

Better Together: Utilizing an interprofessional escape room to educate health professional students about opioid use disorder

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Reimagining Pharmacy

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Disclosure Statement

- Kelsey Schmuhl and Jon Sprague have no relevant financial relationship(s) with ineligible companies to disclose.

and

- None of the planners for this activity have relevant financial relationships with ineligible companies to disclose.

Learning Objectives

At the completion of this activity, the participant will be able to:

1. Describe Scientific Committee on Opioid Prevention and Education (SCOPE).
2. Discuss findings of SCOPE survey of health professional schools.
3. Describe the development of the educational course and interprofessional escape room.
4. Summarize the findings from pilot offering of educational symposium.
5. Identify opportunities for expanding upon the educational symposium in the future

Our Team



• Kelsey Schmuhl • Ross Tamburro • Steven Nagel



• Jon Sprague • T'Bony Jewell

Updates on the Opioid Crisis

National Data: Opioid Overdose Deaths

U.S. Drug Overdose Deaths

- CDC estimates 107,622 drug overdose deaths in 2021
- ~170 fatalities/ day primarily in those 18 to 45
- Primary driver is illicit forms of fentanyl
- Estimated annual economic cost to the U.S. is \$1 trillion

Sources: US Commission on Combating Synthetic Opioid Trafficking Report, 2022
Centers for Disease Control and Prevention

Current supply chain information

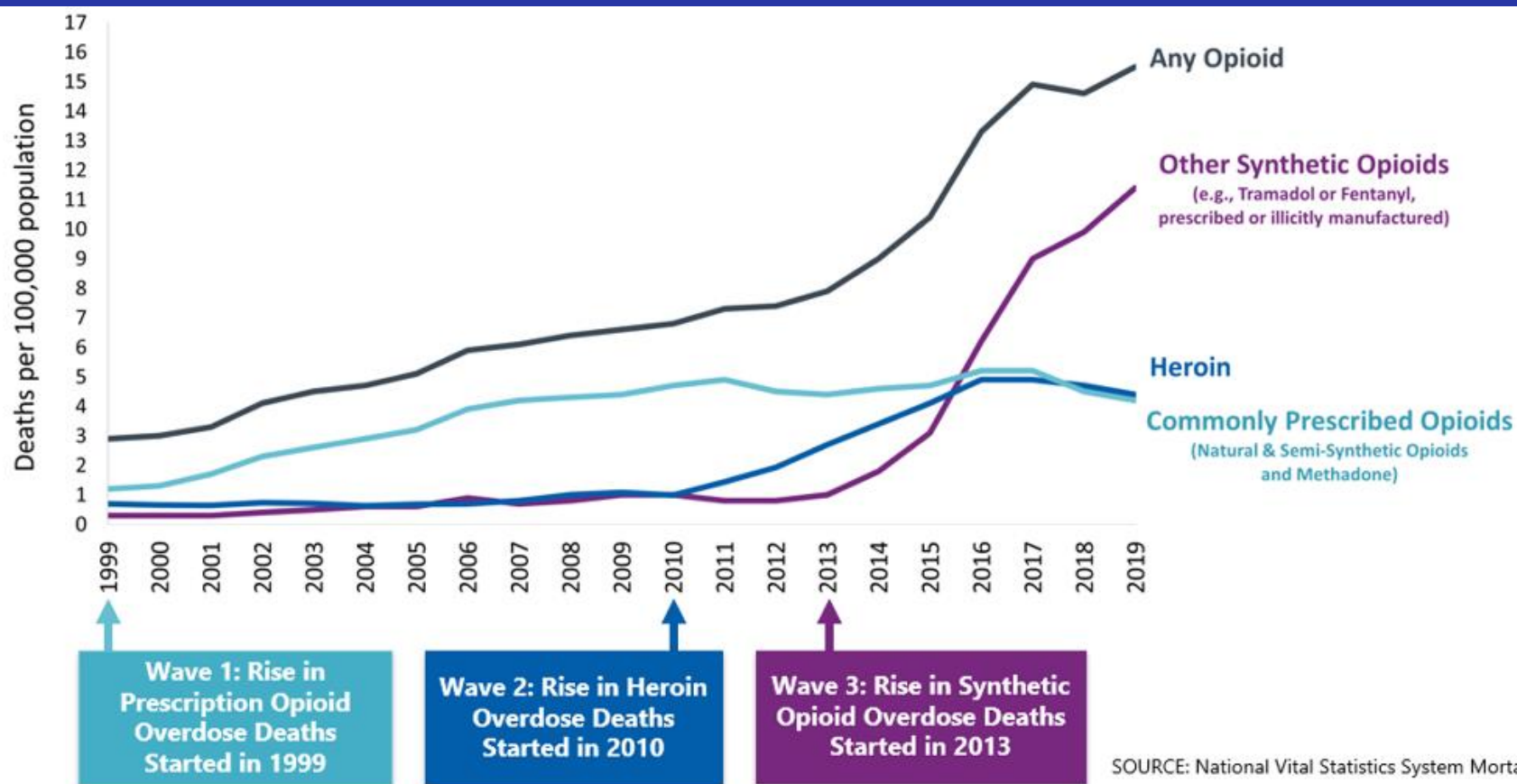
- The Mexican cartels is the principal source of illicit fentanyl
- Precursor chemicals are sourced largely form the People's Republic of China (PRC)
- traffickers conceal hard-to-detect quantities in packages, in vehicles, and on persons and smuggle the drug across the U.S.–Mexico border



Credit: Peniley Ramirez / Univision

Sources: US Commission on Combating Synthetic Opioid Trafficking Report, 2022

What has changed?



New Challenges

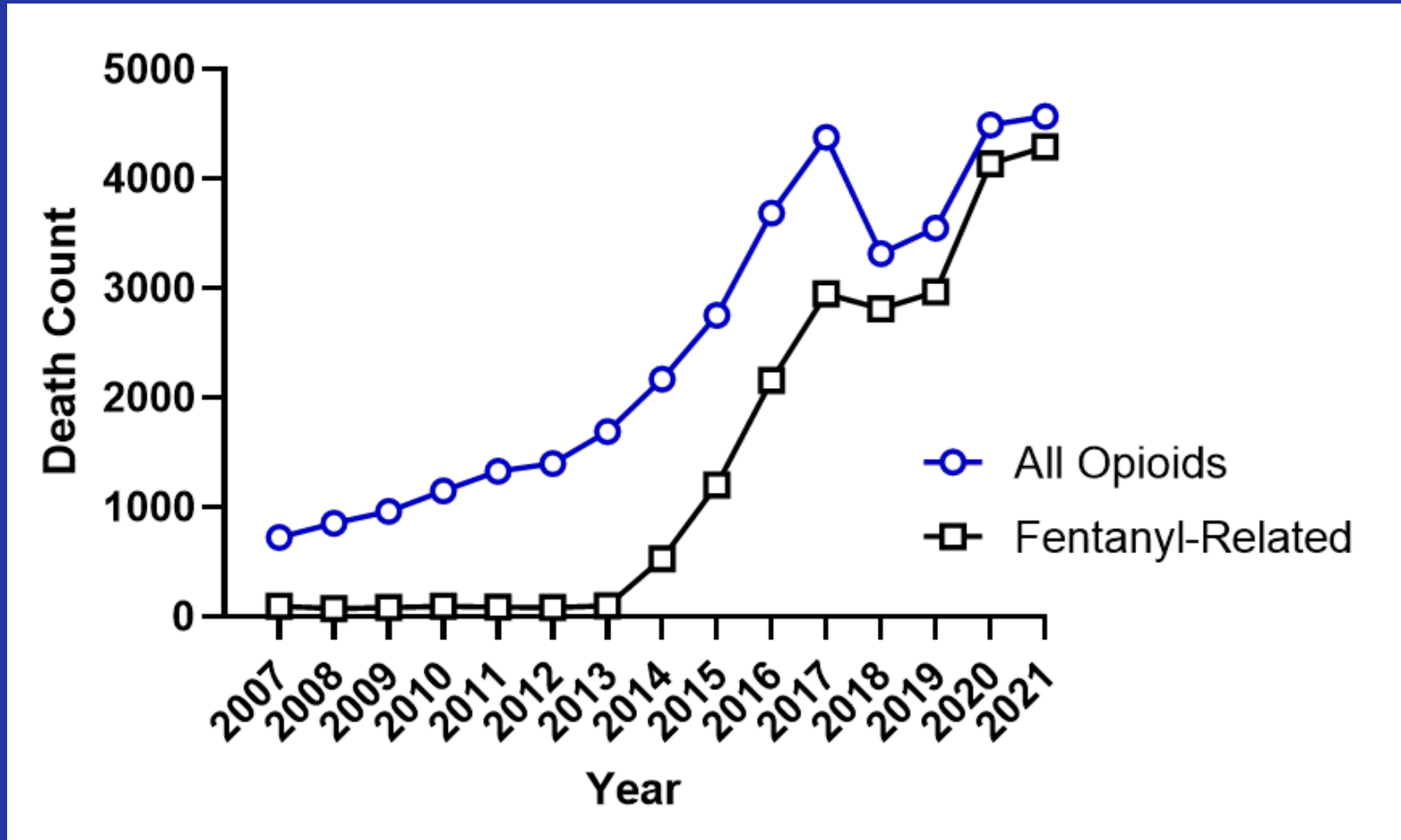
- Illegal drug manufacturing has become easier to conceal by moving from the field to the laboratory.
- Serious geopolitical issues significantly impede actions to disrupt supply.
- Synthetic opioids are highly potent and easy to make, and small amounts can be transported for large profits.
- Social media and encryption platforms, as well as established logistics systems, make distribution difficult to disrupt.

New Challenges Continued...

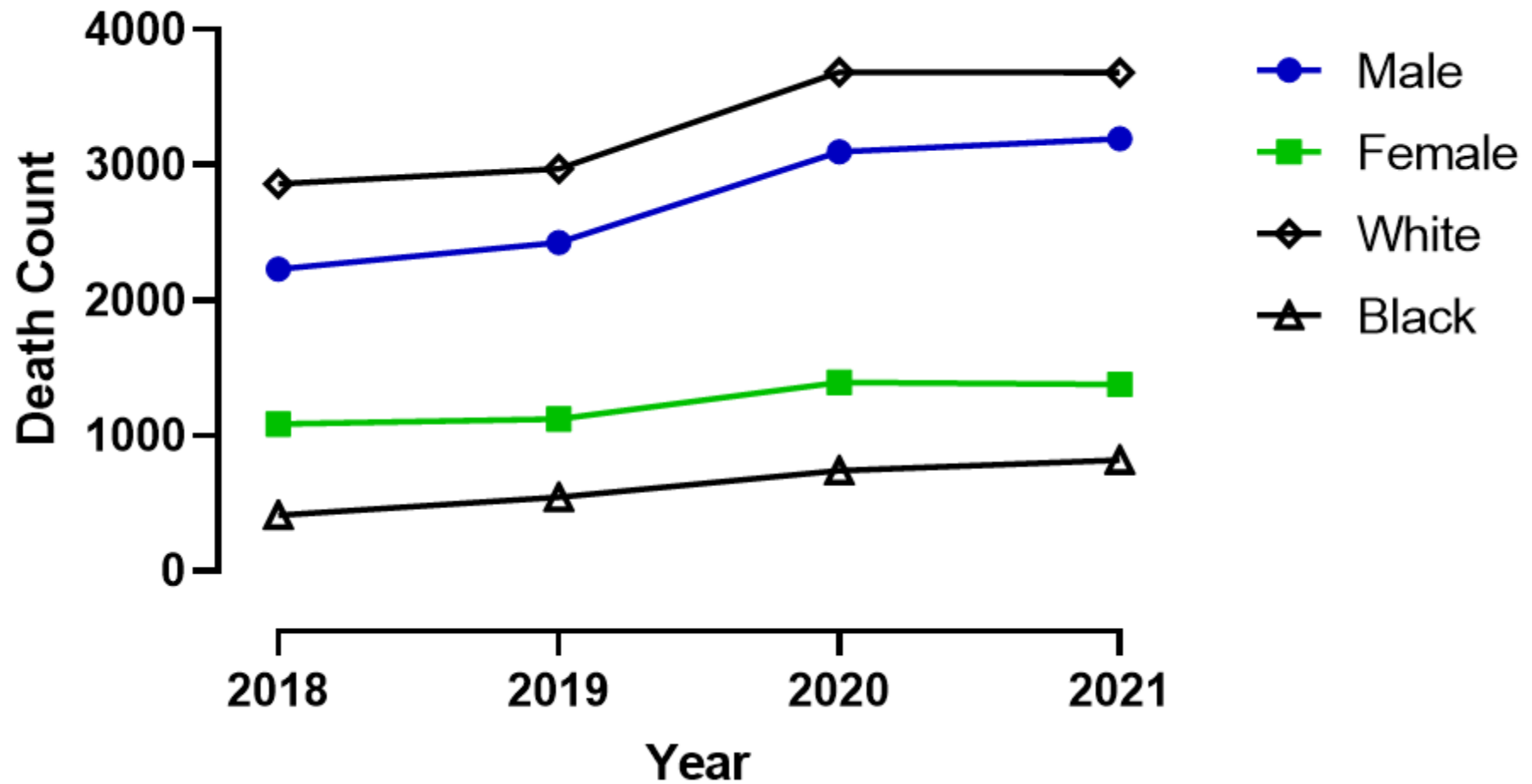
- The pull of demand continues to drive the supply of synthetic opioids.
- External factors, including the coronavirus disease 2019 (COVID-19) pandemic, have driven increases in substance use.
- Overall, synthetic opioids offer economic and tactical advantages that allow criminals to vastly outpace enforcement efforts.

Ohio Opioid Overdose Death Data

Ohio Opioid Deaths: All Opioids vs Fentanyl-Related



Ohio Opioid Deaths: Demographic Data



Dangerous Counterfeit Prescription Tablets



<https://www.dea.gov/sites/default/files/2021-05/Counterfeit%20Pills%20fact%20SHEET-5-13-21-FINAL.pdf>

“Rainbow Fentanyl”



Knowledge Check

In 2023, the majority of opioid related deaths are caused by which of the following:

- A. Heroin
- B. Illicitly manufactured fentanyl
- C. Prescription opioids
- D. Fentanyl patches

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Scientific Committee on Opioid Prevention & Education (SCOPE)

SCOPE Committee

- Scientific Committee on Opioid Prevention and Education (SCOPE) launched by the Ohio Attorney General's Office
 - Goal: to reduce the number of Ohioans who die from substance use disorder
- SCOPE Target Areas
 1. Professional education ← 

We will focus on target area #1
 2. Opioid storage and disposal
 3. Behavioral economic approach
 4. Pharmacogenomic risk assessment study

Target Area 1: Professional Education

SCOPE Survey

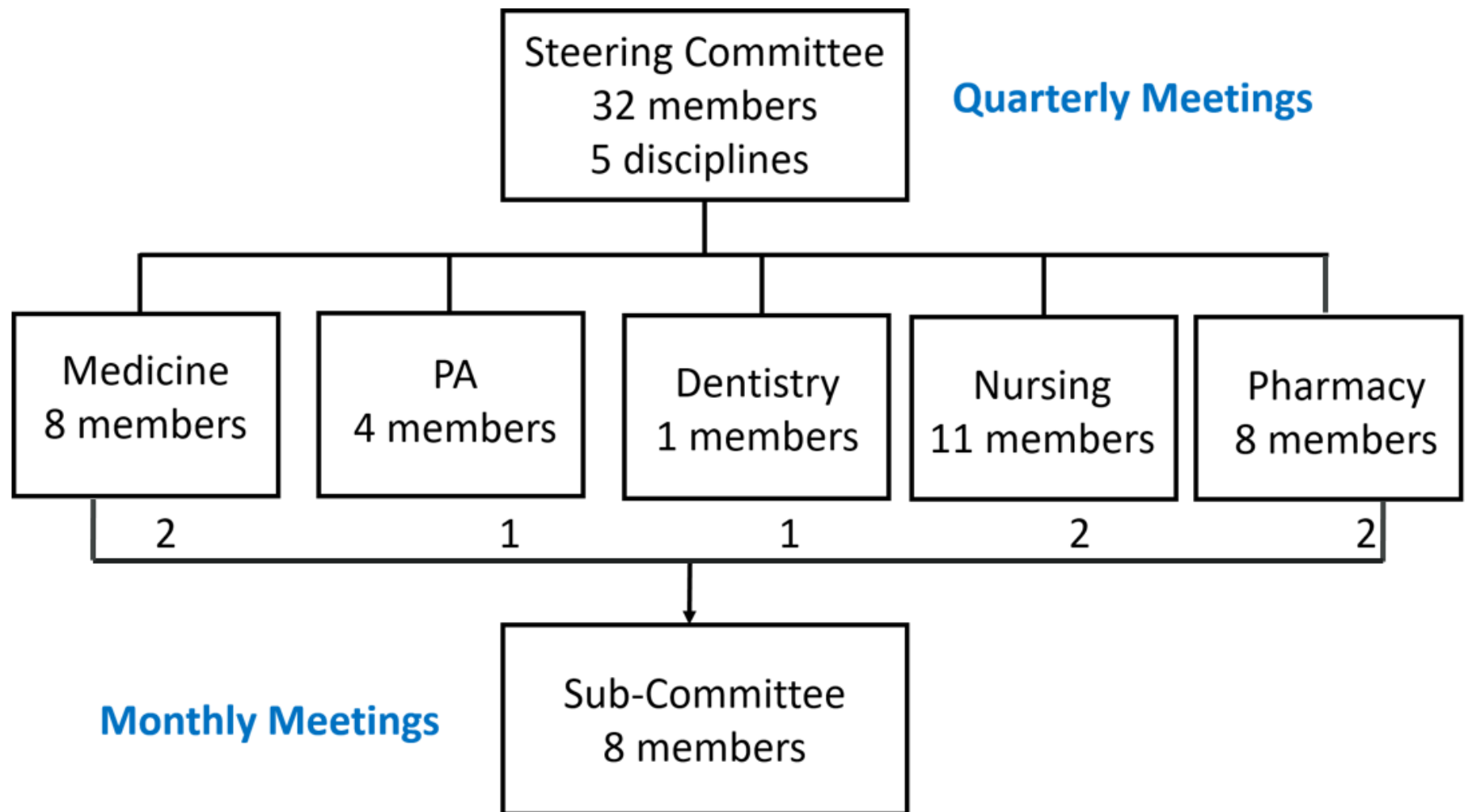
- Survey of Ohio professional healthcare programs
- Objective: to identify the content and extent to which future healthcare professionals are trained in pain management, substance use disorders (SUD), and adverse childhood experiences (ACEs)

Survey Methods

- The survey was distributed to 49 healthcare professional schools in Ohio
- Disciplines included medicine, pharmacy, nursing, physician assistant, dentistry, and optometry
- Survey included four domains:
 1. Initial screening of patients
 2. Training in SUD
 3. Training in care for patients at high risk for SUD
 4. Education in evaluating patients for ACEs

Survey Results

- Survey results indicated a need in the following areas:
 1. Uniform training in the foundations of SUD and ACEs
 2. Use of motivational interviewing techniques when evaluating patients with SUD
 3. Evaluating social determinants of health
 4. Ethics behind treating patients with SUD



Committee's Task

The committee was tasked with creating and implementing an interprofessional educational symposium on opioid use disorder that met the unmet needs identified by SCOPE

Knowledge Check

Which of the following statements is not true about the SCOPE survey?

- A. It surveyed 49 health professional programs in Ohio
- B. The objective of the survey was to identify the content and extent to which students were trained on substance use disorders
- C. The survey found that all health professional programs are utilizing a standard curriculum to teach substance use disorders
- D. An educational committee was formed to address the unmet needs identified in the SCOPE survey results

Knowledge Check

Which of the following statements is not true about the SCOPE survey?

- A. It surveyed 49 health professional programs in Ohio
- B. The objective of the survey was to identify the content and extent to which students were trained on substance use disorders
- C. The survey found that all health professional programs are utilizing a standard curriculum to teach substance use disorders**
- D. An educational committee was formed to address the unmet needs identified in the SCOPE survey results

Project Timeline

Spring 2021

- Committee Formation and initial meeting

Summer
2021

- Subcommittee formed
- Initial planning for educational symposium

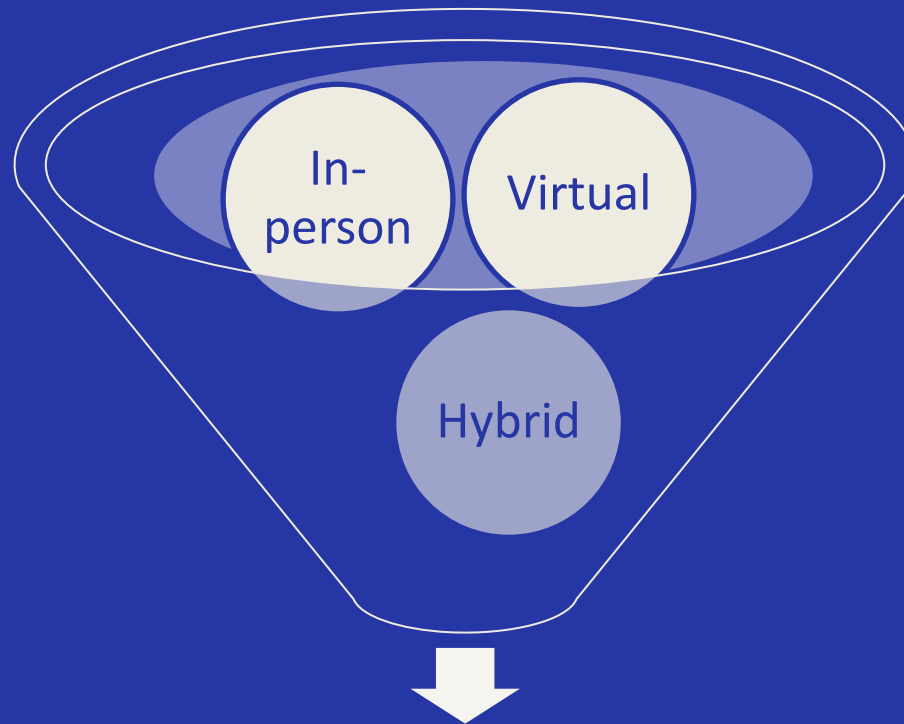
Fall 2021

- Ohio State learning design team joins planning and development efforts
- Materials gathered for asynchronous content and built into learning management system

SUD Symposium Objectives

1. Understand the neurobiology and treatment of SUD
2. Evaluate social determinants of health while caring for patients in pain
3. Assess the ethics behind treating patients with OUD/SUD
4. Identify interprofessional opportunities of care when treating OUD/SUD
5. Evaluate patients based on ACEs while treating patients with pain
6. Employ motivational interviewing techniques when evaluating patient case

Symposium Format





Asynchronous modules with synchronous, virtual symposium and escape room experience


Development Process for Asynchronous Modules

- Deciding on a learning management system
- Receiving materials from external partners
 - Overview, learning objectives, content, pre/post assessment questions
- Module completion requirements
- Ensuring accessibility of all course materials


Learning Management System




Account




Dashboard




Courses




Calendar




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History



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Modules

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SCORM

Attendance

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Echo360

Syllabus

Discussions

Quizzes

Assignments

Collaborations

Outcomes

Files

Pages

Settings


Interprofessional Studies on Opioid Use Disorder SP 2023

Edit

AGO OUD 1101

Interprofessional Studies on
Opioid Use Disorder

Begin or Resume
Course Course
Content



carleton.instructure.com/courses/1746/pages/.../edit

Module Requirements

▼ Module 4: Adverse Childhood Experiences (ACEs)


Prerequisites: Module 3: Treatment of Opioid Use Disorder, Part 2

Complete All Items



Start here




-  OVERVIEW: Adverse Childhood Experiences (ACEs)
View



Pre-assessment



-  PRE-ASSESSMENT: Adverse Childhood Experiences
5 pts | Submit



Learning materials




-  PODCAST: Adverse Childhood Experiences (ACEs)
View



Post-assessment



-  POST-ASSESSMENT: Adverse Childhood Experiences
5 pts | Score at least 4.0



Knowledge Check

All of the following are topics addressed in the educational symposium except:

- A. Managing chronic pain
- B. Adverse Childhood Experiences
- C. Social determinants of health
- D. Motivational interviewing

Knowledge Check

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A. Managing chronic pain

B. Adverse Childhood Experiences

C. Social determinants of health

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Spring 2022

- Asynchronous modules released (Jan/Feb)
- Weekly meetings to develop escape room activities
- First escape rooms launched (April)

Synchronous Symposium

- 3-hour virtual experience hosted on Zoom
 - Introduction, logistics, community building (45 mins)
 - Escape room (90 mins)
 - Debrief and claim certificate (45 mins)

Why an escape room?

- Escape room activities have been used effectively to teach interprofessional communication¹ and cardiovascular content²
- An engaging way to teach complex topics
- Encourages student participation as different skills are needed to solve activities

Logistics

- Breakout rooms utilized for interprofessional work
 - Teams created prior to the symposium
- Team chose a “scribe” to document and answer for the group
- Screen sharing and chat feature utilized to ensure team members were contributing

Facilitators

- Several members of the educational committee served as facilitators for the escape rooms
- Multiple disciplines represented
- Groups could call a facilitator if they had questions
- Facilitator guide provided

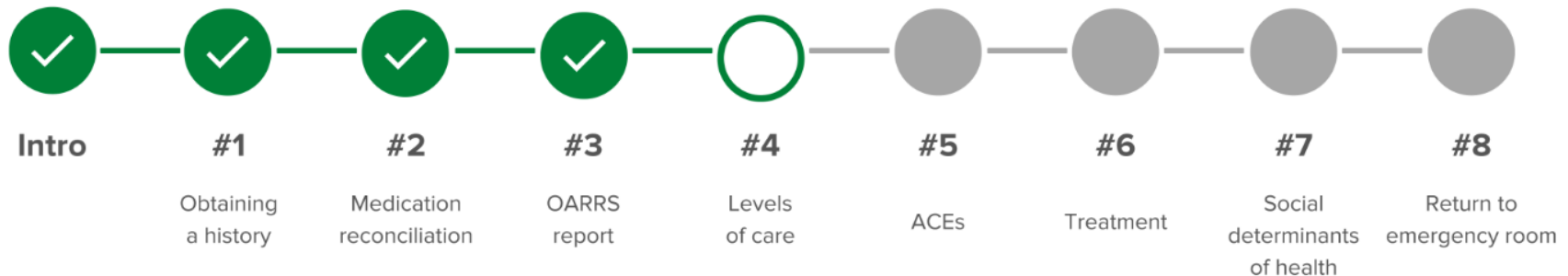
Construction of Escape Room

Technology Used	What is it?	Rationale?
ScarletCanvas	Learning Management System	Hosting program content; ability to enroll non-OSU participants
Echo360	Video Hosting; Captioning & Analytics	Provides real-time analytics of progress through escape room to program facilitators;
Lectora Online	Interactive e-authoring tool	Allow learners autonomy to engage in simulated interview according to own pace ^{3,4} . Track student progress and consolidate large activities.
H5P	Interactive e-authoring tool	Knowledge check activities with instant feedback to assist with knowledge retention and transfer ^{4,5}
CarmenZoom	Academic Web Conferencing Tool	Hosting virtual symposium
MS Forms	Tool to document interdisciplinary discussions	Capture group interprofessional discussion and provide opportunities for generative processing from media-based activities ⁶ ; used to inform revisions
Go.osu.edu links	Short links to direct to resources	Give non-scribes access to external resources

Escape room example

Activity 4 - Residential treatment

Progress



Interprofessional Discussion

As you saw from Alex's OARRS report in the last activity, he was previously on naltrexone ER. During the interview with Alex's brother he also mentioned that Alex had sought out treatment and went to a residential treatment facility for a time. Finding inpatient treatment for Opioid use disorder can be difficult and many patients experience barriers when accessing this high level of care.



Through this portion of the case, consider the following questions:

- Where will Alex go for residential treatment?
- What barriers may the patient and family face when finding a residential facility?
- How will this impact their overall treatment?

Escape room example

External links for this activity: go.osu.edu/escape4au22 ➞

If your group has questions about this interprofessional discussion, please raise your hand in your Zoom room and a facilitator will join to provide assistance.

Residential treatment barriers



1. With your teammates, discuss the following question: What barriers might a patient experience when trying to find residential treatment for opioid use disorder?

Submit

Never give out your password. Report abuse

Next

To understand the barriers that Alex may experience when seeking our residential treatment centers, let's first see how many treatment facilities are available near his home.

1. Visit [samhsa.gov](https://www.samhsa.gov)  and find the treatment locator website www.findtreatment.gov 
 2. Enter Alex's city or zip code (Athens, OH, 45701)
-

Directions

You will be required to receive 100% on this assignment to move forward in the escape room. If you have not received 100% after **two attempts**, please click the "Ask for Help" button in your breakout room to prompt a facilitator to join and discuss the activity.

Next Activity

Once you have received 100%, use the button below to advance:

Move to next activity

Answer the following questions about Alex's treatment facility options.

How many residential treatment sites are located within 25 miles of Athens, OH?

How many residential treatment sites are located within 50 miles?

 Submit

	Distance away from Athens, Ohio	Payment, insurance, or funding accepted	Gender and age groups accepted	Type of opioid treatment	Transitional Services	Does this facility offer transportation assistance?
Health Recovery Services Inc. Rural Womens Recovery Program						
Field of Hope Community Campus Inc.						
Perry Behavioral Health Choices Evolution Mens Residential						
Rigel Recovery Residential Services						
Westbrook Health Services Amity Treatment Center						
Pike County Recovery Council Georgie Harris House 1						
Veteran's Affairs Medical Center						

Outcomes

- 238 students completed the program in fall 2022
- Disciplines represented: pharmacy, dentistry, physician assistant, nurse practitioner, medicine, podiatry,

Participant feedback

- Interprofessional teams were well received
- Escape room format was appreciated
 - Initial concerns about “gamifying” a serious disease, but students thought it was well done
- A desire to incorporate social workers to the interprofessional team was a major theme

Implementation strategies

- Add the experience to an existing course/experiential rotation
- Create an elective around the course
- Create an independent study opportunity
- Allow students to volunteer to participate
- Allow students to participate for field placement hours
- Incorporate into existing interprofessional education program as an option for students

Knowledge Check

Which of the following may be a reason to create an escape room to teach interprofessional education?

- A. To make complex topics seem less serious
- B. To increase student engagement and participation
- C. It is easier than creating a traditional lecture
- D. It requires less collaboration than other interprofessional events

Knowledge Check

Which of the following may be a reason to create an escape room to teach interprofessional education?

- A. To make complex topics seem less serious
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- C. It is easier than creating a traditional lecture
- D. It requires less collaboration than other interprofessional events

Project Timeline

Summer
2022

- Minor revisions made to program based on participant feedback

Fall 2022

- Project launched for second offering
- Social work content developed in collaboration with Ohio State College of Social Work

Fall 2022 outcomes

- 35 students completed the course – social work students involved for the first time
- Collaboration with college of social work to create two new content areas for asynchronous modules
 - Levels of care
 - Maslow's hierarchy of needs

Project Timeline

Summer
2022

- Minor revisions made to program based on participant feedback

Fall 2022

- Project launched for second offering
- Social work content developed in collaboration with Ohio State College of Social Work

Spring 2023

- Project launched for third offering
- Research in progress to assess student perceptions

Summer
2023

- Create new patient case for escape room
- Apply for accreditation as interprofessional continuing education credit

Spring 2023 updates

- Over 400 students enrolled in the program
- Four escape room events planned for March and April
- Research in progress to assess student perceptions of working with an interdisciplinary team and caring for patients with opioid use disorder
- Exploring partnerships with new institutions

Summer 2023 plans

- Create a new patient case for escape room events
 - Explore different levels of care and ways to incorporate multiple disciplines
- Apply for accreditation as interprofessional continuing education for healthcare providers

Knowledge Check

Which of the following is an implementation strategy for this program?

- A. Incorporate it into an existing course
- B. Allow a student to complete it for independent study
- C. Allow students to volunteer to participate
- D. All of the above

Knowledge Check

Which of the following is an implementation strategy for this program?

- A. Incorporate it into an existing course
- B. Allow a student to complete it for independent study
- C. Allow students to volunteer to participate
- D. All of the above**

Additional References

- ¹Friederich, C., Teaford H., Taubenheim, A., Boland, P., & Sick B. (2019). Escaping the professional silo: an escape room implemented in an interprofessional education curriculum. *Journal of Interprofessional Care*, 33(5), 573-575.
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- ⁶Mayer, R.E., Fiorella, L., & Stull, A. (2020). Five ways to increase the effectiveness of instructional video. *Education Tech Research and Dev*, 68, 837-852.
<https://doi.org/10.1007/s11423-020-09749-6>

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