Physicians and the Opioid Crisis

The Role of the Physician in Creating and Reversing the Opioid Epidemic

Stuart N. Damon DO, MS
Health Policy Fellow Class of 2019

Disclosures

- None

Objectives

Upon completion of the presentation, the learner will be able to

1. Discuss factors that led to over-prescription of opioid medications for non-cancer/non-terminal illness-related pain
2. Describe marketing strategies used by manufacturers of opioid medications that alter prescriber behavior with respect to these therapies
3. Summarize policy interventions at the state and federal levels that have been enacted to reduce opioid-related overdose deaths
4. Implement strategies at the institutional and practice levels to reduce accidental opioid overdoses

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Framing the Issue

- An unprecedented public health crisis; in 2017, it was estimated that overdose deaths due to opioids exceeded 47,600[1]
- If the rate of opioid-related deaths continues along its current trajectory, it is estimated that during the 10 year period from 2016-2025, over 700,000 Americans will have lost their lives to overdose[2]

1. Guy, G, Haegerich, T, et al. *Vital Signs:* Pharmacy-Based Naloxone Dispensing — United States, 2012–2018. Morbidity and Mortality Weekly Report August 9, 2019; 68 (31)679-686.

2. Chen Q, Larochelle M, et al. Prevention of Prescription Opioid Misuse and Projected Overdose Deaths in the United States. JAMA Network Open: 2019;2(2)e187621.

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For perspective, that number exceeds the number of US military service members killed in action during the entire 20th Century…

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COMBINED

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Origins

- Historically, physicians were reluctant to prescribe opioid medications to patients for conditions other than cancer and terminal illness
- In 1980, a letter[3] to the New England Journal of Medicine describing experience from a database of >38,000 hospitalized patients asserted that addiction was rare among patients treated with narcotic medication
- Porter and Jick would go on to be cited in over 400 subsequent publications as evidence of low risk for addiction with opioid use in the general population

3. Porter J, Jick H. Addiction Rare in Patients Treated with Narcotics. New England Journal of Medicine 1980; January 10: 302:123.

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Amplification

- Physician prescribing behavior as the crisis unfolded was subject to multiple influences including –
  - Aggressive marketing and lobbying practices
  - Advocacy group influences
  - Policy statements by The World Health Organization and the Joint Commission on the Accreditation of Health Care Organizations

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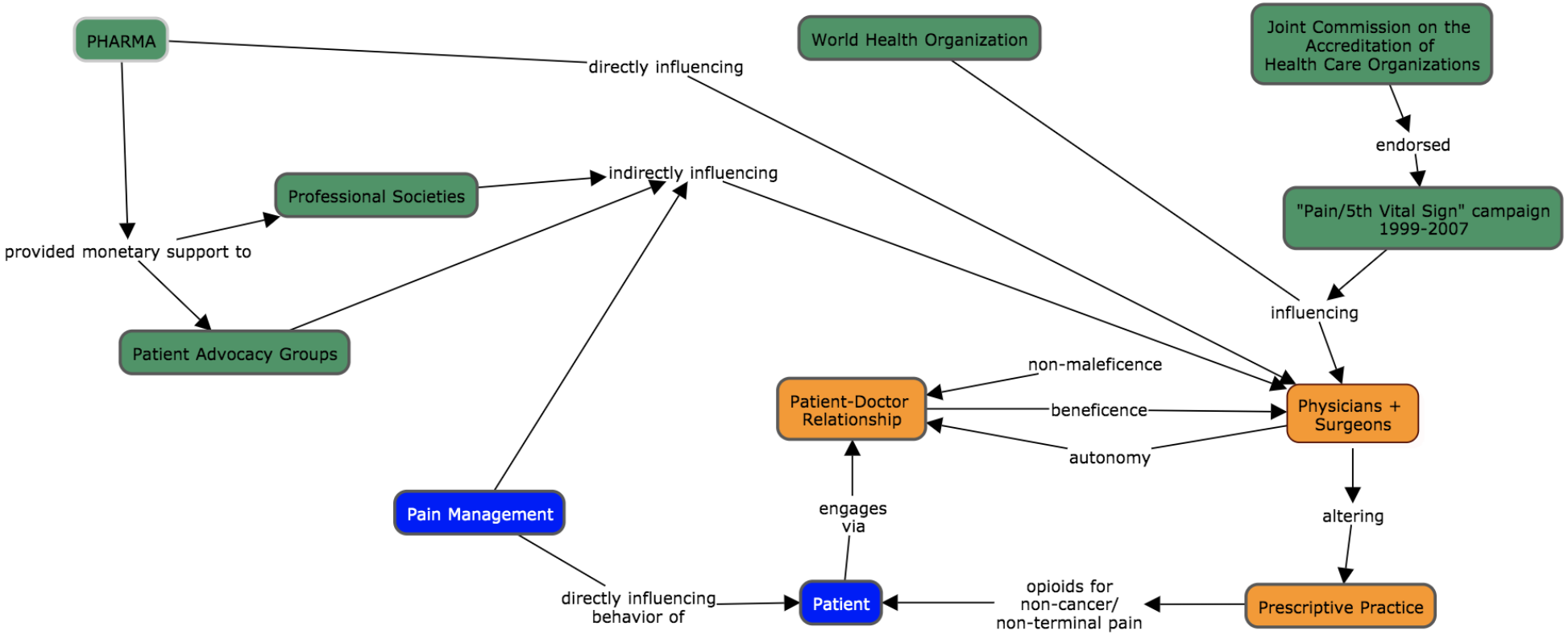
Amplification



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Unintended Consequences I

- Acceptance of monetary (or cash value) incentives:
  - Receipt of any opioid-related payments from industry was associated with 9.3% more opioid (pharmacy benefit) claims the following compared with physicians who received no such payments[4]

4. Hadland SE, Cerdá M, Li Y, Krieger MS, Marshall BDL. Association of Pharmaceutical Industry Marketing of Opioid Products to Physicians With Subsequent Opioid Prescribing. *JAMA Intern Med.* 2018;178(6):861–863. doi:10.1001/jamainternmed.2018.1999

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Unintended Consequences II

- Effects of total number of interactions with representatives of pharmaceutical companies –
  - Increased opioid marketing on the county level was associated with elevated overdose mortality 1 year later[5]
  - Number of marketing interactions with physicians demonstrated a stronger association with mortality than the dollar value of marketing[5]

5. Hadland SE, Rivera-Aguirre A, Marshall BDL, Cerdá M. Association of Pharmaceutical Industry Marketing of Opioid Products With Mortality From Opioid-Related Overdoses. *JAMA Netw Open.* Published online January 18, 20192(1):e186007. doi:10.1001/jamanetworkopen.2018.6007

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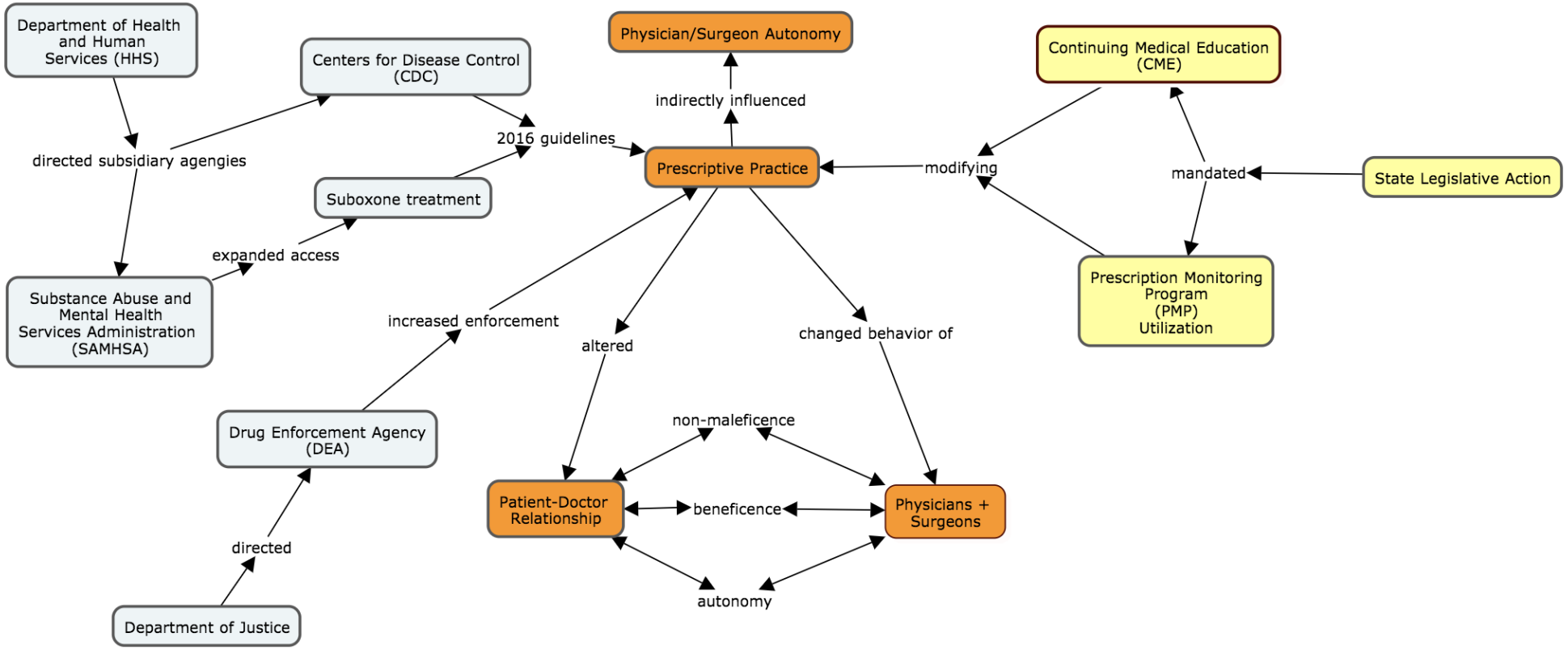
Responding to the Crisis: Federal and State



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Responding to the Crisis: Federal and State

- Senate Bill 724: John S. McCain Opioid Addiction Prevention Act
    - Would limit supply of opioid medication for acute pain to 7 days or to the supply mandated by state law, whichever is less.
    - Exclusions for chronic pain, pain being treated as part of cancer care, hospice or other end of life care, and/or pain being treated as part of palliative care.

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Responding to the Crisis: Federal and State

- Limits on Days Supply (initial prescriptions)[6]
  - 1 state (RI) limits supply to 20 doses.
  - 4 states (KY, MN, NC, NJ) limit supply to less than 7 days.
  - 13 states (AK, CT, DE, IN, LA, MA, ME, NH, NY, OH, PA, UT, VA) limit supply to 7 days.
  - 6 states (HI, IL, MO, NV, TN, SC) limit supply to range from 14-31 days.

6. Davis C, Lieberman A, et al. Laws limiting the prescribing or dispensing of opioids for acute pain in the United States: A national systematic legal review. Drug and Alcohol Dependence 194. 2019; 166-172.

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Responding to the Crisis: Physician-Driven

- “Academic Detailing”
- Concomitant naloxone prescription
- Medical Marijuana
- ”Cascade of Care” strategy importation from HIV/AIDS response
- Informed Consent for long term use of opioid medications

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Responding to the Crisis: Physician-Driven

- Academic Detailing –
  - In a Department of Veterans Affairs study examining the effect of academic detailing on naloxone prescription, it was shown that with 100% exposure to academic detailing, the rate of naloxone prescribing that was >5.5x the rate where no providers were exposed.[7]

7. Bounthavong M, Devine E, et al. Implementation evaluation of academic detailing on naloxone prescribing trends at the United States Veterans Health Administration. Health Services Research 2019;00:1–10.

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Responding to the Crisis: Physician-Driven

- Concomitant Naloxone Prescription –
  - An observational study in Massachusetts in 19 communities demonstrated that overdose rates were significantly reduced in communities in comparison to communities where no potential bystanders received training in the use of intranasal naloxone.[8]

8. Walley A, Xuan Z, et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. British Medical Journal 2013;346:f174.

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Responding to the Crisis: Physician-Driven

- Concomitant Naloxone Prescription –
  - Naloxone prescribing rates increased 106% from 2017-2018, yet overall only 1 prescription for naloxone is written for every 69 prescriptions for an opioid.[1]
  - In a study of co-prescription in a needle exchange program, only 17% of participants had a prescription for naloxone, despite 68% having witnessed an overdose.[9]

9. Dunn K, Barrett F, et al. Opioid Overdose Experience, Risk Behaviors, and Knowledge in Drug Users from a Rural Versus an Urban Setting. Journal of Substance Abuse Treatment 71; December 2016, Pages 1-7

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Responding to the Crisis: Physician-Driven

- Concomitant Naloxone Prescription:
  - The CDC Guideline for Prescribing Opioids for Chronic Pain recommends prescribing naloxone when factors that increase risk for overdose are present, including –
    - History of overdose or substance use disorder
    - Opioid dosages ≥50 morphine milligram equivalents [MME] per day
    - Concurrent use of benzodiazepines

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Responding to the Crisis: Physician-Driven

- Medical Marijuana –
  - In a 5 year study of Medicaid enrollees in states where marijuana is legal for medical and/or adult use vs. states wherein marijuana use is illegal, opioid prescribing was significantly lower in states with medical marijuana laws by 5.88% and adult-recreational use laws by 6.38%.[10]

10. Wen H, Hockenberry JM. Association of Medical and Adult-Use Marijuana Laws With Opioid Prescribing for Medicaid Enrollees. *JAMA Intern Med.* 2018;178(5):673–679. doi:10.1001/jamainternmed.2018.1007

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Responding to the Crisis: Physician-Driven

- Informed Consent –
  - First began to be recommended as a best practice ~2010-2012 and is considered part of/distinct from a more typical medication “contract”
  - The Veterans Health Administration adopted an informed consent process for patients receiving opioid therapy chronically in 2014[12]
  - Unable to identify a study examining the effect of informed consent on either opioid prescribing or overdose rates

12. VHA DIRECTIVE 1005(1). Informed consent for long-term opioid therapy for pain. Department of Veterans Affairs May 6, 2014.

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Responding to the Crisis: Physician-Driven

- ”Cascade of Care” strategy[13] –
  - Proposed strategy borrowed from the response to the HIV/AIDS crisis for implementation at the state level geared to increase –
    1. Diagnosis among those affected
    2. Linkages to care among those diagnosed
    3. Medication initiation and compliance monitoring among those entering care
    4. Retention for at least six months among those initiating medication
    5. Continuous abstinence among those retained

13. Williams R, Nunes E, Olfson M. To Battle The Opioid Overdose Epidemic, Deploy The ‘Cascade of Care’ Model. Health Affairs Blog. https://www.healthaffairs.org/do/10.1377/hblog20170313.059163/full/. Accessed July 31, 2019.

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Policy Recommendations

1. Embed mandatory training in comprehensive addiction medicine approaches in primary care residency programs
2. Employ one or more physician-driven strategies in the practice of individual physicians
3. Revamp Prescription Drug Monitoring Database systems to track co-prescription with naloxone
4. Pilot pre-positioning naloxone with public-access Automated External Defibrillators

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Takeaways

1. High risk patients should receive concurrent prescription of naloxone
2. Bystanders can successfully administer naloxone in the setting of overdose with minimal training
3. Informed consent is an emerging strategy for reducing opioid overdose deaths
4. Allowing access of pharmaceutical representatives to medical practices increases the risk of overdose and overdose death among patients receiving chronic opioid therapy

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Final Thought

There is some hope – preliminary data from 2018 indicate that the overall rate of opioid overdose death declined by 4.6%.[14]

14. Gladden R, O'Donnell J, et al. Changes in Opioid-Involved Overdose Deaths by Opioid Type and Presence of Benzodiazepines, Cocaine, and Methamphetamine — 25 States, July– December 2017 to January–June 2018. Morbidity and Mortality Weekly Report august 30, 2019;68 (34) 738-744

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1. Guy, G, Haegerich, T, et al. *Vital Signs:* Pharmacy-Based Naloxone Dispensing — United States, 2012–2018. Morbidity and Mortality Weekly Report August 9, 2019; 68 (31)679-686.
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6. Davis C, Lieberman A, et al. Laws limiting the prescribing or dispensing of opioids for acute pain in the United States: A national systematic legal review. Drug and Alcohol Dependence 194. 2019; 166-172.

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14. Gladden R, O'Donnell J, et al. Changes in Opioid-Involved Overdose Deaths by Opioid Type and Presence of Benzodiazepines, Cocaine, and Methamphetamine — 25 States, July– December 2017 to January–June 2018. Morbidity and Mortality Weekly Report august 30, 2019;68 (34) 738-744.