

LICENSE (Language, Impact, Communication, Engagement, Non-Stigmatizing, Effectiveness)

Renaissance School of Medicine at Stony Brook University

Authors:

Dafni Frohman, Andrew Wylie

Dafni.frohman@stonybrookmedicine.edu

Faculty Mentor:

Kevin L. Zacharoff, MD, FACPE, FACIP, FAAP

kevin.zacharoff@stonybrookmedicine.edu

A. Abstract

In recent years, dialogue and word choice have become recognized as crucial medical competencies in addressing health disparities (Betancourt et al., 2005). Research has demonstrated that the strength of the patient-provider relationship is linked to adherence to medical instruction and better health outcomes (Betancourt et al., 2005). Yet, medical education lacks guidance on developing these skills, instead focusing on pathophysiology, diagnosis, and management. This is particularly evident when we examine medical student skills, knowledge, and values with respect to social determinants of health and stigma that impact people with substance use disorders.

B. Educational Objectives

The overall goal of this longitudinal curriculum is to improve knowledge, attitudes/biases, and behaviors related to caring for this patient population. By the completion of this longitudinal curriculum, medical student learners will be able to:

- Describe the relevance of SUD in various social determinants of health such as age, socioeconomic, racial, gender, and/or cultural backgrounds
- Recognize the interaction between substance use, treatment adherence, and the social determinants of health
- Apply effective clinical and interviewing skills necessary to engage patients in sensitive dialogues related to substance use, motivation, and harm reduction
- Demonstrate self-reflection regarding one's own strengths and areas for improvement in their approaches towards communicating with and caring for patient with substance use disorders.

C. Introduction/ Rationale

Looking at the prevalence of Substance Use Disorders (SUD) in 2017, approximately 1 in every 10 men and 1 in every 20 women over the age of 11 in the US suffered from a SUD (*Alcohol and Drug Abuse Statistics*, 2021). The opioid epidemic has been prominent in the media, affecting people in all demographics, races, and locations across the US for many years. Despite this prevalence, we have yet to significantly reduce mortality related to drug overdose and promulgate better approaches for

Funding for this initiative was made possible (in part) by grant no. 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

safe and effective prescribing opioid analgesics for those who need them while eliminating excess or unnecessary prescriptions (Mattson CL, 2021).

More so, the COVID-19 pandemic seems to have only worsened the overdose epidemic, with an increase in opioid-related overdoses noted since March 2020 (Holland et al., 2021). Physicians and other healthcare professionals continue to use stigmatizing language, such as describing patients as “*substance abusers*” and urine screenings as “*dirty*”, and often affirm the notion that the patient is the perpetrator of the disease of addiction (Wakeman, 2013). Such language exacerbates barriers between the patient, physicians, and even the healthcare system itself, while contributing to prejudice.

In fact, according to Kelly et al (2010), stigma is a chief reason given for why individuals with SUD often do not pursue treatment (Kelly et al., 2010). More so, pain and SUD education within medical school curriculums has tended to be in fragmented, ineffectual segments within other required courses (Mezei et al., 2011). Given this language is introduced in medical education while medical students are still developing their foundational patient-interaction skills, we propose a curriculum for medical students focused on communication and overall professional identity formation surrounding the opioid epidemic and SUD, and how they overlap with social determinants of health.

The construct of this educational program is based on insights from the University of Colorado’s program on education about patients identifying as LGBTQ+ (Minturn et al., 2021). This program consisted of a 10-hour program for medical and physician assistant students involving lectures and case-based small-group discussions focusing on terminology, history taking, and health maintenance. Additionally, there was a panel discussion with community members that provided insight into some of the challenges these patients often face. Pre- and post- surveys were utilized for addressing self-assessed confidence and knowledge about LGBTQ-specific care. LICENSE, similarly, will consist of didactic sessions, small-group activities, self-reflections, and surveys before and after the course while focusing on terminology, social determinants of health, and stigma that impact patients with SUD and the goal of creating a safe and empathic space for patients.

D. Curriculum Design

The LICENSE (Language, Impact, Communication, Engagement, Non-Stigmatizing, Effectiveness) curriculum is a longitudinal curriculum that is composed of small-group educational activities along the duration of medical school education, concentrating on the social determinants of health that impact SUD, and stigmas associated with SUD. It involves a blend of remote/computer-based (e.g., Zoom) and in-person educational sessions, totaling approximately 10 hours. The sessions involve pre-session readings, didactic components, small-group activities, and a closing question-and-answer period.

The LICENSE curriculum brings about four major forms of innovation, it is:

- Longitudinal, across the entire medical school program
- Focuses on communication skills and de-stigmatization, with the goal of directly improving patient-provider relationships
- Includes didactic portions led by students within their own small groups, each taking a reading and teaching it back to their peers using an adapted version of the jigsaw instructional strategy

Funding for this initiative was made possible (in part) by grant no. 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

- Presents cases that will be progressive, involving the same patient(s) over time, thus establishing clinical continuity, with the patient narratives increasing in complexity as students grow in their learning, and the patients follow their life trajectories

This curriculum is designed to fit the LEARN (*Learner-focused, Experiential, Adaptive, Rigorous and Novel*) Curriculum at the Renaissance School of Medicine (RSOM) yet may be adapted to other frameworks. The LEARN curriculum is comprised of 3 distinct phases: Phase I (18-month, Foundational Phase); Phase II (12-month, Primary Clinical Phase); and Phase III (16-month, Advanced Clinical Phase). In the LICENSE (*Language, Impact, Communication, Engagement, Non-Stigmatizing, Effectiveness*) Curriculum, across the 3 phases, students will complete supplementary readings prior to the meeting, partake in didactic sessions related to social determinants of health and stigmas associated with SUD, apply knowledge in a case-based break-out group activity, and participate in a brief survey for to assess learning outcomes at the end of the session. The standardized patient cases will evolve over time (i.e., between sessions), allowing students to adapt management and treatment plans longitudinally. This is intended to complement the LEARN Curriculum's mission of helping to facilitate the students' professional identity formation (See Appendix A).

During the foundational phase (I), medical students will learn about the importance of using correct terminology, the basic concepts and history of, and common stigmas to be aware of regarding the opioid epidemic and SUD. Didactic learning will focus on the relevance of SUD in various social determinants of health such as age, socioeconomic, racial, gender, and/or cultural backgrounds. In small groups, students will be able to role-play clinical encounters, meeting patients with SUD, repeating and recognizing proper word-choice, and developing foundational skills necessary for patient-centered compassionate management.

In the clinical phase (II), medical students will explore the intersection of SUD and the challenges arising from social determinants of health among specific patient populations. Under the supervision of a moderator, students will train in small groups with standardized patient cases. Together, they will discuss and explore concepts foundational to creating an open and trusting environment with their patients. Feedback and suggestions will be provided by the moderator, standardized patient, and the group. Following these standardized encounters, students will then be offered clinical exposures to actual patients in primary care settings for further supervised instruction.

In the advanced clinical phase (III), medical students will continue to develop these skills in standardized clinical encounters with patients demonstrating problematic substance use. Students will apply their clinical experiences to work individually with a standardized patient on issues related to long-term care, motivational interviewing, and harm reduction strategies. The patient will then provide the student with feedback on their approach to management and interview.

Through this training, medical students will gradually develop the knowledge, skills, and values necessary to navigate the complexities of communication, social determinants of health and their relationship to more effective prevention of, effective assessment and treatment of SUD, and mitigation of health disparities in this patient population. More so, students will better understand the importance and responsibility of their behaviors in these situations, creating a more inclusive and less stigmatizing environment.

LICENSE has the flexibility to be implemented to other health-care professional trainings by adapting the course material and longitudinal training to the respective subject matter.

Funding for this initiative was made possible (in part) by grant no. 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

The Kirkpatrick 4 Level Model (see Appendix B) will be used as the evaluation framework to measure the effectiveness of the LICENSE curriculum.

- Level 1: Collect overall satisfaction and feedback data from the medical students after their participation in this longitudinal curriculum.
- Level 2: *Knowledge and Attitudes*- Survey current medical students at all phases of the curriculum regarding their attitudes about discussing substance use with a patient. This survey will consist of statements with a sliding scale (1 = strongly disagree, 4 = strongly agree) and some multiple-choice questions to assess objective knowledge. Medical students will be asked to complete this survey at the beginning of medical school (during the TMS course) and at the end of each Phase (I, II, and III) of medical school. *Skills*—students may participate in OSCE/Simulated case scenarios. OSCE performance checklists for each case may be developed and reviewed to assess student demonstration of key actions and behavior that relate to effective communication skills.
- Level 3: At the end of each session, students will be required to write a brief reflection responding to an open-ended question prompt sent to them. The question prompts will align with the session objectives and ask for lessons learned and take-aways, providing further opportunity to assess topic-specific attitudes (and challenges associated with patient care). When applicable, engage medical students in reflection round sessions where students will present a SUD case that he/she experienced in the clinical setting and participate in a guided discussion on how they had approached/handled the case. Students may also have ample opportunities to reflect either in written or verbal format throughout their 4 years of training.
- Level 4: The authors will focus on the institutional impact and recognition of the training program. We plan to submit our curricula materials to be considered for publication in MedEdPORTAL®, a peer-reviewed, online repository of learning resources hosted by the Association of American Medical Colleges (AAMC).

Learning Experiences, Instruction and Assessment:

Students entering medical school are eager for clinical experiences, especially during their pre-clinical studies. This course will provide practical simulations that offer students clinical immersion in the beginning stage of their medical education, which is often mainly didactic. By focusing on the early cultivation of patient-interaction skills critical to their future success, we believe students will inherently be “hooked” by the attractiveness of clinical learning opportunities.

Learning objectives will be presented in the first session of each phase during the didactic sessions. In each session, we will display the overall learning objectives, with those specific to the session bolded. With this approach, students will be able to see both the current goals as well as the overarching aspirations for the curriculum.

Students’ prior knowledge will be primed by readings assigned before the session and at the beginning of the didactic portion. By the time the small-group component begins, students will be fully engaged and ready to actively learn and participate.

Student learning will be guided by concurrent readings prior to the sessions as well as didactic portions at the start of each session. The readings will be offered on our learning management system as an electronic PDF and the didactic component will be delivered through Zoom or in a campus classroom,

depending on whether the session is virtual or in-person. The content of this curriculum will be focused on stigma, social determinants of health, and language surrounding SUD.

The different facets of stigma, as the Department of Health and Human Services *Pain Management Best Practices Interagency Task Force Report* of 2019 states, serve as considerable barriers in effectively treating chronic pain (*Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations*, 2019). This stigma may arise from family, friends, coworkers, and society, but also from the health-care system that is in place to treat them. As a result, stigma can lead to feelings of guilt, embarrassment, and/or shame, increasing the risk of behavioral health issues (anxiety, depression, substance dependence) (*Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations*, 2019). In turn, stigma, along with the increased time required to evaluate and treat pain, leads to over-referral and patient abandonment (Substance et al., 2016). To increase awareness around and reduce stigma related to SUD, the report recommends “countering attitudes equating pain with weakness” and encouraging more education about the disease processes underlying acute and chronic pain (Substance et al., 2016).

Education for pain management in medical school, additionally, has been limited to a series of didactic sessions in the first year. Instead, the 2017 National Academies Press Report *Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use* recommends a longitudinal curriculum, focused on interactive sessions targeting communication and clinical competencies. These approaches are likely to break down communication barriers and improve the relationship between the patient and provider (National Academies of Sciences & Medicine, 2017).

To broaden this approach to patients with SUD, the curriculum suggests innovative case scenarios developed either for the role-playing activity or the standardized patient Objective Structured Clinical Examinations (OSCEs), which will use a progressive, unfolding case development strategy. Specifically, students will be presented with longitudinal patient cases over the duration of the curriculum, with each encounter offering new details and information that will require continued development of knowledge and skills, particularly relating to communication.

Students will actively engage in learning through the small-group activities. These will begin as role-playing scenarios with facilitated dialogue amongst students related to demonstrable communication techniques. Then during their clerkship year, small groups of students will engage in role-playing scenarios with standardized patients and discussions about the best manner to conduct the dialogue, receiving guidance and feedback from a moderator, the patient, and each other. Finally, in phase III, students will be able to interact one-on-one with their standardized patient, receiving feedback directly from this patient. There will be two cases that will emphasize SUD and social determinants of health, with the same two patients over a longitudinal period of time (see Appendix C).

Longitudinal Cases:

1. Michael Johnson, a white male adopted into a working-class family in a rural region of the US. In phase I, Michael presents at age 17 as a football player in high school with an athletic injury and requiring opioid analgesic therapy. The objective is to prescribe opioids safely. In phase II, he presents at age 24, after having served in the military and becoming physically injured during his service. He is prescribed opioids and seems to be developing a dependence and possibly problematic drug-related behaviors. The objective is utilizing motivational

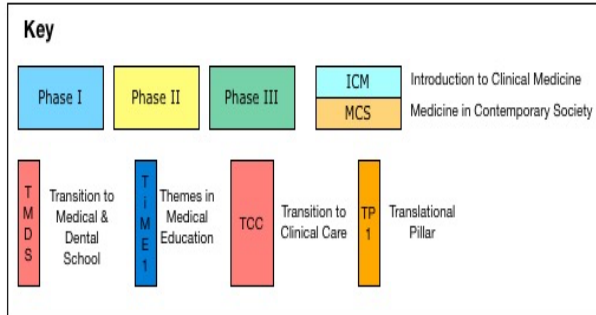
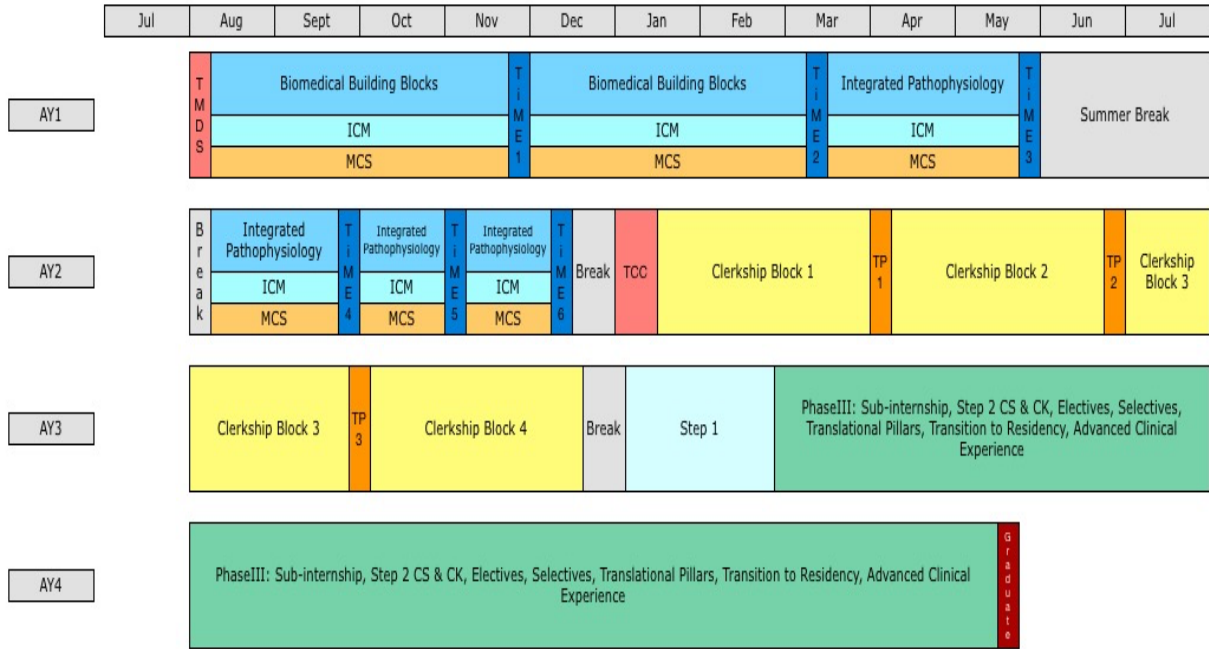
Funding for this initiative was made possible (in part) by grant no. 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

interviewing to explore opioid use. In phase III, Michael presents at age 29 as a veteran with severe PTSD, experiencing homelessness, and unable to hold a job. He is using heroin and is hospitalized for infectious endocarditis. The objective here is to discuss harm reduction and decreasing substance usage.

2. Cadence Cole, a black female lives in New York City with a large, chaotic family and parents who are both problematic drinkers. In phase I, she presents at age 21 as a community college student having difficulty paying for school and supporting her family, running late to the appointment, and looking for birth control. She reports no drinking or drug history. The objective will be to discuss sexual behavior and develop a relationship with the patient. In phase II, Cadence presents at age 28 with recently diagnosed Systemic Lupus Erythematosus (SLE), two children, and an “unreliable” partner. She is on Medicaid and is presenting to for assessment and treatment of SLE symptoms-related symptoms. The objective is to discuss management plans sensitive to her social context. In phase III, she reports at age 33 with complications and pain from lupus, as well as depression. She has begun drinking, has been missing appointments, and her disability benefits have lapsed. The objective here is to recognize depression, address mental health barriers, and discuss treatment adherence.

Students will be assessed on what they know through pre- and post-session quizzes and through feedback from standardized patients in phases II and III. Additionally, pre- and post-session surveys given throughout the curriculum serve to assess knowledge, comfort with the task, and attitudes about SUD. Students will receive feedback on their learning through the pre- and post-session quizzes as well as through feedback from moderators in phase II and in phase III through debriefings that immediately follow the standardized patient OSCE exercises. The debriefings are a key part of this experiential learning activity, allowing the students to review what happened, appraise their performance, and discuss areas of their performance which may need improvement. The debriefings will reinforce learning objectives and promote self-evaluation. These faculty-facilitated debriefing sessions allow the students learn and reflect in a supportive and respectful environment. Additionally, curriculum feedback surveys will provide feedback on how the students believe the courses can be improved.

Appendix A LEARN Curriculum



Funding for this initiative was made possible (in part) by grant no. 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Appendix B
Kirkpatrick Model



Funding for this initiative was made possible (in part) by grant no. 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Appendix C

Longitudinal Cases

Michael Johnson: white male adopted into working class family in a rural town.	Cadence Cole: black female living in the city with several siblings in a chaotic family life where both parents are problem drinkers.
<p>(Age 17) High school football player sustains injury and needs opioids. Using alcohol and marijuana recreationally, NOT clearly demonstrating problems with usage.</p> <p>-Urgent Care Clinic — patient is seeking analgesia.</p> <p>-Goals: prescribe opioids safely, explore non-problematic substance use in sensitive ways.</p>	<p>(Age 21) Attends community college but having difficulty keeping up with classes; working to pay for school AND support family. Runs late to appointment due to reliance on single household car. No drinking or drugs, states she would never after seeing effect on her parents' relationship (both drink and fight).</p> <p>-Initial encounter at Primary Care clinic - patient is sexually active and looking for birth control.</p> <p>-Goals: establish social context for patient, discuss sexual behavior in sensitive way</p>
<p>(Age 24) Veteran with pain problem. Goes to Afghanistan, in an explosion during second tour that kills several of his company and leaves him physically injured/ on disability. Will not discuss service. Prescribed on opioids at some point and continues to take them (wherever he can get them), does not want to stop. Hints of PTSD.</p> <p>-VA Primary Care Clinic — patient needs to obtain physical in order to apply for benefits</p> <p>-Goals: motivational interviewing to explore opioid use, identify psychiatric undertones</p>	<p>(Age 28) Recently diagnosed with lupus and on Medicaid. Runs late to appointment; has two children with an unreliable man, seems exhausted all the time for caring from them. No drinking or drugs.</p> <p>-Follow-up encounter at Primary Care clinic — patient is having difficulty with SLE symptoms and looking for help</p> <p>-Goals: design patient-centered management plan sensitive to social situation</p>
<p>(Age 29) Homeless veteran with severe PTSD. In and out of shelters and unable to hold a job. Using heroin and whatever else he can get his hands on.</p> <p>-VA Hospital — patient has been hospitalized for infectious endocarditis</p> <p>-Goals: harm reduction and exploration of decreasing substance usage</p>	<p>(Age 33) Lupus has progressed, causing complications and pain. Patient is depressed. Has been missing appointments so her insurance coverage/ disability benefits have lapsed; states she can't bring herself to make it out the door some days. A sibling is helping her care for her children. Has begun drinking.</p> <p>-Follow-up encounter at Primary Care clinic — patient needs to see a doctor to regain disability benefits coverage</p> <p>-Goals: recognize depression, identify, and address mental health barriers to treatment adherence</p>

Funding for this initiative was made possible (in part) by grant no. 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

References

- Alcohol and Drug Abuse Statistics*. (2021). American Addiction Centers.
<https://americanaddictioncenters.org/rehab-guide/addiction-statistics>
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Park, E. R. (2005). Cultural competence and health care disparities: key perspectives and trends. *Health Aff (Millwood)*, 24(2), 499-505.
<https://doi.org/10.1377/hlthaff.24.2.499>
- Holland, K. M., Jones, C., Vivolo-Kantor, A. M., Idaikkadar, N., Zwald, M., Hoots, B., Yard, E., D'Inverno, A., Swedo, E., Chen, M. S., Petrosky, E., Board, A., Martinez, P., Stone, D. M., Law, R., Coletta, M. A., Adjemian, J., Thomas, C., Puddy, R. W., Peacock, G., Dowling, N. F., & Houry, D. (2021). Trends in US Emergency Department Visits for Mental Health, Overdose, and Violence Outcomes Before and During the COVID-19 Pandemic. *JAMA Psychiatry*.
<https://doi.org/10.1001/jamapsychiatry.2020.4402>
- Kelly, J. F., Dow, S. J., & Westerhoff, C. (2010). Does Our Choice of Substance-Related Terms Influence Perceptions of Treatment Need? An Empirical Investigation with Two Commonly Used Terms. *Journal of Drug Issues*, 40(4), 805-818. <https://doi.org/10.1177/002204261004000403>
- Mattson CL, T. L., Quinn K, Kariisa M, Patel P, Davis NL. (2021). Trends and Geographic Patterns in Drug and Synthetic Opioid Overdose Deaths — United States, 2013–2019. *MMWR Morb Mortal Wkly Rep* 2021, 70:202–207. <https://doi.org/http://dx.doi.org/10.15585/mmwr.mm7006a4>
- Mezei, L., Murinson, B. B., & Johns Hopkins Pain Curriculum Development, T. (2011). Pain education in North American medical schools. *J Pain*, 12(12), 1199-1208.
<https://doi.org/10.1016/j.jpain.2011.06.006>
- Minturn, M. S., Martinez, E. I., Le, T., Nokoff, N., Fitch, L., Little, C. E., & Lee, R. S. (2021). Early Intervention for LGBTQ Health: A 10-Hour Curriculum for Preclinical Health Professions Students. *MedEdPORTAL*, 17, 11072. https://doi.org/doi:10.15766/mep_2374-8265.11072
- National Academies of Sciences, E., & Medicine. (2017). *Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use*. The National Academies Press. <https://doi.org/doi:10.17226/24781>
- Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations*. (2019). <https://www.hhs.gov/ash/advisory-committees/pain/reports/index.html>
- Substance, A., Mental Health Services, A., & Office of the Surgeon, G. (2016). Reports of the Surgeon General. In *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. US Department of Health and Human Services.
- Wakeman, S. E. (2013). Language and addiction: choosing words wisely. *Am J Public Health*, 103(4), e1-2.
<https://doi.org/10.2105/AJPH.2012.301191>