

# **Opioid prescription use in head and neck cancer patients: retrospective analysis to evaluate for preoperative predictors of increased opioid use during post-operative time period**



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# Background



- Opioids:
  - Effective in controlling post-operative pain
  - Significant effort put into relieving postoperative head and neck pain as it is an important part of patient care and patient satisfaction
  - Among patients, pain continues to be the biggest fear and anxiety associated with surgery
  - In order to increase patient comfort and satisfaction, moderate to severe pain is most commonly treated by usage of opioids

# Background – cont.



- **Opioids: National Concerns**
  - The US consumes 80% of the world's opioids
  - Estimated 5 million Americans are current nonmedical users of opioids
  - Prescription opioids are involved in 45 overdose deaths per day
  - The US Centers for Disease Control and Prevention defined prescription drug abuse as an epidemic and listed it as one of its top five threats in 2014

# Opioid addiction in Virginia



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## Opioid Addiction Crisis Declared a Public Health Emergency in Virginia

~Health officials join together to address growing opioid addiction crisis in Virginia~

**RICHMOND** – Governor Terry McAuliffe today announced that State Health Commissioner Marissa J. Levine, MD, MPH, FAAFP, has declared the Virginia opioid addiction crisis a Public Health Emergency.

This declaration comes in response to the growing number of overdoses attributed to opioid use, and evidence that Carfentanyl, a highly dangerous synthetic opioid used to sedate large animals such as elephants, has made its way into Virginia. A Public Health Emergency is an event, either natural or manmade, that creates a health risk to the public.

“Too many families across Virginia and the nation are dealing with heartbreak and loss as a result of prescription opioid and heroin abuse epidemic,” **said Governor McAuliffe**. “We cannot stand by while these drugs harm our communities and our economy. That is why I support Dr. Levine’s decision to declare a public health emergency, to heighten awareness of this issue, provide a framework for further actions to fight it, and to save Virginians’ lives.”

# Opioid addiction in Virginia – cont.



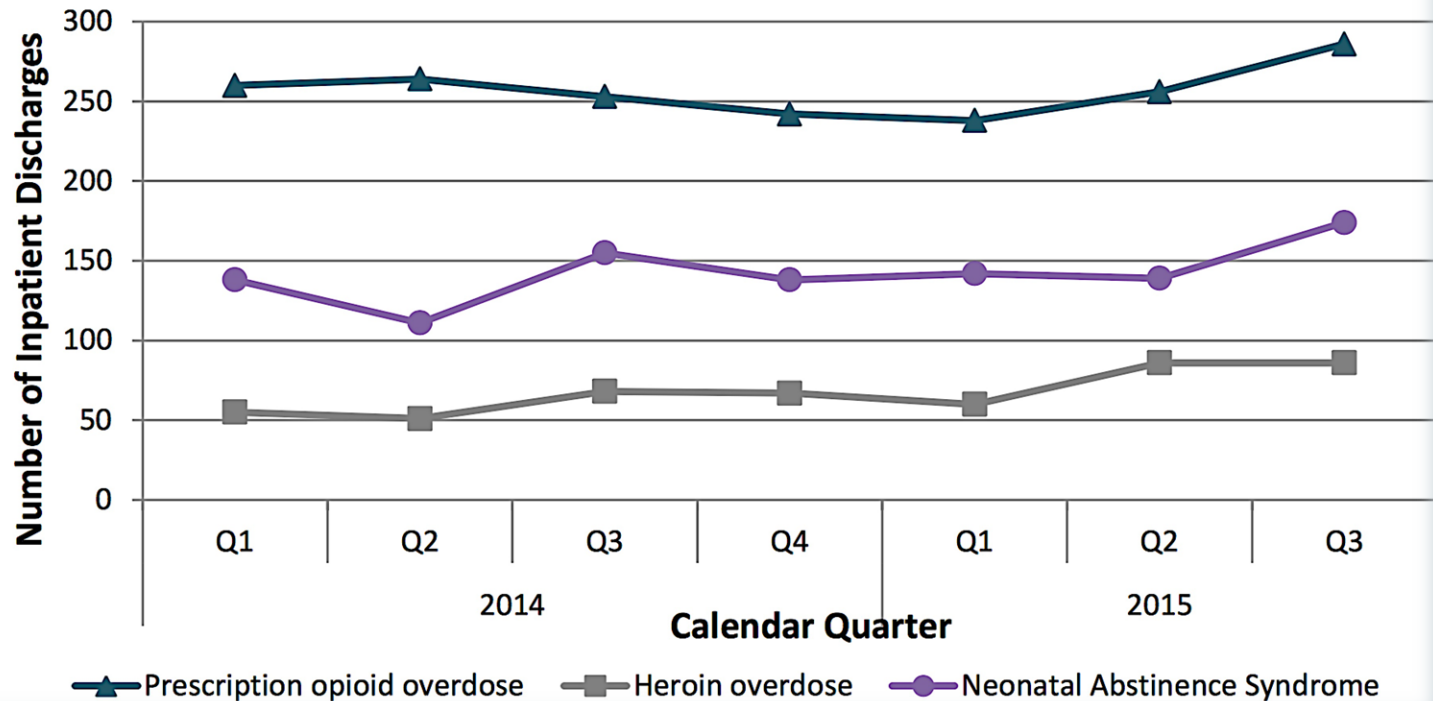
- In 2013, fatal drug overdoses became the number one cause of unnatural death.
- In 2014, for the first time in Virginia, more people died from opioid overdoses than fatal car accidents.
- Emergency department visits for heroin overdose for January-September 2016 increased 89 percent, compared to the same nine-month period in 2015

# Opioid addiction in Virginia – cont.



**Figure 2.**

**Number of Inpatient Discharges from Virginia Hospitals with Diagnosis of Prescription Opioid Overdose, Heroin Overdose or Neonatal Abstinence Syndrome, Q1 2014 - Q3 2015**



# Project Aim



1. Identify patients that have undergone surgery for head and neck cancer of the oral cavity, oropharynx, larynx.
2. Determine whether the patient's previous social history and medication history including alcohol, tobacco, drugs, pain medication (prescription, non-prescription), anxiolytic medications and anti-depressive medications has an effect on utilization and duration of post-operative opioid medications.
3. Utilize this information to help optimize post-operative pain control while minimizing risk for over prescribing of pain medication

# Study Design



- The research subjects will be recruited from EVMS Department of Otolaryngology and identified through a retrospective chart review of their medical records. Subjects will be adults between the ages of 21 to 89 who have undergone surgery for head and neck cancer between Jan 1, 2013 and July 1, 2017 with a 6 month follow up period. We estimate reviewing 400 charts of patients who meet these criteria.



# Results



- Will include:
  - Surgery performed, reconstruction performed, alternative treatment (chemotherapy, radiation), complications during treatment, days of admission after surgery, post-operative opioid used, duration of post-operative opioid used, post-operative non-opioid pain medication used, length of non-opioid pain medication used, pre-operative opioid usage,, pre-operative non-opioid pain medication (OTC), pre-operative alcohol usage, pre-operative smoking history, pre-operative psychological distress, medications used for psychological distress

# Conclusion



- **Benefits and future plans:**
  - Information obtained from this study may help us identify additional information that will help surgeons in counseling patients postoperatively after head and neck cancer surgery
  - Allow surgeons to develop a successful plan for pain control with minimal side effects and minimizing use of opioid medications
  - May help result in a decrease of the over prescription of opioids that leads to opioid abuse, addiction and overdose

# Acknowledgements



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