The Impact Of A Structured Opioid Renewal Clinic On Aberrant Drug Behavior Outcomes At A Northeastern VA Medical Center

Salimah H. Meghani, PhD, MBE, CRNP
Assistant Professor, University of Pennsylvania School of Nursing
Nancy Wiedemer, CRNP
Pain Management Coordinator, Philadelphia VA Medical Center

Background & Significance

Development of the Opioid Renewal Clinic: A primary care based program to provide structured monitoring of opioid therapy for chronic pain patients at risk for substance abuse

Background & Significance

- Veterans Health Administration National Pain Management Initiative, 1998
- Joint Commission Pain Management Standards, 2000
- Evidence for Acute and Cancer Pain management is strong
- Evidence for Chronic Pain management is evolving
Background & Significance

- Chronic Pain Management
  - Focus on improvement in function
  - Chronic Disease Management Model
  - Opioids are considered standard of care

Incorporating Consensus Guidelines into Primary Care Practice at PVAMC

- Chronic Narcotic Use Policy 1998
- Chronic Opioid Use Policy 2000
  - Major Principles
    - Assessment → diagnosis
    - Use of Opioid Treatment Agreement
    - One Provider responsible for Rx
    - Urine Drug Testing
    - Documentation

The Problem

- Guidelines and policies available but “they take too much time”!
- Reluctance of PCPs, who care for the majority, to prescribe opioids
- Concern about diversion, abuse, addiction and regulatory scrutiny, particularly in a high risk population
- Prescribing opioids without assessment and without monitoring treatment outcomes
The Problem

- The Oxycontin Media Blitz
- Visit from the Investigator General
- Pharmacy Budget “crisis”
  $237,830 - 6 month (in 2001) cost of Oxycontin

The Need

- Cost-effective strategies to support PCPs’ management of these patients.

Action plan:
- Focus group meetings with PCPs
- Review of Literature for guidelines and evidence-based strategies

Results of review of the literature formed the foundation of our program
Definition of Terms

- Physical Dependence
- Tolerance
- Abuse
- Addiction

Withdrawal syndrome in response to abrupt dose reduction
- Pharmacologic property, dose may need to be increased to maintain effect
- The intentional misuse of a medication for nonprescribed effects (e.g. mood alteration)
- Chronic neurobiologic disorder characterized by loss of control, craving, compulsive use despite harm

Consensus Document: The American Academy of Pain Medicine,
The American Pain Society, The American Society of Addiction Medicine

Spectrum of Drug Misuse

- Self medication: mood, sleep, memories
- Undertreated pain (pseudoaddiction)
- Sharing medications
- Recreation: euphoria, rush high
- Addictive use
- Diversion for profit
  - Criminal business
  - Support medication costs

Savage 2001

Differential Diagnosis of aberrant drug-related behavior

- Addiction
- Under-treated pain (Pseudoaddiction)
- Other psychiatric disorders (e.g., Borderline personality disorder)
- Mild encephalopathy
- Family disturbances
- Criminal intent

Portenoy, 2003; Passik & Kirsh, 2004
The Opioid Renewal Clinic: A Primary Care, Managed Approach to Opioid Therapy for Chronic Pain

A Nurse Practitioner and Clinical Pharmacist managed service at the Philadelphia VA Medical Center

Start-up date: September 2001

Opioid Renewal Clinic: Services

- Assist with management of *challenging* patients requiring structured prescribing and monitoring of long-term opioid therapy
  
  - Patients with aberrant drug related behaviors
    - r/o substance misuse vs. pseudoaddiction vs. addiction
  
  - Patients with h/o addiction, recent addiction, active addiction

- Assist with opioid titration and rotation

- Assist with routine opioid renewals
  
  - Patients who have stabilized
  
  - Part-time providers
Opioid Renewal Clinic Goals

- Facilitate appropriate treatment for each patient
  - opioid therapy if indicated and/or
  - addiction treatment
- Improve PCP confidence in prescribing opioids
- Improve monitoring and documentation
- Provide cost-effective care by decreasing miss-utilization of resources

Opioid Renewal Clinic Procedure

- Consult from PCP

- Eligibility
  - Workup and pain dx
  - Opioid Treatment Agreement
  - Baseline urine drug test

  THE PCP CONTINUES TO BE RESPONSIBLE TO PRESCRIBE OPIOIDS

Opioid Renewal Clinic: Example of Strategies

- Opioid Treatment Agreement
  → Second Chance Agreement
- Frequent visits
- Prescribing opioids on a short term basis (i.e. weekly or bi-weekly)
- Periodic urine drug testing
- Pill counts
- Co-management with addiction services
Monitor and Document the 4 “As”

- **Analgesia** (pain relief)
- **ADL’s** (functional ability)
- **Adverse Effects** (constipation, nausea...)
- **Aberrant behavior** (drug seeking or seeking pain relief)

(Passick & Weinreb, 2000)

---

**Results**

**784 referrals 1/2/02 – 12/6/06**

<table>
<thead>
<tr>
<th>Aberrant behavior</th>
<th>No Aberrant Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>366 (47%)</td>
<td>418 (53%)</td>
</tr>
</tbody>
</table>

UDT + for illegal drugs or un prescribed drugs, negative for prescribed drugs, overusing prescribed opioids

Opioid rotation or titration
Hi/O of recent substance abuse
Conflicts with providers
Part-time clinicians- referred for assistance with monthly monitoring

---

**Results (n=784)**

**366 (47%) Documented aberrant behavior**

- Resolution of aberrant behavior
  - 148 (40.4%)
  - 187 (51%)
- Discharge from ORC
  - n=101 (28%) self-discharged
  - n= 86 (23%) ORC discharged
  - 24 (6.6%)
  - 7 (1.9%)
- Referred for addiction therapy
- Consistently negative UDT weaned from opioids
Purpose

- What are the demographic and clinical predictors of the resolution of aberrant drug behavior in a group of patients referred to the Opioid Renewal Clinic by their primary care providers?

Methods (cont.)

- Setting
  - Philadelphia VA Medical Center.

- Data Extraction
  - Data were extracted by the professional information management staff of the Center using Veterans Health Information System and Technology Architecture (VistA) database.

Methods

- Design
  - Retrospective chart review

- Sample
  - Consecutive patients (N=196) referred to ORC by their PCPs between 1/17/02 to 8/27/04 for aberrant behaviors including positive urine drug testing (UDT) or a pattern of early refill requests.
Methods (cont.)

Data Extraction (cont.):
- **Demographic** (age, race, gender, marital status, and, employment status, combat history, and service connection)
- **Pain & Addiction** (site of pain, primary pain diagnosis, number of pain diagnosis, drug and alcohol addiction)
- **Physical/Psychological Comorbidity** (Charlson index—a standard measure of the burden of medical comorbidity, history of depression, anxiety, post-traumatic stress disorder)

| Resolution of aberrant behavior | 86 (43.9%) |
| Discharge from ORC              | 82 (41.8%) |
| n= 22 (11%) self-discharged     |
| n= 67 (34%) ORC discharged      |
| Referred for addiction therapy  | 21 (10.7%)  |
| Consistently negative UDT       | 7 (3.6%)    |
| weaned from opioids             |

Cohort for retrospective review
401 referrals, 1/02 - 8/04
- 205 (51%) No aberrant behaviors
- 196 (49%) Documented aberrant behavior

Methods (cont.)

Data Analysis
- Aberrant drug behavior outcomes were evaluated at one year following patients’ enrollment in the ORC.
- Aberrant behavior categorized as binary variable (0 = 'resolution' and 1 = 'non-resolution').
- Logistic regression to identify independent predictors of aberrant behavior outcomes.
Aberrant behavior resolved (N=110)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberrant behavior resolved</td>
<td>86</td>
<td>43.9%</td>
</tr>
<tr>
<td>Discharged from ORC</td>
<td>82</td>
<td>41.8%</td>
</tr>
<tr>
<td>Accepted addiction treatment</td>
<td>21</td>
<td>10.7%</td>
</tr>
<tr>
<td>Weaned for consistently negative urine for prescribed opioids</td>
<td>7</td>
<td>3.6%</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Results (cont.)**

After controlling for several covariates, Logistic Regression analysis found three variables important in predicting aberrant drug behavior outcomes.

1. **History of Cocaine Addiction:**
   - Most powerful predictor
   - Hx. of Cocaine addiction increased the odds of failure (not resolved) by 4 times (OR = 3.805, CI, 1.47 to 9.82, p = 0.006).

2. **Number of Pain Diagnoses:**
   - Every additional pain diagnosis reduced the odds of failure by about 14% (OR = 0.861, CI, 0.76 to 0.98, p = 0.02).

3. **Married v. Single Veterans**
   - Married individuals were 58% less likely to fail the ORC program than single individuals (OR = 0.419, CI, 0.18 to 0.98, p = 0.045).
Conclusions

- About half the patients resolved aberrant behavior within a structured opioid renewal program.
- Veterans with cocaine dependence had significantly higher risk for failing the program reveals a need for a tailored intervention for this subgroup of patients.
- Those with higher level of pain may have higher motivation to adhere to the program's structure.

Conclusions

- Marriage may be a proxy for social support.
- Having close social relationships has consistently been shown to be an important personal resource and a significant determinant of individual differences in morbidity and adherence to medical treatment for chronic illnesses (Holt-Lunstad, 2008; Revenson, 1995; DiMatteo, 2004).
- The role of marriage and social support with adherence to an opioid treatment program in a high risk population may be explored in further studies.

Limitations

- ORC is a clinical program-
  - No standardized instruments to establish pain levels, clinical pain diagnosis, and psychometrically-derived variables, and other patient characteristics or functional status were available.
  - The study included mostly male veterans from a single medical center; therefore our results may not be generalizable to other populations.
Future Directions

- Prospective studies of the impact of structured risk management program using standardized measures
- Cost-benefit analysis of such a program

References