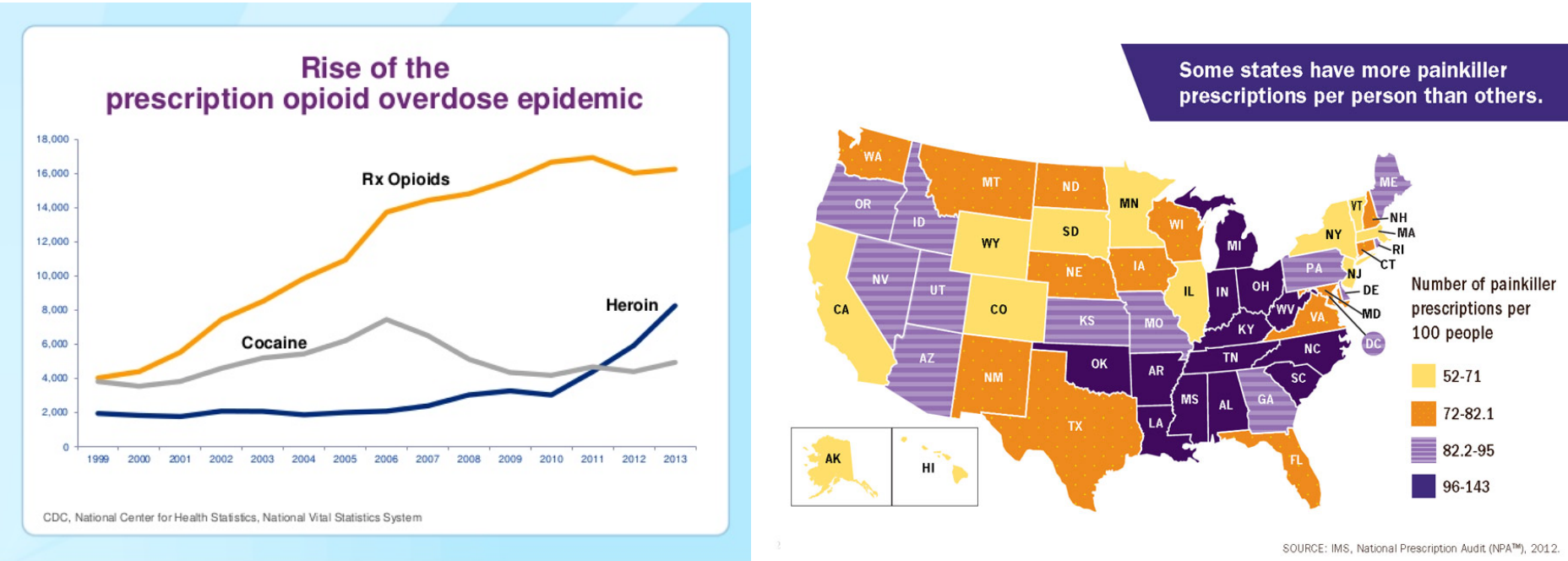


Public Access to Naloxone: Provider Awareness and Prescribing Attitudes

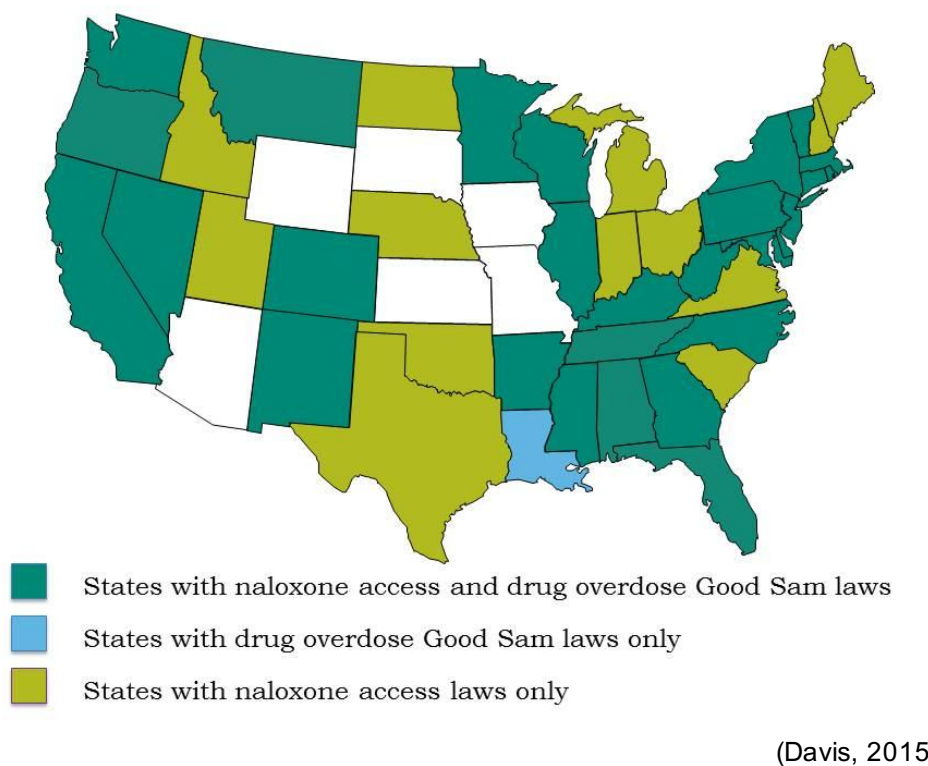
Background

Across the globe, drug overdose has become a devastating epidemic surpassing motor vehicle collisions as the leading cause of adult accidental death in the U.S. Of the annual U.S. death toll, pharmaceuticals contributed to approximately 22,767 overdose deaths with 71.3% related to opioid pain medications. This problem has been directly associated with inappropriate prescription of opioid medications by healthcare providers, who wrote nearly 259 million opioid prescriptions in one year.



NALOXONE DISTRIBUTION LAWS

Naloxone has been used for many years among medical professionals to quickly and effectively reverse the respiratory depression effects of opioids. In response to the opioid overdose crisis, many states have introduced legislation allowing prescription for take-home naloxone to non-medically trained laypersons for administration to friends or family members in non-hospital opioid overdose events. As of July 2015, 41 states have introduced naloxone laws, which differ in terms of public access.



Purpose

The purpose of this project is to explore factors influencing nurse practitioners' (NPs') intention to prescribe take-home naloxone to laypersons in Tennessee emergency departments (EDs), primary care settings, and pain management clinics.

RESEARCH QUESTIONS

- 1) Does level of knowledge regarding naloxone distribution laws correlate with NPs' intention to prescribe naloxone to laypersons?
- 2) Do underlying attitudes or normative beliefs correlate with NPs' intention to prescribe naloxone to laypersons?
- 3) Does intention to prescribe naloxone vary between NPs practicing in rural versus urban clinic sites?

Methods

DESIGN

- Correlational and descriptive
- Theoretical framework used for survey design – Theory of Reasoned Action

DATA COLLECTION TOOL

- Web-based survey emailed to NPs using secure software
- Questions developed with the Theory of Reasoned Action
 - Knowledge of naloxone law
 - Attitudes toward naloxone distribution
 - Subjective norms
 - Intention to prescribe naloxone to laypersons in TN.
- Demographic questions to describe the sample

PARTICIPANTS

- 6,196 Tennessee NPs were sent the initial survey; Responses screened to include only NPs who prescribe opioids and practice in emergency departments, primary care clinics, and pain management clinics

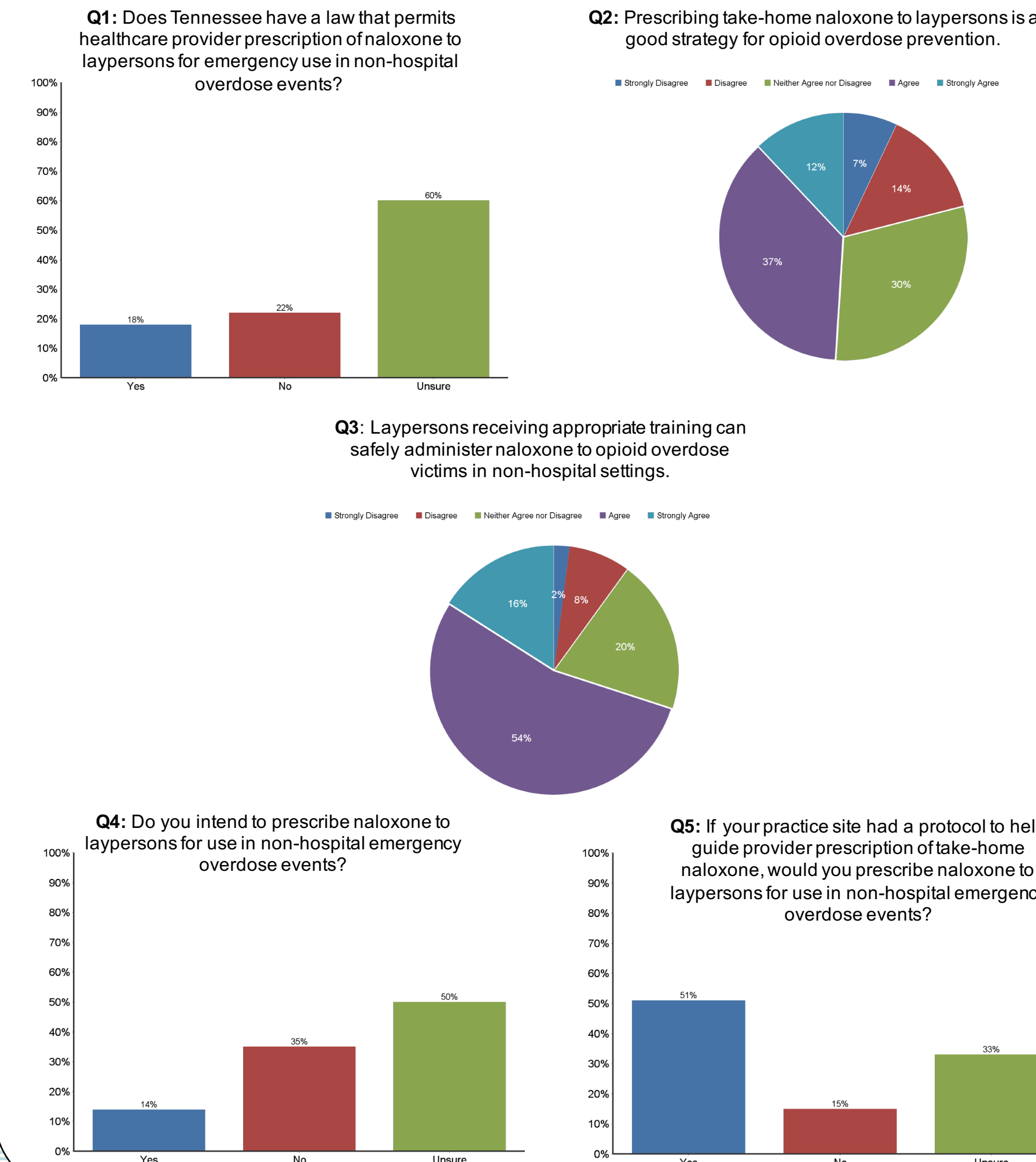
PROCEDURES

- Emails sent to 6,196 Tennessee NPs with study explanation, consent information, and survey link
 - Monetary incentive: one winner selected for \$150 Visa Prepaid gift card
- Responses kept anonymous and screened to exclude participants who do not meet study criteria
- SPSS statistical analysis of responses – chi square correlational tests
- Thank you emails sent to participants with education on naloxone distribution

Preliminary Results

Data collection is STILL IN PROGRESS and will be complete by December 1, 2015. When data collection is completed, final statistical analyses will be performed to determine if significant correlations exist among the variables.

Currently, 505 participants have completed the survey, but only 181 participants met the study's inclusion criteria. The following graphs display preliminary descriptive data from 181 participants as of October 12, 2015.



Conclusions

Due to the descriptive nature of the study's preliminary data, conclusive correlations have not been determined at this stage. Still, preliminary data suggests that most NPs are unaware of the naloxone laws in their state. NPs mostly agree that laypersons administering naloxone to victims would be a good and safe strategy for opioid overdose prevention. While NPs were either unsure or opposed to writing a prescription for take-home naloxone, the majority of NPs affirmed that they would consider prescribing take-home naloxone if prescribing protocols were in place. Based on this data and information found in the literature, healthcare providers are unaware of naloxone laws, unwilling to prescribe, and desire defined standards for prescribing. Without prescriber involvement in the naloxone distribution movement, it will be impossible to measure the true impact of naloxone distribution laws on opioid overdose deaths.



Figure 1: Evzio™ auto-injector is the only FDA-approved form of take-home naloxone intended for layperson use (kaléo Pharma, 2014)

Nursing Opportunities

While pharmacists, physicians, attorneys, and public health officials have been involved with naloxone distribution efforts, nurses remain underrepresented in this discussion. As patient advocates, APRNs should be more involved in opioid overdose prevention and public health legislative initiatives on state and federal levels. APRNs should also be involved with prescribing protocol development. Naloxone distribution efforts should be combined with other overdose preventative efforts, such as drug monitoring databases, stricter opioid prescribing protocols, drug disposal programs, and opioid abuse treatment.

Bibliography

1. Centers for Disease Control and Prevention (CDC). (2014). *Opioid painkiller prescribing: Where you live makes a difference*. Retrieved from <http://www.cdc.gov/vitalsigns/opioid-prescribing/index.html>
2. Centers for Disease Control and Prevention (CDC). (2015a). *Prescribing data*. Retrieved from <http://www.cdc.gov/drugoverdose/data/prescribing.html>
3. Centers for Disease Control and Prevention (CDC). (2015b). *Prescription drug overdose data*. Retrieved from <http://www.cdc.gov/drugoverdose/data/overdose.html>
4. Davis, C. (2015). *Legal interventions to reduce overdose mortality: Naloxone access and overdose good Samaritan laws*. Retrieved from The Network for Public Health Law website: https://www.networkforphl.org/_asset/qz5pvn/network-naloxone-10-4.pdf
5. Kaléo Pharma. (2014). *About Evzio*. Retrieved from <http://evzio.com/patient/about-evzio/what-is-evzio.php>
6. United States Food and Drug Administration (FDA). (2014). *Information on naloxone auto-injector (marketed as Evzio)*. Retrieved from <http://www.fda.gov/drugs/drugsafety/postmarketdrugsafetyinformationforpatientsandproviders/ucm391449.htm>
7. Wermeling, D. P. (2015). Review of naloxone safety for opioid overdose: Practical considerations for new technology and expanded public access. *Therapeutic Advances in Drug Safety*, 6(1), 20-31. doi: 10.1177/2042098614564776