient retention in continuing SUD care
   50% increase since 2003
1. Improve detection of substance misuse
   Screening & diagnostic follow-up

2. Implement effective SUD cessation treatment
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3. Improve patient retention in continuing SUD care
   50% increase since 2003
The Spectrum of Opiate Use

- Low risk acute use
- Abstinence
- Dependence
- Risk behaviors
- Harmful, abuse
- Opiate Addiction
- Opiate Use Disorders

Unhealthy opiate use

Heavy severe consumption consequences
Screening for prescription opiate abuse

Using self report instruments – DAST

Asking the providers for Opiate abusing pats

Review of “Red Flag” behaviors of patients

Review of Pharmacy databases for:
  - Chronic opiates for at least 3 months
  - High doses of opiates
  - Three or more opiates prescribed

Service Utilization – multiple ED visits over 3 mo

Overdose, urine toxicology showing other drugs
Red Flag Behaviors:

- Missed appointments;
- Running out of meds too soon;
- Taking medications off schedule;
- Not responding to phone calls;
- Refusing urine or breath testing;
- Neglecting to mention new medication or outside treatment;
- Appearing intoxicated or disheveled in person or on the phone;
- Frequent or urgent inappropriate phone calls;
- Neglecting to mention change in address, job or home situation;
- Inappropriate outbursts of anger;
- Lost or stolen medication;
- Frequent physical injuries or auto accidents;
- Non-payment of bills.

(Opiate Medication Initiative for Rural Oregon Residents-OMIROR; Nov. 2003; Northwest Frontier Addiction Technology Transfer Center (ATTC))
Adding staff to implement diagnoses

Primary care - mental health integration in VA

Co-located Integrated Care (CoLIC)

Care Management (CM)

Work done in alcoholism, not yet opiates

Screening using AUDIT-C for problem drinking

Helping treating clinicians to diagnose alcohol dependence based on screening

Diagnosis is intermediate outcome that facilities treatment initiation
Co-Located Integrated Care (CoLIC)

- Consists of a prescribing provider and therapist team
- Same Day visits
- See All Comers – few restrictions on diagnosis
- Become part of the Primary Care Team
- 15-45 min structured assessment
- Medication and/or brief Psychotherapy
- Consultation with Primary Care Providers
- Chronic Severe patients referred to Specialty MH
Care Management

- **Care Focus**
  - MDD, Substance Misuse
  - Patient Education
  - Symptom and Side Effect tracking
  - Brief, Structured intervention
  - Mostly by telephone

- **Consultation/Weekly Supervision**
  - Primary Care Physician
  - Team Psychiatrist
Nurse as Depression Care Manager (DCM)

- Focus is on patients with depressive disorders
- Initial and 6-8 Follow-up assessments over six months
- Patient education and activation, promoting patient self-management during follow-up
- Effective Triage to MHS if indicated
- Relapse prevention focus of interventions
# Alcohol Diagnoses: Co-LIC

<table>
<thead>
<tr>
<th>Site</th>
<th>Site Description</th>
<th>Total Uniques</th>
<th>Uniques w/Alcohol Dx</th>
<th>% Uniques w/Alcohol Dx</th>
</tr>
</thead>
<tbody>
<tr>
<td>502</td>
<td>VAMC</td>
<td>215</td>
<td>19</td>
<td>9%</td>
</tr>
<tr>
<td>520</td>
<td>CBOC</td>
<td>1432</td>
<td>142</td>
<td>9%</td>
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<tr>
<td>564</td>
<td>CBOC</td>
<td>1487</td>
<td>256</td>
<td>17%</td>
</tr>
<tr>
<td>623</td>
<td>CBOC</td>
<td>451</td>
<td>35</td>
<td>8%</td>
</tr>
<tr>
<td>635</td>
<td>VAMC</td>
<td>2154</td>
<td>92</td>
<td>4%</td>
</tr>
<tr>
<td>V16</td>
<td>Total*</td>
<td>5739</td>
<td>544</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

* V16 Total* includes all sites:

- 502 (VAMC): 215 total uniques, 19 with alcohol dx, 9%
- 520 (CBOC): 1432 total uniques, 142 with alcohol dx, 9%
- 564 (CBOC): 1487 total uniques, 256 with alcohol dx, 17%
- 623 (CBOC): 451 total uniques, 35 with alcohol dx, 8%
- 635 (VAMC): 2154 total uniques, 92 with alcohol dx, 4%

*Data run for 1/1/07 – 9/30/08

* 580 and 586 excluded due to partial implementation of program
## Alcohol Diagnoses: Care Management

<table>
<thead>
<tr>
<th>Site</th>
<th>Site Description</th>
<th>Uniques</th>
<th>Uniques w/Alcohol Dx</th>
<th>% Uniques diagnosed with Alcohol Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>598</td>
<td>CBOC</td>
<td>519</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>629</td>
<td>CBOC</td>
<td>285</td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>667</td>
<td>VAMC &amp; CBOC</td>
<td>759</td>
<td>5</td>
<td>0.7%</td>
</tr>
<tr>
<td>V16</td>
<td>Total</td>
<td>1563</td>
<td>8</td>
<td>0.5%</td>
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</table>

Data run for 1/1/07 – 9/30/08
Co-located Integrated Care (CoLIC) appears to be 10X to 20X more effective than Care Management at establishing substance dependence diagnoses.

May be function of CoLIC’s immediate assessment on day of screening.

May reflect Care Management’s primary focus on depression, not substance dependence.
1. Improve **detection** of substance misuse
   Screening & diagnostic follow-up
2. Implement effective SUD cessation **treatment**
   Methadone, Buprenorphine, Naltrexone (depot)
3. Improve patient **retention** in continuing SUD care
   
   50% increase since 2003
Treatment Guidelines

Major treatment guideline revisions: 2006-09

VA and Dept of Defense guidelines – 2007
- Buprenorphine not in 2001 guideline,
- Added in 2007 and added to national formulary
- Each hospital limits availability based on cost

APA treatment guidelines – 2006
- Buprenorphine added as office-based treatment

CINP (International Neuropsychopharm) and WHO – 2008
- Buprenorphine added as office-based treatment
- Depot naltrexone added as Off-label use

World Federation of Societies of Biological Psychiatry – 2007
Methadone maintenance has infrequently been acceptable to chronic pain patients who develop addiction behaviors.

Transition from short acting opiate abuse to methadone can be medically dangerous due to over-estimate of dose needed.

Availability of treatment slots has been limited: 4.5 million addicts vs. 220,000 slots.
Depot Naltrexone

Naltrexone oral compliance is very poor without strong adherence program

Depot naltrexone is expensive - $700/month

Most likely candidates are from criminal justice or medical professions

Transition from chronic pain medications to naltrexone usually requires specialist intervention due to medical withdrawal

Chronic pain then requires psychological treatments
Buprenorphine for prescription opiates

Most readily accepted pharmacotherapy

Transition to buprenorphine addresses recurrent withdrawal and hyperalgesia

Provider barriers include need to have DEA related training (8 hours)

Other administrative barriers due to cost ($5/day) and need for increased scheduled contact with patient
Patients Satisfied at 6 Months

“Overall, how would you rate the helpfulness of BUP as a medication for opioid addiction?”

- Extremely helpful: 73%
- Very helpful: 22%
- Somewhat helpful: 4%
- Not helpful: 1%

n=389

Patient Study
Voluntary vs. coerced participation in Recovery plan
Relapse or lapse will intensify contact frequency

No use of other medications or opiate prescribers
Opiates used only as prescribed
No Diversion of opiates
Safe storage & Other safety issues

Scheduled appointments for Counseling must be kept
However, will not meet, when Under the influence
Compliance with pill counts & urine tests
Frequency of Visits

Daily during induction (3-5 days);

At least weekly until stabilized (3-6 weeks);

Then no less often than every 4 weeks (2 years);

Lapse based on urine toxicology leads to increased frequency of contact
SUD QUERI Targets

1. Improve detection of substance misuse
   Screening & diagnostic follow-up
2. Implement effective SUD cessation treatment
   Methadone, Buprenorphine, Naltrexone (depot)
3. Improve patient retention in continuing SUD care

50% increase since 2003
Length of treatment could be as short as a few days for Medically-supervised withdrawal, but few indications for this brief intervention.

Most patients need at least 2 years maintenance on medication to prevent relapse.

Aligning patient and provider incentives to extend continuity of treatment is an organizational & reimbursement issue.
Ball and Ross Study (1991)

Impact of methadone maintenance treatment on intravenous drug use for 388 male methadone patients in 6 programs

*In-Treatment*
Retention in VA SUD programs

Schaefer et al. Medical Care 2005
Regional VA: 90 day Treatment Retention
<table>
<thead>
<tr>
<th>Interventions for Continuity of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realistic provider performance Goals</td>
</tr>
<tr>
<td>Provider performance monitors monthly</td>
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<tr>
<td>Feedback to Provider about meeting monitors</td>
</tr>
<tr>
<td>Electronic reminders to provider for patient FU</td>
</tr>
<tr>
<td>Limit duration of opiate prescriptions</td>
</tr>
<tr>
<td>Call patient before scheduled appointments</td>
</tr>
<tr>
<td>Telephone counseling &amp; telemedicine</td>
</tr>
<tr>
<td>NO refills between appointments</td>
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</tbody>
</table>
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2. Implement effective SUD cessation treatment
   Methadone, Buprenorphine, Naltrexone (depot)
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   50% increase since 2003
“Simple” Principles of Implementation

Top down and bottom up

Local latitude on “how” – customizing

Feedback on performance
  Carefully defined, accurate, local

Accessible supervisor or “coach” with more expertise about improvement
  Academic detailing

Measure carefully

Unintended consequences or Gaming

Miller, Sorensen, Selzer, Brigham. JSAT, 2006;21:25-39
Challenges

- Funding implementation
  - Mixed research/management review panels
  - Balance rigor and relevance
- Career path for junior colleagues?
- Identifying “essential components”
  - Mechanisms of behavior change
- Sustainability
  - Workload limits – panel sizes


Moos RH. Addictive disorders in context: principles and puzzles of effective treatment and recovery. Psychol Addict Behav. 2003 Mar;17(1):3-12..


VA/DoD Clinical Practice Guideline for Management of Substance Use Disorders in Primary and Specialty Care
http://www.oqp.med.va.gov/cpg/SUD/SUD_Base.htm

VA Quality Enhancement Research Initiative (QUERI) http://www.hsrdrresearch.va.gov/queri