

Analysis of the 2017 Montgomery County Adult Risk Perception of Prescription Opioid Misuse Survey Data

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Outline

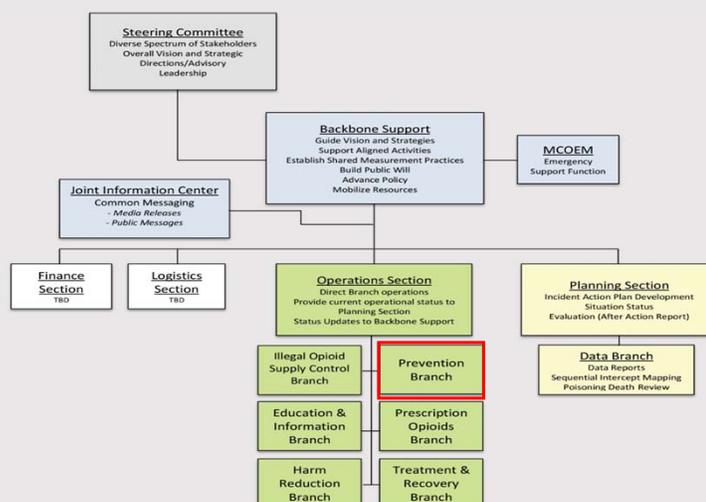
- Introduction
- Background
- Data Analysis
- Discussion & Recommendations
- Limitations & Future Areas of Interest

Introduction – Opioid Epidemic

- Opioid Epidemic in **United States** (2000-2014)
 - Death rate from drug overdoses increased by **137%**
 - Death rate from opioid overdoses increased by **200%**
- Opioid Epidemic in **Montgomery County** (2010-2017)
 - Death rate from opioid overdoses increased by **215%**
 - Death rate by the end of 2017 projected to increase by **530%**
- **Prescription Opioids Deaths** from 2009-2014 in **Montgomery County**
 - Misuse of prescription opioids made up **50%** of the unintentional drug overdose deaths

Introduction – Emergency Framework

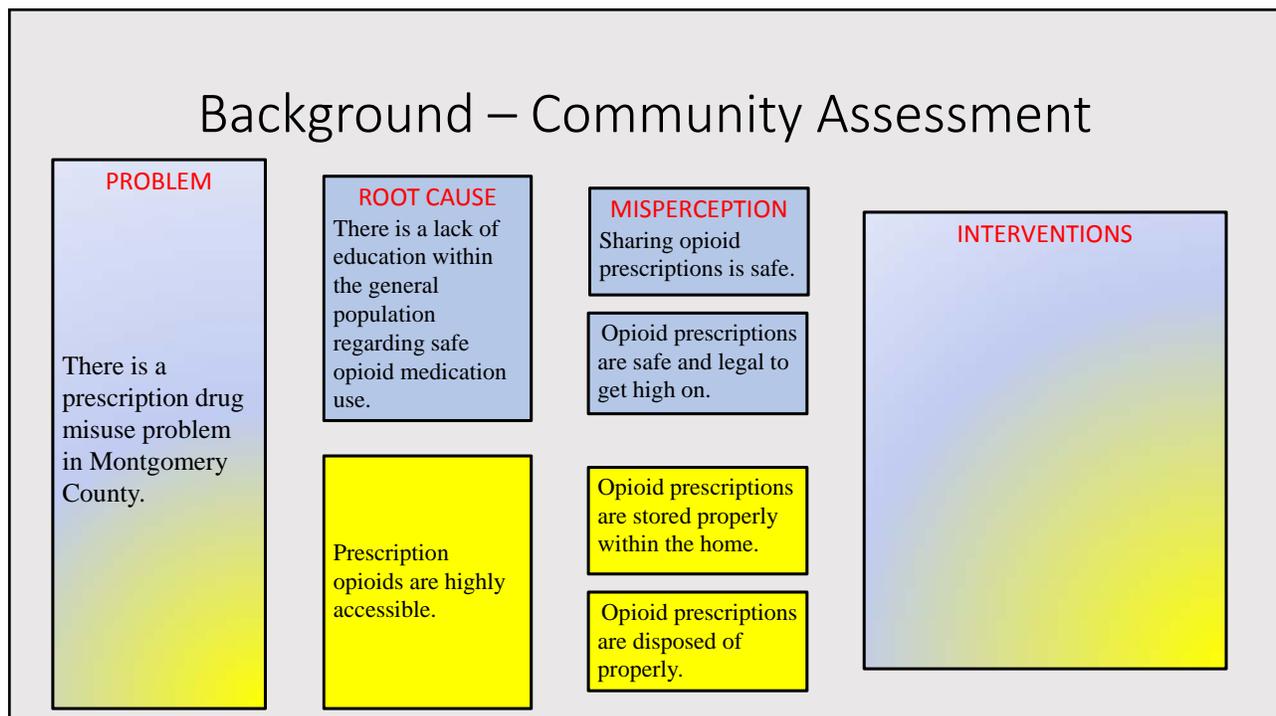
- PHDMC implemented a framework based on the National Incident Management System (NIMS)
 - Community Overdose Action Team (COAT)
 - Eight Branches – each providing a different avenue for possible interventions
 - Incorporated a Joint Information Center (JIC)



Background – Community Assessment

- COAT asked Montgomery County Prevention Coalition and ADAMHS to conduct a Community Assessment
 - Review of previous community assessments
 - Dayton Area Drug Survey (DADS) – focused on school children and looked at multiple “drugs” not just prescription opioids; not relevant to adults and prescription opioids
 - Two **Root Causes** with associated misperceptions were postulated:
 - **Lack of education** in the general population regarding safe opioid medication use
 - Sharing opioid prescriptions is safe
 - Using prescription opioids to get high is safe and legal
 - Prescription opioids were simply **“too accessible”**
 - Over prescribed by medical practitioners
 - Stored and disposed of improperly

Background – Community Assessment



Background – Community Assessment

- Community Assessment (Cont'd)
 - Developed a survey in March 2017
 - **9 demographic questions**: county and zip code of residence, race/ethnicity, gender, age, level of education, employment status, employment in Montgomery County, and school attendance in Montgomery County
 - **19 prescription opioid questions** covering six categories
 - **Taking more than prescribed** (2 Likert scale questions, 1 multiple selection question looking at reasoning)
 - **Giving to family/friends** (2 Likert scale questions, 1 multiple selection question looking at reasoning)
 - **Receiving from family/friends** (2 Likert scale questions, 1 multiple selection question looking at reasoning)
 - **Taking for reasons other than prescribed** (3 Likert scale questions, 1 multiple selection question looking at reasoning)
 - **Disposal methods** (2 multiple selection questions, 2 dichotomous questions)
 - **Storage methods** (1 Likert scale question, 1 multiple selection question)

Background – Community Assessment

- Community Assessment (Cont'd)
 - IRB exempt based on 45 CFR part 46 and Ohio Revised Code 340
 - Released the survey via a secure web-based platform (Survey Monkey) in April 2017



<https://www.surveymonkey.com/r/MPMS-Adult>

Data Analysis – Literature Review

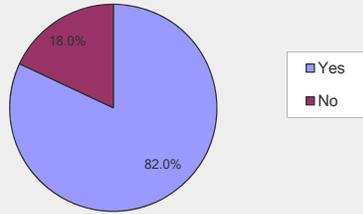
- Twenty articles reviewed prior to data analysis
 - **Risk perception** of opioid medications by various communities (6)
 - **Risk factors** related to prescription opioid misuse (8)
 - Potential **prevention strategies** to mitigate prescription opioid misuse (3)
 - Programs to help **monitor** doctor's prescribing habits and/or pharmacy intervention methods (3)

Data Analysis – Methods

- Data from the survey were retrieved and analyzed in July 2017
 - Each question had:
 - Raw numbers of respondents completing that question
 - Percentages of each selected answer
 - The data were analyzed for trends

Data Analysis – Demographics

Do you live in Montgomery County?

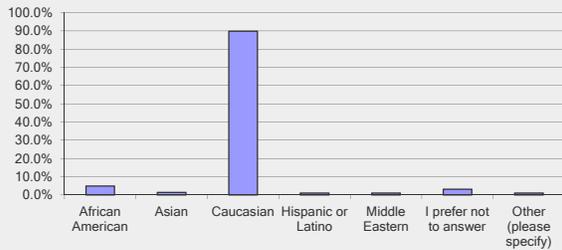


• Top Three Zip Codes
(based on number of respondents living there)

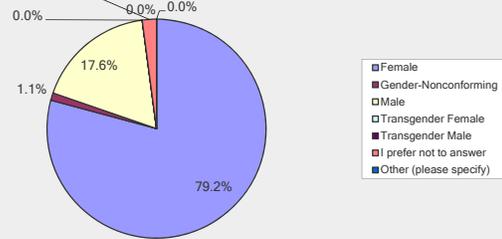
- 45327
- 45459
- 45325

Data Analysis – Demographics

What is your race/ethnicity? (Mark all that apply)



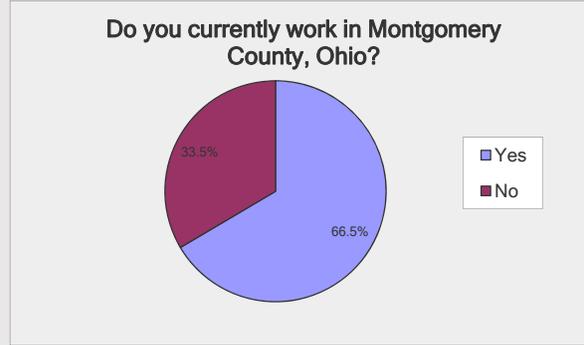
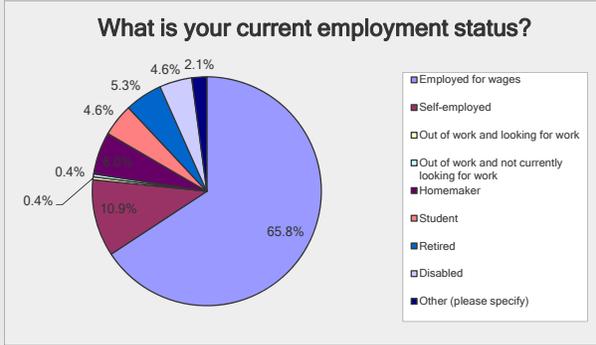
What is your gender?



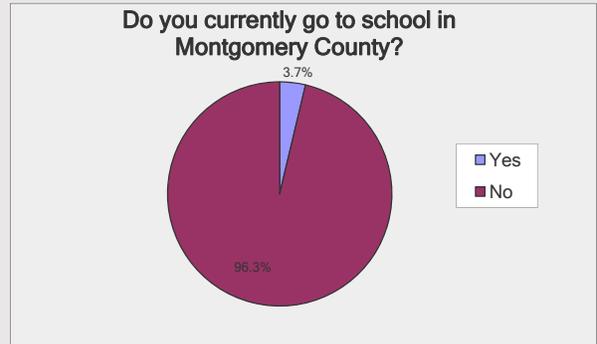
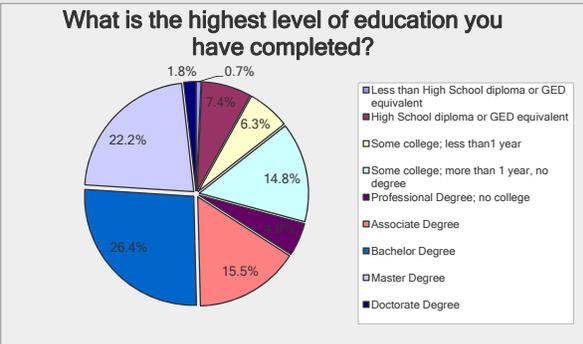
What is your age?

Ranged from 19 to 78 years old (mean 44 years ± 13.22 years)

Data Analysis – Demographics



Data Analysis – Demographics

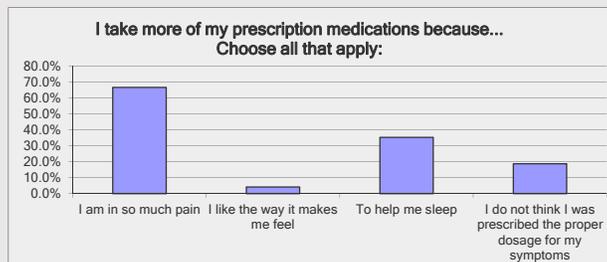
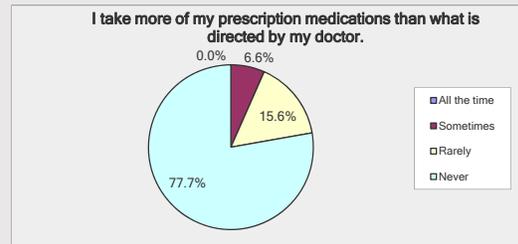
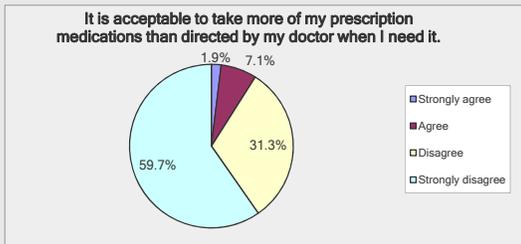


Data Analysis - Demographics

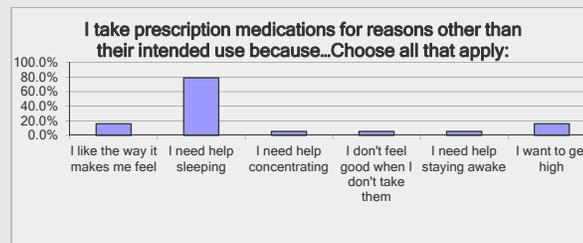
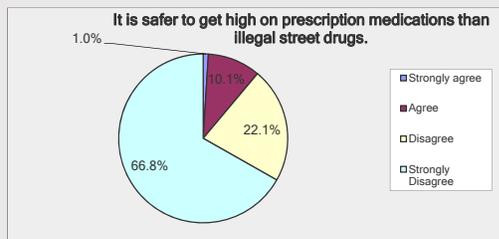
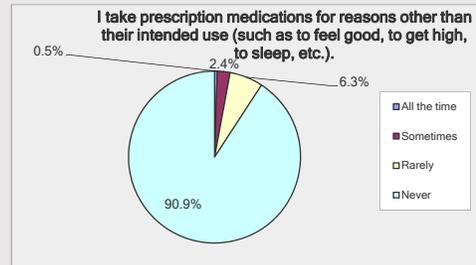
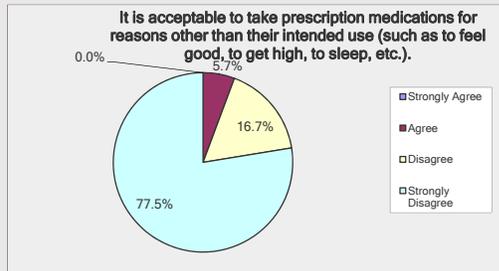
- Main characteristics of the respondents
 - Caucasian Female
 - Age 44 years old
 - Living in Montgomery County (45327)
 - College educated
 - Employed for wages



Data Analysis – Personal Use (pain control)



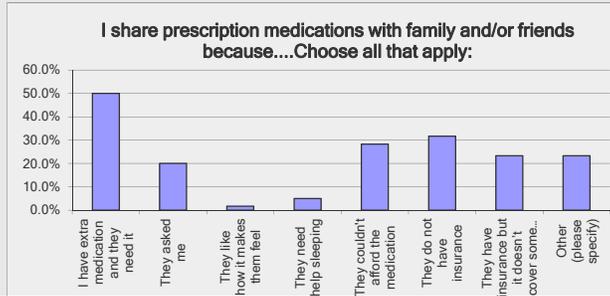
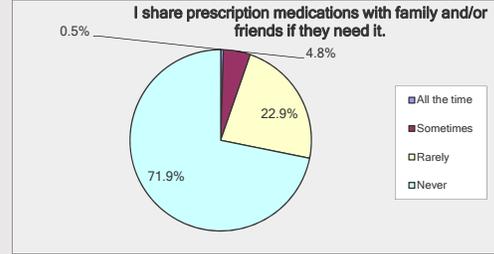
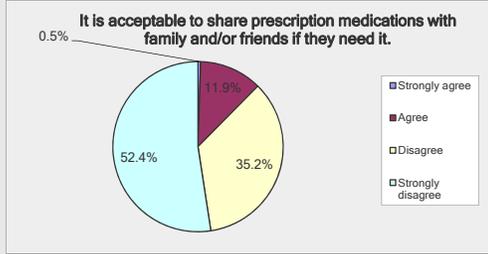
Data Analysis – Personal Use (recreational/illicit)



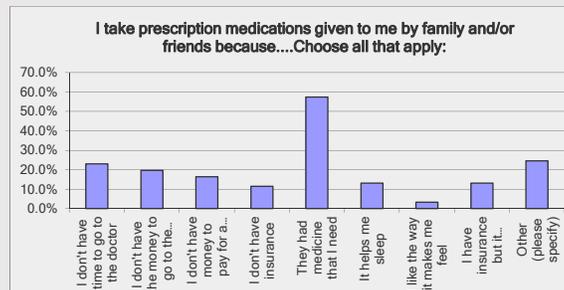
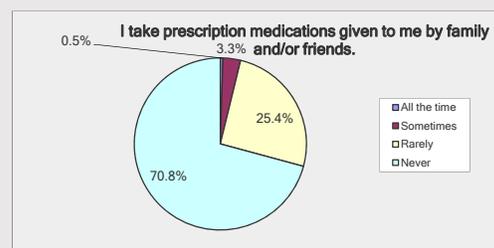
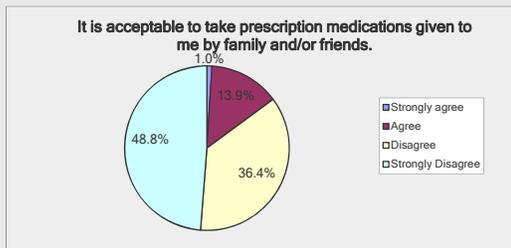
Data Analysis – Summary

- **PERSONAL USE (Medical Treatment)**
 - **91%** indicated it's bad to use Rx opioids outside of prescribed parameters
 - Yet only **77%** actually followed the prescribed parameters
 - **Uncontrolled pain** and **sleep difficulties** were the main reasons for this
- **PERSONAL USE (Recreational/Illicit)**
 - **94%** indicated that taking Rx opioids for other than intended use is bad
 - **88%** indicated that Rx opioids were NOT safer to get high on
 - Well supported by the fact that **91%** never engage in this behavior
 - **Assisting sleep habits** was the main reason for recreational use

Data Analysis – Sharing (giving to family/friends)



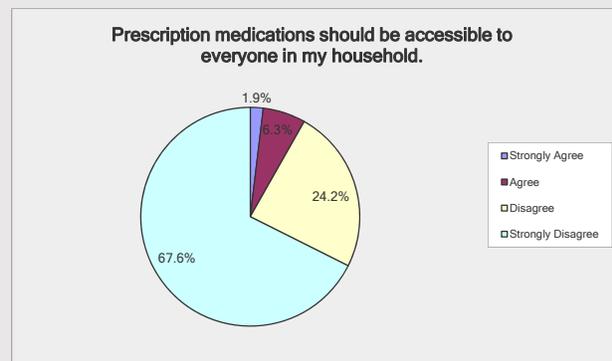
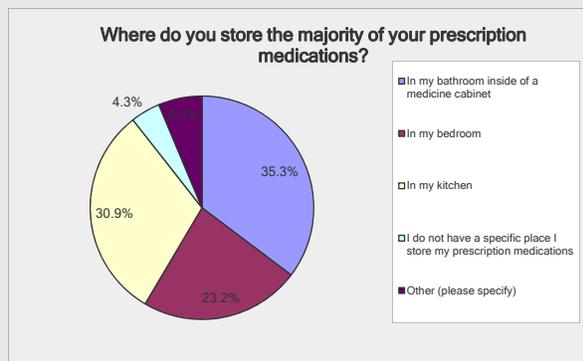
Data Analysis – Sharing (receiving from family/friends)



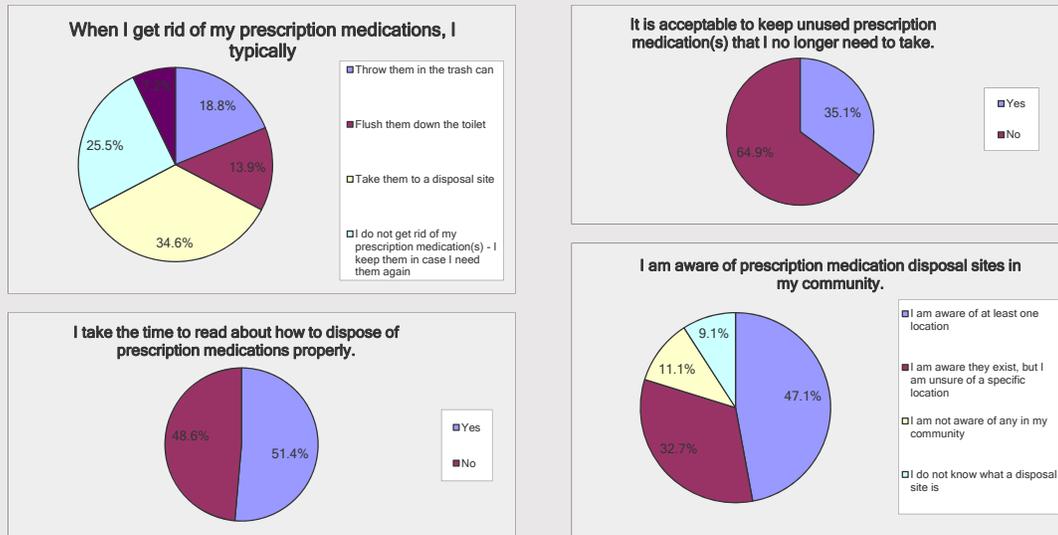
Data Analysis – Summary

- **SHARING (Giving)**
 - **87%** indicated it's bad to give Rx opioids to family/friends
 - Yet only **72%** never share their Rx opioids with family/friends
 - Having **extra medication with a family/friend in need** was the main reason for giving Rx Opioids
 - The "NEED" was largely due to **financial difficulties** in obtaining the Rx opioid through legitimate channels
- **SHARING (Receiving)**
 - **85%** indicated that accepting Rx opioids offered by family/friends was bad
 - Yet only **70%** never accepted Rx opioids when offered by family/friends
 - **Limited access to doctors, financial barriers, and the fact that family/friends had what was needed**, were the main reasons for accepting Rx opioids

Data Analysis – Storage



Data Analysis – Disposal



Data Analysis – Summary

- **STORAGE**
 - **92%** indicated that Rx opioids should not be accessible to household members
 - Yet only **35%** of respondents stored their medications in a dedicated space in a private area (medicine cabinet in their bathroom) – locked or unlocked unknown
- **DISPOSAL**
 - **64%** indicated that it is unacceptable to keep unused Rx opioids
 - **51%** indicated they take the time to learn about proper disposal methods for Rx opioids
 - **47%** are aware of Rx opioid disposal sites within their community
 - Yet only **35%** actually take their unused Rx opioids to a disposal site

Discussion & Recommendations

- PERSONAL MISUSE (Pain Control or Recreational/Illicit)
 - **Improve the doctor/patient relationship**
 - Increase the access to care
 - Allowing time to develop a comprehensive pain management plan
 - Eliminate the fear of uncontrolled pain
 - Remove the stigma of being treated alongside people involved with recreational use
 - **Address the emotional hardships** related to chronic pain
 - Decrease reliance on opioid medications

Discussion & Recommendations

- SHARING (Giving or Receiving)
 - Provide **improved financial support** for obtaining prescribed opioid medications
 - Poor pain control, resulting from financial limitations, largely drove the behavior of sharing opioid medications
 - No literature was found to support or refute this notion; further research required

Discussion & Recommendations

• STORAGE

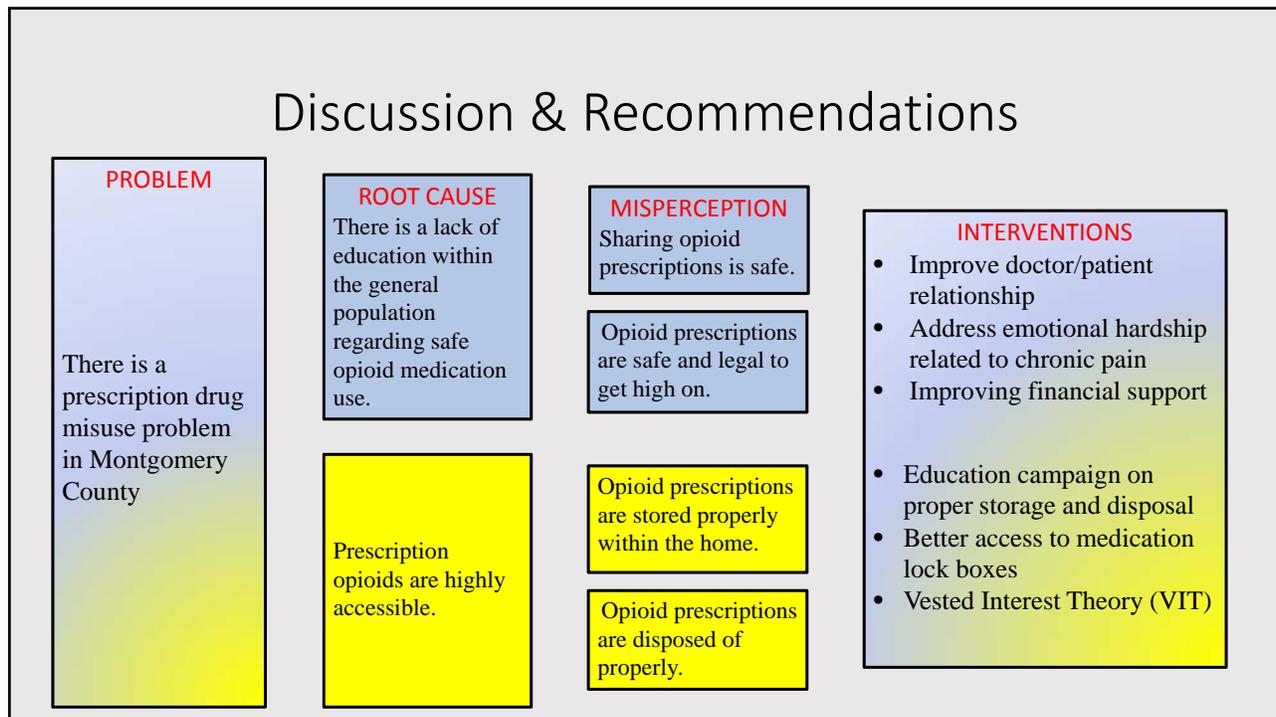
- Education Campaigns
 - 5-11% of prescription opioid abusers steal from their family members
 - None of the respondents incorporated a **secure storage method**
 - National Family Partnership's Lock Your Meds® campaign
 - Expand opportunities to obtain prescription medication lock boxes
- Behavior Modification
 - **Vested Interest Theory (VIT)** – behavior can be modified through hedonic relevance of attitudes

Discussion & Recommendations

• DISPOSAL

- Education Campaigns
 - Address the **hazards of keeping medications**
 - Highlighting medication **disposal locations**
 - Consider adding sites that are not located within law enforcement centers
- Behavior Modification
 - **Vested Interest Theory (VIT)** – behavior can be modified through hedonic relevance of attitudes

Discussion & Recommendations



Limitations

- **Small Sample Size**
 - 284 respondents out of ~535,000 total population for Montgomery County (2010 Census Bureau)
 - The four questions related to “why” you had certain perceptions or acted in a certain way only had 60-70 respondents answer
 - **Greater chance for assuming a false premise to be true**
- **Selection Bias**
 - Online version requires access to a computer and the ability to navigate web-based surveys – respondents more likely to have a higher socioeconomic class and education level
 - Consider other media versions as well (apps, print, etc.)
 - Consider linking to sites that cross the range of the socioeconomic spectrum (WIC, Job and Family Services, Hospital’s web-based patient sign in portals, etc.)

Future Areas of Interest

- Engage with community leaders to get a **wider scope of community members** completing the current survey
- Conduct separate surveys that **identify high-risk geographical areas**
 - Then try to identify root causes to prescription opioid misuse within those areas
 - Allows for more concentrated education and intervention campaigns
- Assess the **impact of any interventions** with follow-up surveys
 - Provides important feedback on the success of implemented programs

Questions