

A PDMP REPORT AFFECTS PRESCRIBING BEHAVIOR

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ISSUES THAT PROMPTED STUDY

Pain is among most common complaints in ED.

Joint Commission and American Pain Society have noted the importance of prompt recognition and treatment of pain.

Numerous studies still document inadequate pain management for ED patients.

Prescription drug abuse continues to increase.

Overdose deaths in U.S. due to prescription drugs doubled between 1999 and 2005.

RESEARCH QUESTIONS

- **Does data from a statewide PMP influence clinical management of ED patients with non-traumatic pain?**
- **What factors are associated with any changes in clinical management?**

STUDY DESIGN & SETTING

- **Prospective quasi-experimental study**
- **University of Toledo Medical Center
Emergency Department (Toledo, Ohio)**
- **June-July, 2008**
- **Approved by University of Toledo
Institutional Review Board**

OUTCOMES TO BE MEASURED

Primary Outcome Measure

- **Change in opioid prescription writing**

Secondary Outcome Measure

- **Reasons for change in clinical management**

METHOD

Convenience sample- not all patients who qualified were included.

Research assistants identified the patients to be included.

PRIVACY SAFEGUARDS

Research assistants were trained, 2nd year medical students.

Strict patient confidentiality maintained throughout study.

No PHI on data collection sheets.

Patient identifiers, including PMP report place in ED HIPAA-compliant disposal units at end of each day.

PATIENTS

- **≥ 18 years of age**
- **Chief complaint of painful condition, including dental, neck, back, head, joint, or abdominal pain.**
- **Acute injuries – excluded from study**

PROCESS

- 1. Prescriber examined patient.**
- 2. Research assistant administered survey to prescriber.**
 - Likelihood of querying PMP**
 - Likelihood of prescribing a controlled substance**
 - If so, which drug and quantity**
- 3. PMP data presented to prescriber**
- 4. 3 questions repeated**

PROCESS, CONT.

Prescribers also asked for other factors that influenced the prescription decision

- **Physical exam findings**
- **Patient appearance**
- **Patient demeanor**
- **Patient statements**

RESULTS

Patients - 199 selected, 179 completed study.

Prescribers - 17 ED physicians, 1 nurse practitioner

Before access to PMP information

- **Probability of querying PMP prior to prescribing**
 - **47% high probability, 36% low probability**
- **Likelihood of prescribing a controlled substance**
 - **32% high, 26% moderate, 36% low**

RESULTS, CONT.

**PMP information that was provided to prescriber
(re previous 12 months)**

- **# prescriptions = 0 – 128 (mean 18.9)**
- **# of prescribers = 0 – 40 (mean 5.6)**
- **# of pharmacies = 0 – 20 (mean 3.5)**
- **# of addresses used by patients = 0-14 (mean 1.8)**

RESULTS, CONT.

After review of PMP information

41% altered prescribing plan

- **61% prescribed fewer or no opioids**
- **39% prescribed more pain relief**

RESULTS, CONT.

Reasons cited for change in prescribing

- **Number of prescribers 31%**
- **Number of pharmacies 26%**
- **Number of addresses 16%**
- **Physical exam 25%**
- **Patient statements 15%**
 - **Truthfulness of patient statements compared with PMP report**
 - **Insistence on specific medication**

CONCLUSION

Use of PMP data frequently altered a providers' prescribing behavior for patients complaining of non-traumatic pain.

LIMITATIONS

Study was performed at one institution.

Number of patients treated by each physician is not the same.

- **One physician treated 1/3 of patients**
- **Three physicians treated 1/3**
- **14 practitioners treated 1/3**

Documentation was self-report

Study may have affected behavior since the surveys were conducted during the decision-making process.

PMP data may have been incomplete- Toledo is close to Michigan border

CITATION

Baehren D. Marco C, et. al. *A Statewide Prescription Monitoring Program Affects Emergency Department Prescribing Behaviors*, ANNALS EMERGENCY MEDICINE, July 2010, at 19.