Management of Iatrogenic Withdrawal Syndrome (IWS) in the Pediatric Patient to Reduce Length of Stay (*Driving Detox*)

**PURPOSE**

*Driving Detox*, a revision of the current hospital sedation weaning guideline, introduced the Withdrawal Assessment Tool-1 (WAT-1) to incorporate multidisciplinary collaboration in the assessment, prevention, and treatment of IWS for WAT-1 scores greater than or equal to 3. The overall goal is to decrease unit length of stay (LOS) and transition to a nurse-driven benzodiazepine and opioid weaning protocol supported by WAT-1 scores.

**BACKGROUND**

Development of Iatrogenic Withdrawal Syndrome (IWS) can occur during medication tapering as patients withdraw from intentional attempts to discontinue medication. A tertiary hospital has used a weaning guideline for over ten years, but, due to non-compliance with the complicated protocol, providers were practicing no uniformity. The Withdrawal Assessment Tool-1 (WAT-1) demonstrated effectiveness at assessing withdrawal in patients treated with narcotics and benzodiazepines regardless of the patients’ developmental milestones, medical conditions, or individual temperament. (Franck et al., 2008).

**METHODOLOGY**

Chart reviews were completed to assess the level of iatrogenic withdrawal and unit LOS for patients treated with the existing weaning protocol. A Plan-Do-Study-Act method was used to improve the existing protocol, initiate WAT-1 assessments, decrease unit LOS, and decrease IWS. In total, 20 pre-intervention and 20 post-intervention patients were identified.

**RESULTS**

There was no significant difference in pre-intervention versus post-intervention unit length of stay (p= 0.076). The project demonstrated a statistically significant increase in the percent of WAT-1 scoring being completed (p value=0.008) and a statistically significant reduction in WAT-1 scores greater than 3 in the post-intervention period (p<0.001) suggesting the tool was used, and use of the tool reduced withdrawal symptoms.

**IMPLICATIONS**

*Driving Detox* was not effective in reducing LOS but did demonstrate the ability to improve medication weaning by increasing recognition of withdrawal symptoms and prompting appropriate treatment. Further study is needed to determine the ideal frequency of WAT-1 scoring needed to improve patient outcomes. Development of a generalizable weaning protocol among institutions would provide many patients with proper monitoring.