

**Submission Id:** 5608

**Title**

*Medical vs. Recreational Marijuana in Patients with Non-cancer Pain and Long-term Prescription Opioid Use*

**Priority 1 (Research Category)**

Population health and epidemiology

**Presenters**

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**Abstract**

**Background:** It is uncertain whether patients with chronic non-cancer pain (CNCP) and long-term opioid therapy (LTOT) have an increased probability of being lifetime recreational or medical marijuana users. We determined if more frequent and higher dose prescription opioid use was associated with recreational and/or medical marijuana use.

**Methods:** Eligible patients (n=1,037) starting a new period of 30–90-day prescription opioid use were recruited from two midwestern health care systems to a prospective cohort study of chronic opioid use and mental health outcomes. This study is based on baseline data. Primary exposures were daily versus non-daily opioid use and  $\geq 50$  morphine milligram equivalent (MME) dose per day vs.  $< 50$  MME. Participants self-reported lifetime recreational and medical marijuana use. Multivariate, multinomial regression models estimated the association between prescription opioid exposures and type of marijuana use relative to no marijuana use, before and after adjusting for confounding.

**Results:** The sample was an average of 54.9 (SD $\pm$ 11.3) years of age, 57.3% female gender and 75.2% White, and 22.5% Black race. Among all participants, 44.5% were never marijuana users, 21.3% were recreational only, 7.7% medical only and 26.6% were both recreational and medical marijuana users. After controlling for confounders, daily opioid use was significantly associated with lifetime recreational versus never marijuana use. No other significant associations between prescription opioid use and marijuana use were observed.

**Conclusion:** Patients with CNCP and LTOT who use opioids daily are more likely to have ever used recreational but not medical marijuana. Prospective data is needed to determine how marijuana use influences the course of LTOT and vice versa.