The misuse, abuse, and diversion of prescription drugs has evolved into a very serious public health and public safety problem in the United States. Drug diversion is when a drug leaves legitimate medical practice, such as a patient giving away or selling the medication. Results from the 2012 National Survey on Drug Use and Health indicate that approximately 15.7 million individuals aged 12 years or older have used prescription drugs non-medically within the past year, and 6.7 million have used these drugs non-medically within the past month. Results from the 2012 National Survey on Drug Use and Health indicate that approximately 15.7 million individuals aged 12 years or older have used prescription drugs non-medically within the past year, and 6.7 million have used these drugs non-medically within the past month. In 2013, the “Monitoring the Future” survey found that among the top 10 substances abused by 12th-graders, 6 of them were pharmaceuticals (i.e., Adderall, Vicodin, OxyContin, cough medicine, tranquilizers, and sedatives). Abuse and diversion of prescription opioids are of particular concern, as they now account for more than 75% of all pharmaceutical overdose deaths nationally and claim more than 400 lives each year in LA County. Most prescription drugs associated with overdose deaths are prescribed by physicians, not purchased online or stolen from pharmacies. The practice of “doctor shopping,” in which individuals obtain multiple prescriptions from multiple prescribers, is a known major contributor to prescription drug, especially opioid, abuse or diversion. Therefore, growing attention has been directed toward identifying doctor-shopping behavior and preventing controlled substance diversion at the point of patient care. Most states have established prescription drug monitoring programs (PDMPs) to track and monitor the prescribing of controlled substances and to detect patterns of abuse and diversion. PDMPs collect data from pharmacies on dispensed controlled-substance prescriptions and make this information available to authorized users through secure electronic databases. Currently, 49 states and 1 U.S. territory have enacted legislation to develop PDMPs, and 47 states have operational PDMPs.

The CURES/PDMP Program
California’s PDMP, known as the Controlled Substance Utilization Review and Evaluation System, is a tool for judicious prescribing.

Controlled Substance Utilization Review and Evaluation System
A Tool for Judicious Prescribing

Tina Kim, PhD
Mike Small
Catherine Hwang
Shantel Muldrew, MPH

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The CURES/PDMP Program
California’s PDMP, known as the Controlled Substance Utilization Review and Evaluation System, is a tool for judicious prescribing.
Evaluation System (CURES), is an electronic database designed to monitor the prescribing and dispensing of Schedule II through IV controlled prescriptions. In 1998, CURES replaced the California Triplicate Prescription Program, which at the time was the nation’s oldest PDMP (created in 1939). In 2009, the California Department of Justice (DOJ) instituted a web-based PDMP, a searchable database component of CURES, which has subsequently been referred to as “CURES/PDMP.”

CURES/PDMP allows pre-registered users (e.g., licensed prescribers, pharmacists, law enforcement, and medical regulatory boards) at the point of care to quickly review patient controlled-substance history information via automated Patient Activity Reports, or PARs. In addition to helping prescribers make better prescribing decisions, CURES/PDMP enables registered users to identify and assist patients who may be abusing controlled substances (Box 1). It can also assist law enforcement agencies and regulatory boards to identify patterns of activity that are suggestive of prescription drug diversion as well as inappropriate prescribing and dispensing practices, such as prescription fraud and forgeries. CURES/PDMP may be readily incorporated into clinical practice as part of a comprehensive prescription drug abuse prevention strategy.

Findings from the CURES/PDMP Data Analysis
In 2012, nearly 10 million controlled substance prescriptions (Schedules II-IV) were written in Los Angeles County. Among these, more than 4 million prescriptions were for opioids. Hydrocodone was the most frequently prescribed opioid (67.0%), followed by oxycodone (10.8%), codeine (10.6%), morphine (3.9%), and fentanyl (2.1%) (Figure 1). For this article, we focused our analyses on opioid prescriptions dispensed in Los Angeles County, as this drug class is commonly abused and diverted and poses a high risk for adverse health outcomes and death.

In 2012, approximately 4.1 million opioid prescriptions were prescribed by 55,819 unique prescribers for about 1.5 million unique patients at 4,621 unique pharmacies. On average, each patient obtained 2.70 opioid prescriptions (SD=4.06; range: 1 to 203) from 1.32 prescribers (SD=0.88; range: 1 to 79) and 1.13 pharmacies (SD=0.45; range: 1 to 32). Of the patients who filled opioid prescriptions, 58% were female, and 60% were older than 45 years of age. The top 24.5% of prescribers were responsible for 90.9% of all opioid prescriptions dispensed in 2012 (Figure 2).

Consistent with the scientific literature, doctor shopping in this analysis was defined as obtaining opioid prescriptions from 4 or more prescribers and from 4 or more pharmacies in 2012. According to 2012 CURES data, there were 5,153 (0.3%) patients in Los Angeles County who met these criteria. Doctor shoppers were most common in Service Planning Area (SPA) 1-Antelope Valley (76 per 100,000 population) and SPA 6-South (62 per 100,000 population). Compared to non-doctor shoppers, doctor shoppers were more likely to be 35-64 years of age, use long-acting opioids, use higher total daily drug doses, and use oxycodone, morphine, and fentanyl. In addition, doctor shoppers obtained a significantly greater number of pills and prescriptions, procured more days of supply, and had higher morphine equivalent doses (MED) per patient compared to non-doctor shoppers (Table 1). Some extreme cases were identified among doctor shoppers, as shown in Table 2. However, because the CURES/PDMP data system does not collect information about prescribers’ specialties or patients’ medical conditions, these results need to be interpreted with caution.

CURES/PDMP Enrollment and Utilization
Available evidence suggests that PDMPs can be an effective tool for reducing doctor shopping, improving clinical decision-making, changing prescribing behavior, and supporting

Box 1. Examples of Potential Problem Behaviors that Can Be Identified with CURES/PDMP

| Patient Information |
| - Multiple similarly spelled names |
| - Multiple addresses (e.g., different cities) |
| Prescription Information |
| - Filling prescriptions more frequently than clinically indicated |
| - Duplicate prescriptions (same drug class in same time frame) |
| - Filling for large quantities and/or high strengths or dose escalation |
| Pharmacy Information |
| - Multiple pharmacies, especially for same drug |
| Prescriber Information |
| - Multiple prescribers, especially for same drug |
| - Prescriptions under your name that you did not prescribe |

Reproduced with permission from Judith Martin and Michelle Geier. The table was presented at the CADPAAC meeting, Sacramento, January 30, 2014.
The Los Angeles County Department of Public Health strongly urges all physicians and pharmacists to register with CURES and routinely check Patient Activity Reports.

In view of enrollment challenges with the current CURES/PDMP system, the Budget Act of 2013 authorized funding for a new CURES 2.0 system to improve system accessibility and streamline the registration process. The new system should relieve many of the existing impediments to registration. Further, a recently enacted senate bill (SB 809, Chapter 400, Statutes of 2013, DeSaulnier) requires all health care practitioners authorized to prescribe, order, administer, furnish, or dispense Schedule II-IV controlled substances to submit an application in order to gain approval for accessing online CURES information.

Although the bill does not require CURES registrants to use the system, routinely checking CURES Patient Activity Reports at the point of patient care will help prescribers detect and prevent doctor-shopper behavior which, in turn, will improve patient outcomes. Information on individual patients’ prescription history for controlled substances may be obtained via automated CURES PARs at the DOJ website. See Box 3 for detailed information about how to request a CURES PAR, and Box 4 for a sample PAR. According to the current manager of the CURES database, CURES data presents such valuable patient prescription acquisition history that, as the anticipated new CURES system dramatically improves accessibility, checking CURES may very well become a medical standard of care and render a government mandate unnecessary.

**Using Patient Activity Reports as a Clinical Tool**

Patient Activity Reports allow prescribers and pharmacists to review a patient’s controlled-substance prescription history to assess, identify, and prevent prescription drug abuse and

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**Figure 1. Percent of Prescription Drugs (Schedule II-IV) Dispensed in Los Angeles County, 2012 (N=9,763,887)**

![Figure 1](image-url)
Table 1. Opioid Prescriptions per Patient among Doctor Shoppers vs. Non-Doctor Shoppers in Los Angeles County, 2012

<table>
<thead>
<tr>
<th>Per Patient</th>
<th>Doctor Shoppers</th>
<th>Non-doctor Shoppers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Pills</td>
<td>1,017.9</td>
<td>159.6</td>
</tr>
<tr>
<td>Number of Prescriptions</td>
<td>15.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Days of Supply</td>
<td>239.8</td>
<td>40.2</td>
</tr>
<tr>
<td>Morphine Equivalent Doses</td>
<td>946.2</td>
<td>157.3</td>
</tr>
</tbody>
</table>

Table 2. Extreme Cases of Opioid Prescriptions Filled in Los Angeles County, 2012

<table>
<thead>
<tr>
<th>Patient with...</th>
<th>Value</th>
<th>Gender</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest number of opioid prescriptions</td>
<td>203</td>
<td>Male</td>
<td>44</td>
</tr>
<tr>
<td>Highest number of prescribers</td>
<td>79</td>
<td>Male/Female</td>
<td>48/40</td>
</tr>
<tr>
<td>Highest number of pharmacies</td>
<td>32</td>
<td>Male</td>
<td>33</td>
</tr>
<tr>
<td>Highest number of opioid pills</td>
<td>30,000</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Highest opioid dosage per day (MED)</td>
<td>157,377</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
Box 2. How to Obtain Access to CURES/PDMP

Step 1. Register online.
Submit the online application on the California Department of Justice website at https://pmp.doj.ca.gov/pmpreg. Select “Practitioner” or “Pharmacist” as appropriate on the application and fill out all required fields.

Step 2. Print application.
After completing the online registration, print your registration confirmation immediately. You will also receive an e-mail verification immediately after completing the online application. You must respond to this e-mail within 72 hours.

Step 3. Compile your application package by attaching the following to your CURES confirmation page:
   a. A copy of your Drug Enforcement Administration (DEA) Controlled Substances Registration Certificate
   b. A copy of your State Medical License or State Pharmacy License
   c. A copy of a government-issued identification.

Step 4. Have your entire application package notarized.
You will sign/date your application before the notary public.

Step 5. Submit your notarized application package to:
California Department of Justice
CURES/PDMP
P.O. Box 160447
Sacramento, CA 95816

The application process will take at least 8 weeks. If you don’t hear from the DOJ after 8 weeks, please do not hesitate to direct questions to the CURES Program at:
Phone: (916) 227-3843
FAX: (916) 227-4589
E-mail: PMP@doj.ca.gov

Note: For outreach events, you can skip Steps 4 and 5. Bring your signed/dated application package to the event and turn it in to the DOJ staff member. Contact CURES Manager Tina Farales at tina.farales@doj.ca.gov to schedule a CURES sign-up event.

diversion. For the past 4 years, the Addiction Psychiatry Fellowship at Cedars-Sinai Medical Center has included PARs as a key tool in clinical training. During an interview, Dr. Jeffery Wilkins, who directs the program, stressed that physicians have the potential to play a very important role in preventing overdose deaths with the aid of PARs, stating that “PARs generate opportunities to have supportive discussions with patients, as well as informative and often eye-opening discussions with other physicians and prescribers involved in a patient’s care.” He also indicated that in 2013, a large majority of patients with prescription opioid problems at Cedars-Sinai Medical Center were female and over 45 years of age, which is consistent with local and national trends.

Dr. Wilkins recommended that physicians consider the following key questions when they review PARs:
1. Is my patient’s pattern of obtaining controlled substance prescriptions consistent with my goals for the patient?
2. Has my patient sought controlled substance prescription from other physicians?
3. Does my patient’s controlled substance history contain other prescriptions that may interact with medications I am prescribing or am considering?
4. If I detect an early pattern that may be indicative of overutilization, is there an opportunity for me to intervene before clinical problems arise?
5. If I detect signs and symptoms of excessive medication use (e.g., apparent intoxication, difficulty staying awake, slurred speech), is there an opportunity for me to lessen the severity of symptoms and facilitate recovery?

Health care practitioners can play a significant role in addressing the prescription drug abuse epidemic in Los Angeles County. Their enrollment in and use of CURES/PDMP is a key step to ensure safe prescribing and appropriate dispensing, as well as to reduce diversion and abuse of controlled substances.
Box 3. How to Request a CURES Patient Activity Report

Step 1. Log In
- Go to the PDMP website at https://pmp.doj.ca.gov/pdmp/index.do.
- Or do a Google search for “CURES Login.”
- Enter Username and the Password and Click the “Login” button.

Step 2. Locate Patient Activity Report (PAR)
- The Login will open to the “Welcome to the PDMP Application” screen.
- Click on the “Patient Activity Report” (PAR) link on the left of the screen.

Step 3. Enter the Patient Information
- Enter the patient’s last name, first initial, and date of birth (mm/dd/yyyy).
- Click on the drop down tab in the "Period in Months" and select 12 months.
- Certify Search and Click on the SEARCH button.

Step 4. Generate Report
- Check all boxes with matching patient names you are searching. You may be surprised how many boxes you will need to check if your patient is a frequent user.
- Click the GENERATE REPORT button.
- Scroll down and click the VIEW/PRINT CONSOLIDATED REPORT button.
- The PAR will display on a consolidated page or set of pages listing the prescription history of the patient requested.

Box 4. Sample Patient Activity Report from the CURES Database

The authors would like to thank Jeffery Wilkins, MD, DFAPA, FASAM, LINCY, for sharing his clinical examples of CURES utilization and for his review of this article. He is the Andy Heyward/Amy Moynihan Chair in Addiction Medicine in the Department of Psychiatry at Cedars-Sinai Medical Center, Director of the American Board of Addiction Medicine/American Society of Addiction Medicine, and Clinical Professor, Department of Psychiatry and Biobehavioral Sciences, UCLA. Thanks also to the Substance Abuse Prevention and Control Program’s Kairong Wang, PhD, Research Analyst, for her additional data analysis support and Benedict Lee, PhD, Director, Epidemiology and Science Division, for his review.

Tina Kim, PhD is a Chief, Epidemiology and Science Division; Catherine Hwang is an MSPH Candidate at Johns Hopkins and former Epi Scholar; and Shantel Muldrew, MPH, is a Research Analyst, Substance Abuse Prevention and Control, Los Angeles County Department of Public Health. Mike Small is the CURES/PDMP Program Manager, Law Enforcement Support Program, California State Department of Justice.
CURES/PDMP Frequently Asked Questions

Who can access CURES/PDMP?
Practitioners eligible to prescribe controlled substances, pharmacists authorized to dispense controlled substances, sworn law enforcement personnel, and authorized regulatory boards.

What do I do if a patient expresses concerns regarding the information obtained from CURES/PDMP?
Do not provide a copy of the Patient Activity Report (PAR) to the patient. You may refer the patient to the CURES/PDMP public number: (916) 227-3843.

Can I share my CURES/PDMP login and password?
No. The patient information contained in the PDMP is confidential information protected by federal and state law. The PDMP login and password may not be shared with anyone.

What do I do if I find out my patient is obtaining multiple prescriptions from various practitioners?
Work with your patient to help him/her get the support he/she needs. Refer to the Medical Board of California’s “Guidelines for Prescribing Controlled Substances for Pain” at http://www.mbc.ca.gov/Licensees/Prescribing/Pain_Guidelines.aspx. You may also wish to contact and alert other practitioners or pharmacists listed in the PAR and/or refer your patient to addiction treatment: www.findtreatment.samhsa.gov or 1-800-662-HELP.

What do I do if I suspect that my patient is diverting his/her prescriptions for profit?
If you believe that your patient is acting criminally, you should report the circumstances to your local police or sheriff department or the Drug Enforcement Agency office in your area. If you believe that your patient is seeking the drugs due to addiction, you should be prepared to intervene and get him/her the help he/she needs, as described in the question above.

REFERENCES

April 2014    LA County Department of Public Health    Rx for Prevention
Rx for Prevention is published 10 times a year by the Los Angeles County Department of Public Health. If you would like to receive this newsletter by e-mail, go to www.publichealth.lacounty.gov and subscribe to the ListServ for Rx for Prevention.

Upcoming Training

Immunization Training: 2014 Adult Immunization Schedule
The Los Angeles County Department of Public Health Immunization Program, is offering a 2-hour CEU training titled “2014 Adult Immunization Schedule” and no charge to providers. Topics include adult immunization schedule updates and recommendations for vaccinating medically high-risk adults and health care personnel.

To register or learn more about other trainings sponsored by the Immunization Program, visit www.publichealth.lacounty.gov/ip/trainconf.htm or call (213) 351-7800.

Index of Disease Reporting Forms

All case reporting forms from the LA County Department of Public Health are available by telephone or Internet.

Reportable Diseases & Conditions
Confidential Morbidity Report
Morbidity Unit (888) 397-3993
Acute Communicable Disease Control (213) 240-7941

Sexually Transmitted Disease
Confidential Morbidity Report
(213) 744-3070
www.publichealth.lacounty.gov/dhsp/ReportCase.htm (web page)
www.publichealth.lacounty.gov/dhsp/ReportCase/STD_CMRR.pdf (form)

Adult HIV/AIDS Case Report Form
For patients over 13 years of age at time of diagnosis
Division of HIV and STD Programs (213) 351-8196
www.publichealth.lacounty.gov/dhsp/ReportCase.htm

Pediatric HIV/AIDS Case Report Form
For patients less than 13 years of age at time of diagnosis

Pediatric AIDS Surveillance Program
(213) 351-8153
Must first call program before reporting
www.publichealth.lacounty.gov/dhsp/ReportCase.htm

Tuberculosis Suspects & Cases
Confidential Morbidity Report
Tuberculosis Control (213) 745-0800
www.publichealth.lacounty.gov/tb/forms/cmr.pdf

Lead Reporting
No reporting form. Reports are taken over the phone.
Lead Program (323) 869-7195

Animal Bite Report Form
Veterinary Public Health (877) 747-2243
www.publichealth.lacounty.gov/vet/biteintro.htm

Animal Diseases and Syndrome
Report Form
Veterinary Public Health (877) 747-2243
www.publichealth.lacounty.gov/vet/disintro.htm

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