Reduction In OxyContin® Diversion Cases Following the Introduction of Reformulated OxyContin

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**Abstract:**

**Aims:** Reformulated OxyContin® (ORF), a formulation intended to deter crushing and that forms a gel when dissolved, was introduced in August 2010, with the goal of deterring abuse, particularly through routes that require tampering. This study examines whether there was a decline in drug diversion cases for OxyContin following the introduction of the reformulation.

**Methods:** The number of diversion cases using reports from law enforcement agencies participating in the RADARS® System were compared for the periods before and after introduction of ORF. Case count data from the 4Q2008 through the 3Q2010 was considered the pre-ORF period and 4Q2010 to 2Q2011 the post-ORF period. Poisson regression tested whether the number of OxyContin diversion cases declined post-ORF, adjusting for population coverage and for number of individuals filling a prescription for a given drug, a measure of drug availability. Trends were also estimated for eight other prescription opioid drug classes.

**Results:** A 45% decline in the expected number of OxyContin diversion cases (95% CI: 40-50%, p<0.001) was observed following transition to reformulated OxyContin. This decline was significantly greater than changes observed for immediate release oxycodone (10% increase, 95% CI: 5-16%), hydrocodone (20% decrease, 95% CI: 16-23%), tramadol (31% decrease, 95% CI: 19-41%) and other opioid drug classes with the exception of buprenorphine (34% decrease, 95% CI: 23-43%).

**Conclusions:** These findings indicate that introduction of reformulated OxyContin was followed by a decline in diversion of OxyContin and that the decline was greater than most other prescription opioids. The decreased diversion of OxyContin to illegal channels suggests a decline in demand for reformulated versus original OxyContin.