Key Points

- RADARS® System programs can help illustrate the impact of Prescription Drug Monitoring Programs (PDMPs)
- By population rate and URDD, buprenorphine, methadone, morphine and oxycodone showed declines after 2Q2011 in the RADARS® System Opioid Treatment Program.
- In the RADARS® System Drug Diversion program, hydrocodone showed a decline in population rate after 1Q2012 but URDD rates remained stable.

Figure 1: Opioid Treatment Program Population and URDD Rates in Kentucky from Q1 2009 – Q3 2012

Background

Prescription Drug Monitoring Programs (PDMPs) are statewide databases that gather information from pharmacies on dispensed prescriptions of controlled substances. These databases were implemented to address the prescription drug abuse epidemic [1]. Kentucky implemented their PDMP program in January 1999 with the online startup of KASPER (Kentucky All Schedule Prescription Electronic Reporting) [2]. Data collection processes were enhanced in February 2008 [2]. Kentucky has instituted satisfaction surveys to document the role PDMPs play in clinical practices and provides quarterly reports to show prescribing patterns by geographic areas [1]. In 2012, a statute mandating PDMP enrollment and use by prescribers was enacted with the immediate result of a crack-down on “pain management clinics” [3]. In October, the press was already reporting success with the new statute: “so far, 10 pain management clinics have closed and the amount of pain killers being prescribed has dropped sharply since the law took effect [4].
Methods
Data was restricted to Kentucky based zip codes for RADARS® System Opioid Treatment Program (OTP) and Drug Diversion (DD) Programs for buprenorphine, hydrocodeone, methadone, morphine and oxycodone. The number of cases, Unique Recipient of Dispensed Drug (URDD), and population for every 3-digit zip code in the state were summed by drug and year quarter. The sum of the cases then was divided by the summed URDD and summed population and multiplied by 1,000 and 100,000, respectively, to obtain the URDD and population rates for each drug and year quarter.

Results
Data from OTP showed declines for buprenorphine, methadone, morphine and oxycodone after 1Q2011 for both population and URDD rates (see figures above on pg1). Hydrocodeone only declined by population rate. By comparison, DD data does not show such dramatic decreases across the 5 products. Hydrocodeone diversion decreased after 1Q2012 by population rate but not by URDD (see figures below).

Figure 2: Drug Diversion Program Population and URDD Rates in Kentucky from Q1 2009 – Q3 2012

Conclusions
RADARS® System programs can show the impact of the PDMP instituted in Kentucky over time. In particular, noteworthy declines in population and URDD rates are seen for buprenorphine, hydrocodeone, methadone, morphine and oxycodone in the Opioid Treatment Program. Such dramatic decreases were not evident in the Drug Diversion Program.


References