

## Collaboration or Coercion? Partnering to Divert Prescription Opioid Medications

Traci C. Green, Sarah E. Bowman, Madeline Ray,  
Nickolas Zaller, Robert Heimer, and Patricia Case

---

**ABSTRACT** *Diversion of prescription opioids is a widespread problem in the USA. While “doctor shopping” and pill brokering are well-described types of medication diversion, we sought to understand the social dynamic of diversion of prescription opioids and identify other diversion methods. Using qualitative data collected as part of a 12-week Rapid Assessment and Response study of prescription opioid overdose and abuse (the RARx Study) conducted in three communities in two New England states, we reviewed and thematically coded 195 interviews. Diversion took many forms: doctor shopping, pill brokering, and, most commonly, siphoning from the family medicine chest. Partnering—of patients with other “patients,” of patients with “caregivers”—to obtain prescription opioids was also described. Motivations for partnering indicated doing so out of fear of violence, for financial benefit, or in exchange for transportation or other services. Partnering for prescription opioids exhibited a range of power differentials, from collaboration to coercion, and tended to involve vulnerable populations such as the elderly, disabled, or destitute. Increased awareness among health providers of the ease of access and diversion of prescription opioids is needed to promote patient safety and prevent interpersonal violence.*

**KEYWORDS** *Diversion, Prescription opioid abuse, Overdose, Elder abuse*

---

### INTRODUCTION

Abuse of prescription opioids and death from overdose involving these medications are at unprecedented rates in the USA. Increases in fatal overdose since the mid-1990s have largely been driven by the substantial growth in opioid analgesic prescriptions and non-pharmacy use of prescription opioids.<sup>1–5</sup> People who abuse these drugs may access them either through their own prescriptions or through diversion—the transfer of a prescription drug from a lawful to an unlawful channel of distribution of use<sup>6</sup>—at any number of points in the supply chain. Prescription opioid diversion from prescribed patients to non-prescribed users has been well documented.<sup>7–11</sup> Known sources of diversion involve procuring pills from family members, friends, acquaintances, and strangers, through theft, fraud, exchange, sale,

---

Green, Bowman, and Ray are with the Department of Emergency Medicine, Rhode Island Hospital, Providence, RI, USA; Green and Zaller are with the The Warren Alpert Medical School at Brown University, Providence, RI, USA; Zaller is with the The Miriam Hospital, Providence, RI, USA; Heimer is with the Yale School of Public Health, New Haven, CT, USA; Case is with the Fenway Community Health, Boston, MA, USA.

Correspondence: Traci C. Green, Department of Emergency Medicine, 593 Eddy St. Providence, RI 02903, USA. (E-mail: traci.c.green@gmail.com)

or gift.<sup>12</sup> Diversion of prescription opioids takes place within different types of social networks.<sup>13</sup> There is growing evidence of collaboration between people for the purpose of accessing medication, such as healthcare providers and patients diverting and selling prescription opioids,<sup>9</sup> and “pill brokers” who partner with elderly Medicaid recipients to gain access to their pills.<sup>10</sup> Little is known about the social dynamic in which these medications are diverted, though possible mechanisms include social coercion, exchange for money or goods, exploitation of a disadvantaged person, or collaboration between perhaps unlikely parties.

This study aims to explore the social dynamic of diversion of prescription opioids and identify potential diversion methods, using qualitative data collected as part of a 12-week Rapid Assessment and Response study of prescription opioid overdose and abuse (the RARx Study) conducted in three communities in two New England states.

## METHODS

Data collection was part of a Rapid Assessment and Response process in Connecticut (CT) and Rhode Island (RI). The purpose of the RAR was to better understand patterns of prescription opioid overdoses in the selected communities and to suggest targeted ways to better prevent them.

### Study Locations

To select the study sites, we conducted forensic case review of medical examiner drug-involved intoxication deaths that took place in calendar year 2009 and geospatial analysis of these death locations. Potential study locations had to fulfill the following specific criteria: (1) experienced  $\geq 3$  prescription opioid overdose deaths in adjoining cities or towns during 2009 and (2) adult prescription opioid or methadone overdose mortality rates in the highest quartile. Based on these criteria, findings suggested one community in RI and two communities in CT had an emergent or persistent prescription opioid overdose problem. A persistent problem was defined as one known to have existed in the years prior to the medical examiner case review, as evident from prior publication<sup>14</sup> and extant reports<sup>15</sup>; an emergent problem lacked such evidence.

Study sites were described statistically and by residents as either suburban or small towns. Table 1 provides study site characteristics. Site populations numbered from less than 20,000 to less than 85,000, and median age was 39.1. One site was

**TABLE 1 Study site demographics**

	Hispanic or Latino %	White race %	High school graduate or higher education %	Residents living in poverty %	Population N	Age median	Overdose problem trend
CT site 1	4.5	91.7	86.3	3.6	<50,000	39.1	Emergent
CT site 2	16.7	68.4	82.2	9.7	<20,000	38.4	Persistent
RI site	3.4	90.8	85	8.2	<85,000	43.7	Persistent
Median	4.5	90.8	85	8.2	–	39.1	

Source: US Census 2010; A persistent overdose problem was defined as one known to have existed in the years prior to the medical examiner case review, as evident from prior publication<sup>14</sup> and extant reports<sup>15</sup>; an emergent problem site lacked such data

notable for having an older median age and ranked among the top 100 cities (sized 50,000 or greater) with the oldest residents.<sup>16</sup> While residents of the study sites were primarily White and non-Hispanic, one study site exhibited diversity in race and ethnicity. The same site also had the highest rates of persons living in poverty and lowest education levels of the study sites.

### **Data Collection**

Following community selection for the RAR, Community Advisory Boards (CABs) were established in each state. The CABs provided community-level oversight of the RAR by tailoring the evaluation to the local community, which included making referrals and contacts with prospective interviewees, meeting with the research team throughout the data collection process, and ultimately helping select interventions to be undertaken in response to the RAR's findings.

Seven field interviewers were trained in qualitative interviewing methods and thematic coding. Interviewees were recruited through recommendation by CAB members, and chain referral, wherein interviewees recommended further interviewees. Interviews were audio recorded and transcribed; interviewers additionally kept field notes as written reflections on their process.

Data collection occurred during a 12-week period. In-depth interviews were conducted with key informants representing individuals who could provide a sense of the "big picture" of prescription opioid abuse and overdose; individuals with day-to-day professional contact with people using prescription opioids and at risk of overdose; and individuals who are using prescription opioids currently, or have personal experience with prescription opioid use or users. These interviewees were labeled as systems, interactors, and community key informants, respectively. A semi-structured interview guide was used to cover topics on drug use more generally; prescription opioid use, abuse, diversion; overdose awareness and responses; and possible interventions, including prescription monitoring, naloxone access, and drug treatment. Additionally, anonymous brief intercept surveys were conducted with individuals who had personal knowledge of pain pill use in the community. The brief surveys collected specific information on prescription opioid abuse and overdose; recruitment was geographically targeted and venue-based (e.g., outreach van, drug treatment program, chronic pain clinic, bars). Interviewees completed a verbal informed consent process and received a copy of the Informed Consent form and privacy practices. The study and consent process was approved by the Institutional Review Board at Rhode Island Hospital.

### **Data Analysis**

Interview recordings were professionally transcribed. Data were stored securely on a password-protected server according to the requirements of the Institutional Review Board of the Rhode Island Hospital. Through an iterative process, the research team developed a qualitative coding scheme which was applied to the interview transcripts. Themes were added as they emerged from the data, allowing for inductive analysis. Using Nvivo version 9 (QSR International, Burlington, MA, USA), a qualitative data management software package, and Microsoft Word 2007 (Microsoft Corporation, Redmond, WA, USA), the interviews were coded independently by two members of the field team, with the principal investigator (TCG) checking for consistency. Discrepancies in coding were resolved by consensus. The research team derived conclusions from the coded transcripts.

## RESULTS

We collected 143 key informant interviews and conducted 52 anonymous brief intercept surveys across the two states and three study sites. Table 1 presents the sociodemographics of the interviewees, by site. Approximately 10 % of interviews were conducted with systems level key informants, 43 % were interactors, 18 % were community interviewees, and 27 % were brief intercept interviews. Forty-four percent of those interviewed ( $n=87$ ) identified as having personal experience with prescription opioid use. Occupational roles of interviewees included prescribers and other non-prescriber medical professionals (17.4 %), state or local government representatives (7.2 %), drug treatment program professionals (7.2 %), law enforcement (6.7 %), emergency medical service providers (6.2 %), and pharmacists (3.1 %). Notably, four interviews were conducted with pharmaceutical company executives. The majority of interviewees identified as White (90.8 %) and not Hispanic (95 %), and two thirds were male (Table 2).

**TABLE 2 Sociodemographic characteristics of RARx Study participants by site ( $N=195$ )**

	Rhode Island ( $n=75$ )		Connecticut ( $n=120$ )		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<b>Interview type</b>						
Systems key informant	9	12.0	14	11.7	19	9.7
Interactor key informant	42	56.0	43	35.8	85	43.6
Community key informant	13	17.3	22	18.3	35	17.9
Brief intercept	11	14.7	41	34.2	52	26.7
<b>Occupational role or personal experience</b>						
Drug Treatment Provider	11	14.7	3	2.5	14	7.2
Fire/Emergency Medical Service provider	3	4.0	9	7.5	12	6.2
Government	7	9.3	7	5.8	14	7.2
Medical Examiner	2	2.7	2	1.7	4	2.1
Medical professional, Non-prescriber	7	9.3	5	4.2	12	6.2
Other community/professional	3	4.0	4	3.3	7	3.6
Personal experience with prescription opioid use	24	32.0	63	52.5	87	44.6
Pharmaceutical company employee	1	1.3	3	2.5	4	2.1
Pharmacy professional	1	1.3	5	4.2	6	3.1
Law enforcement	5	6.7	8	6.7	13	6.7
Medical professional, Prescriber	11	14.7	11	9.2	22	11.3
<b>Gender</b>						
Men	47	62.7	82	68.3	129	66.2
Women	26	34.7	35	29.2	61	31.3
Missing	2	2.7	3	2.5	5	2.6
<b>Race</b>						
White	70	93.3	107	89.2	177	90.8
Black/African American	3	4.0	2	1.7	5	2.6
More than one race	0	0.0	3	2.5	3	1.5
Other (Asian, Native American, Pacific Islander)	0	0.0	5	4.2	5	2.6
Missing	2	2.7	3	2.5	5	2.6
<b>Ethnicity</b>						
Not Hispanic or Latino	70	93.3	109	90.8	179	91.8
Hispanic or Latino	3	4.0	7	5.8	10	5.1
Missing	2	2.7	4	3.3	6	3.1

### Sources of Diverted Prescription Pills

Prescription opioid medications came from a wide variety of sources. Reports of sources for pain medications from medical providers and police officers offered a common method of diversion of pain medications—from the family medicine cabinet. One police officer described prescription theft:

They'll go to their grandmother's house and ... they'll take it, and, and of course, the elderly won't realize it. –Interactor, CT

A “grandmother”, either real or figurative, was sometimes reported as a collaborator in pill diversion. A physician described elder knowledge of pill diversion, saying:

I have had grandmothers sell their, give their medications to their grandsons to sell on the street.–Interactor, CT

The sale of prescription opioids is often driven by economic needs of those who have prescriptions for medications. Participants described a tipping point, where individuals actually need the pills that have been prescribed for legitimate pain, but have competing financial needs. The price per milligram for oxycodone during the study period was roughly \$1 per milligram<sup>17</sup>; individuals are not able to resist the temptation to sell some of their prescription opioid pills. A police officer discussed the financial incentives, saying:

It has a lot to do with the, the economy, ...dealers need money, and the people ... being prescribed the medication, they are getting help with their medication, but they, but they also need finances...., and that's how they draw...a team.–Interactor, CT

There is also a financial incentive to get a prescription illegitimately, for faking a condition that might require pain medication, and selling all of the pills in order to purchase other kinds of drugs. One police officer said:

People that are known to be pill sellers are the ones who get the prescription and then sell it to people in the town, and they use that money to buy stuff for themselves. Now, they may get a prescription of Oxycontin and their drug of choice is not Oxycontin, their drug of choice is heroin, so they take the sale money and they buy their heroin with it.–Interactor, RI

A similar pattern that mixed therapeutic need with diversion was described by a physician, who said:

Some people actually have chronic pain issues,...sometimes what they'll do is, they'll sell part of the prescription to continue, to continue their ability to pay for their ongoing therapy.–Interactor, RI

### Collaborative and Exploitative Partnerships

A further pattern of prescription opioid diversion in the interviews was partnership for the purpose of diversion. Interviewees told of several cases in which people

coordinated efforts in doctors' offices, pharmacies, and outside to get and fill prescriptions. Partnerships were identified as collaborative or exploitative, some of which demonstrated a power differential.

### **Collaborative Partnering**

Partnering at the clinic or pharmacy exemplified a collaboration in which the partners both benefited from the diversion. Interviewer field notes report:

They worked out a deal in which the interviewee gave the man rides to the clinics in exchange for a share of the pills. Such partnerships between young and old, sick and well often form for the purpose of drug diversion. If you look young and healthy, a doctor won't believe that you need pain pills, so younger people will team up with older people.—Intercept, RI

These unexpected partnerships did not go unnoticed by health professionals. For example, one pharmacist recounted:

...there are people that, customers that we would never put together. And then, they would come together in a car at the drive-thru [pharmacy] ...like, we definitely [see] one person that's always trying to get his prescription early.... And here comes another gentleman who's always getting his Oxycontin early. And they're together.—Interactor, RI

Many interviewees said their suburban or small town setting made mobility difficult, especially for the elderly, disabled, and impoverished residents, with implications for prescription opioid diversion. One interviewee complained to this effect,

It's kind of hard to get around. It's, like, you take the bus and stuff. It's just, it's, there's no easy way to get in and out of [study area].—Community, RI.

Limited or inaccessible transportation and high demand for prescription opioids appeared to create a marketplace where the prescription opioids became currency. Often transportation to a clinic visit or to the pharmacy was given in exchange for a portion of the pills. A police officer recounted what she perceived as a typical conversation that may initiate the exchange of pills for a ride. She paraphrased:

I need a ride...I have to go to Social Security...I know you're a pill popper, so why don't you give me a ride, I can get five pills.... And you can give me a ride for the week, take me to the market, take me to the drug store, take me to, you know, my doctor's appointment, I'll give you some pills.—Interactor, RI

### **Exploitative Partnering**

In some instances, partnering appeared exploitive, with one member of the partnership taking advantage of the other to get access to the prescription opioids. This took place in the community, outside of the pharmacy and doctors' office. In particular, exploitative partnering tended to occur in physical locations where multiple generations may share a common space (i.e., multi-family home), or where elderly or disabled people reside independently in the community (e.g., low-income

housing, apartment buildings). An elderly affairs advocate told of a mother and son partnership in which the adult son exploited his mother for housing and prescription opioid medications. He furthermore noted that these partnerships were not uncommon, elaborating a familiar exchange:

“Mom, go to the doctor’s, tell him you need more pills. I need pills.” ...Junior lives with me, can’t afford to be out there, can’t...you know, he’s just getting his check, he’s waiting, it’s been three months...he just literally just lives off his mom and, and does that. Mom’s not gonna rat junior out. This son now has his five or six friends coming over. In this one bedroom, they’re all drinking, they’re all doing pills inside the apartment, and when you speak with mom, “Nope. He’s such a good son.” He is definitely using mom as the crutch.–Interactor, RI

There were also notable instances of exploitation happening in the pharmacy or community clinic setting. For example, a community member with family and professional exposure to prescription opioid abuse told of a local man who provided housing to vulnerable and indigent people in exchange for medications and other benefits that they were receiving. Furthermore, the man accompanied them to medical appointments, posing as their caregiver or patient advocate, making the case on their behalf that they were down and out and in need of a prescription:

...he would come in, you know, get his pain pills [and say], “I brought this person in. They really need help.” You know, “They’re homeless.” Big, sad story.... But really, they’re giving him all their, food stamps, all their stuff. All their pain medication, like, and he, like, distributes them out, like, you know what I mean?... He took...takes advantage of more vulnerable people, so he can sit in his bedroom all day and snort Oxycontin, you know?–Community, RI

## DISCUSSION

The results of this rapid assessment drew our attention to collaborative and exploitative partnering arrangements through which prescription opioids are diverted in three New England suburban and small town areas. Interviewees discerned identifiable patterns of diversion, from apparently consensual or even collaborative partnerships to exploitative relationships based upon access to prescription opioids. Some of these partnerships had a potential dimension of fear or abuse not previously observed in the published literature. Awareness of the potential for exploitative partnering, and the opportunity to witness these partnerships during the medical encounter, may inform medical and pharmacy practice.

In addition to informal arrangements at home and in the community, partnerships formed in which patients were accompanied on their trips to the doctor or pharmacy and subsequently provided some or all of their medication to their companion. These partnerships, and the exploitative partnerships in particular, have not previously been discussed in the literature on prescription opioid diversion.

Study sites were described by residents as either suburban or small towns, locations that are known to have high rates of prescription opioid abuse relative to urban areas.<sup>8,18–20</sup> While transactions exchanging illicit drugs like heroin and crack cocaine for housing, shelter, or sex are common in the literature<sup>21</sup> and typically noted in urban drug-using scenes,<sup>22</sup> the exchange of prescription opioids for

transportation in a suburban and small town area is an arrangement not previously described.

Raising awareness of the potential for exploitative partnerships during the medical encounter may allow providers and pharmacists to better anticipate, identify, and avoid diversion of the medications they prescribe and dispense and ultimately better protect and care for patients vulnerable to such exploitation. Use of state prescription monitoring programs may be helpful in detecting patterns of abuse, diversion, and counseling on safety precautions against addiction and prescription opioid overdose.<sup>23</sup> Our findings indicate a need for providers to be aware of potentially exploitative partnerships, abusive relationships, arrangements in which another person may control or steal their patients' medications, and other types of interpersonal violence such as medication exploitation, when prescribing abusable medications like prescription opioids. Laws in both study areas require healthcare providers to report elder and child abuse. Successful provider interventions include multi-component interpersonal violence screening program approaches, such as those recently reviewed.<sup>24-26</sup>

Recent attention to abuse and diversion of prescription opioids and criminalization of overprescribing may have a real or perceived "chilling effect" on the part of providers and pharmacists to write and fill these prescriptions.<sup>27-29</sup> Opioid drugs are vitally important medications for the treatment of pain, opioid dependence, and end-stage disease. Growing awareness of abuse and diversion should not limit availability of these critical medications to patients in need. However, further attention to the nature of the exchange and the context of abuse and diversion may better inform provider practice and increase comfort prescribing and dispensing these medications. Continuing medical education that acknowledges and addresses the complicated landscape of opioid prescribing is indicated.

There are important limitations to this analysis. Rapid assessment methods entail a short data collection period; these results are only a reflection of drug use and impression of drug use at one particular time. The interviewees identified may not have knowledge that is representative of all prescription opioid use in the study areas, nor are the experiences of drug users in the study area generalizable to other areas. A larger scale study is needed to better understand the nature of these relationships. It is difficult to distinguish between collaboration and exploitation in a relationship, especially when obtained from a third-party source. Strengths of the data include the short turnaround between data collection and reporting, a community-based approach that was informed by the local CABs and input from a wide range of interviewees with varied experiences and firsthand perspectives on prescription opioid abuse.

These findings call for more research into the role of prescription opioid diversion within abusive relationships of all kinds, and a broader understanding of the collaborative relationships and social networks in which diversion of prescription opioids may take place. Further research would be helpful to better characterize the nature of exploitative partnerships as they relate to prescription opioids, and to prepare providers with evidence-based, effective strategies to identify and respond to these situations.

## CONCLUSION

Diversion of prescription opioid medications takes different forms. Prescribers and pharmacists should be aware of potentially collaborative and exploitative partnering



between patients and family members, caregivers, acquaintances, or strangers, especially when treating patient populations historically vulnerable to abuse (e.g., elderly, children, women). As with other problems of interpersonal violence and abuse, in instances where diversion may be the result of coercive or exploitative practices, this is an opportunity to identify and intervene on the patient's behalf.

## ACKNOWLEDGEMENTS

We gratefully acknowledge Roza Tammer, Rehan Ansari, and Nicole Pflug for their assistance in data collection. This work was supported by a grant from the Centers for Disease Control and Prevention (CDC) (R21CE001846 Green (PI)). The funding source had no role in the study design, analysis, interpretation of the data, or decision to publish.

## REFERENCES

1. Hall AJ, Logan JE, Toblin RL, et al. Patterns of abuse among unintentional pharmaceutical overdose fatalities. *JAMA*. 2008; 300: 2613–2620.
2. Paulozzi LJ. Opioid analgesic involvement in drug abuse deaths in American metropolitan areas. *Am J Public Health*. 2006; 96(10): 1755–1757.
3. Paulozzi LJ, Ballesteros MF, Stevens JA. Recent trends in mortality from unintentional injury in the United States. *J Safety Res*. 2006; 37(3): 277–283.
4. Paulozzi LJ, Budnitz DS, Xi Y. Increasing deaths from opioid analgesics in the United States. *Pharmacoepidemiol Drug Saf*. 2006; 15(9): 618–627.
5. Paulozzi LJ, Ryan GW. Opioid analgesics and rates of fatal drug poisoning in the United States. *Am J Prev Med*. 2006; 31(6): 506–511.
6. Diversion Prevention and Control, Uniform Controlled Substances Act. In: on NCoC, Laws US, eds. Chicago, IL1994.
7. Davis WR, Johnson BD. Prescription opioid use, misuse, and diversion among street drug users in New York City. *Drug Alcohol Depend*. 2008; 92(1–3): 267–276.
8. Rosenblum A, Parrino M, Schnoll SH, et al. Prescription opioid abuse among enrollees into methadone maintenance treatment. *Drug Alcohol Depend*. 2007; 90(1): 64–71.
9. Inciardi JA, Surratt HL, Kurtz SP, Burke JJ. The diversion of prescription drugs by health care workers in Cincinnati, Ohio. *Subst Use Misuse*. 2006; 41(2): 255–264.
10. Inciardi JA, Surratt HL, Kurtz SP, Cicero TJ. Mechanisms of prescription drug diversion among drug-involved club- and street-based populations. *Pain Med*. 2007; 8(2): 171–183.
11. Inciardi JA, Surratt HL, Cicero TJ, Kurtz SP, Martin SS, Parrino MW. The "black box" of prescription drug diversion. *J Addict Dis*. 2009; 28(4): 332–347.
12. Inciardi JA, Surratt HL, Cicero TJ, Beard RA. Prescription opioid abuse and diversion in an urban community: the results of an ultrarapid assessment. *Pain Med*. 2009; 10(3): 537–548.
13. Lankenau SE, Teti M, Silva K, Jackson Bloom J, Harocopos A, Treese M. Initiation into prescription opioid misuse amongst young injection drug users. *Int J Drug Policy*. 2012; 23(1): 37–44.
14. Green TC, Grau LE, Carver HW, Kinzly M, Heimer R. Epidemiologic trends and geographic patterns of fatal opioid intoxications in Connecticut, USA: 1997–2007. *Drug Alcohol Depend*. 2011; 115(3): 221–8.
15. SAMHSA. Area profiles of drug-related mortality, 2008. Rockville, MD2010.
16. Advameb, Inc., City-Data. updated July 1, 2012. <http://www.city-data.com>. Accessed 14 Aug 2012.
17. RADARS System. "OxyContin". StreetRx. Updated August 10, 2012. <http://www.streetrx.com>. Accessed 10 Aug 2012.

18. Cicero TJ, Inciardi JA, Surratt H. Trends in the use and abuse of branded and generic extended release oxycodone and fentanyl products in the United States. *Drug Alcohol Depend.* 2007; 91(2-3): 115-120.
19. Paulozzi LJ, Xi Y. Recent changes in drug poisoning mortality in the United States by urban-rural status and by drug type. *Pharmacoepidemiol Drug Saf.* 2008; 17(10): 997-1005.
20. Cicero TJ, Surratt H, Inciardi JA, Munoz A. Relationship between therapeutic use and abuse of opioid analgesics in rural, suburban, and urban locations in the United States. *Pharmacoepidemiol Drug Saf.* 2007; 16(8): 827-840.
21. Jones DL, Irwin KL, Inciardi J, et al. The high-risk sexual practices of crack-smoking sex workers recruited from the streets of three American cities. The Multicenter Crack Cocaine and HIV Infection Study Team. *Sex Transm Dis.* 1998; 25(4): 187-193.
22. Weatherby NL, Shultz JM, Chitwood DD, et al. Crack cocaine use and sexual activity in Miami, Florida. *J Psychoactive Drugs.* 1992; 24(4): 373-380.
23. Green TC, Mann MR, Bowman SE, et al. How does use of a prescription monitoring program change medical practice? *Pain Med.* 2012; 13(10): 1314-23.
24. O'Campo P, Kirst M, Tsamis C, Chambers C, Ahmad F. Implementing successful intimate partner violence screening programs in health care settings: evidence generated from a realist-informed systematic review. *Soc Sci Med.* 2011; 72(6): 855-866.
25. Ramsay J, Richardson J, Carter YH, Davidson LL, Feder G. Should health professionals screen women for domestic violence? Systematic review. *BMJ.* 2002; 325(7359): 314.
26. McCaw B, Berman WH, Syme SL, Hunkeler EF. Beyond screening for domestic violence: a systems model approach in a managed care setting. *Am J Prev Med.* 2001; 21(3): 170-176.
27. Potter M, Schafer S, Gonzalez-Mendez E, et al. Opioids for chronic nonmalignant pain. Attitudes and practices of primary care physicians in the UCSF/Stanford Collaborative Research Network. University of California, San Francisco. *J Fam Pract.* 2001; 50(2): 145-151.
28. Fishman SM, Papazian JS, Gonzalez S, Riches PS, Gilson A. Regulating opioid prescribing through prescription monitoring programs: balancing drug diversion and treatment of pain. *Pain Med.* 2004; 5(3): 309-324.
29. Richard M, Reisman PJS, Adam J, Atherly, Christopher R, Flowers. Prescription opioid usage and abuse relationships: an evaluation of state prescription drug monitoring program efficacy. *Subst Abuse Res Treat.* 2009; 3: 41-51.