



Responding to the Opioid Crisis: An Educator's View

Lisa Graves MD

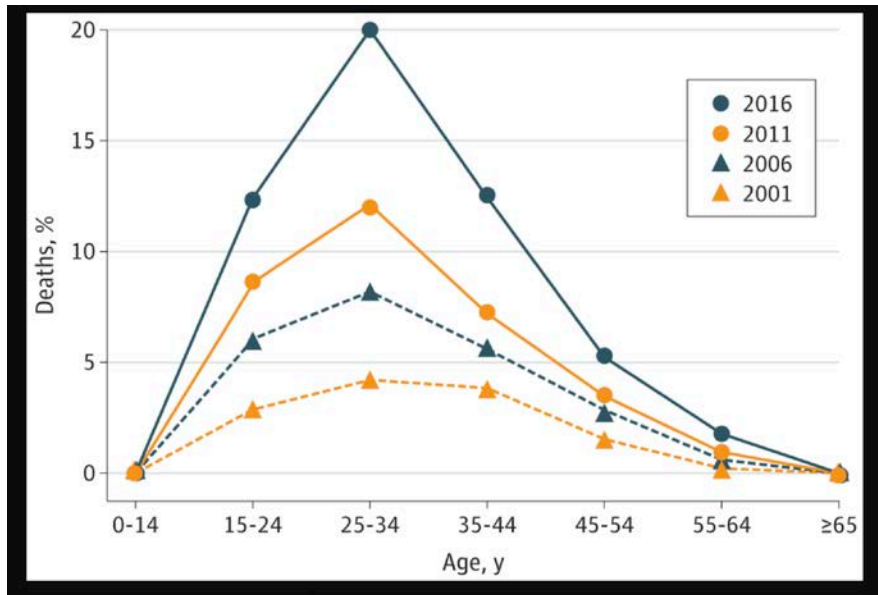
Western Michigan University Homer Stryker M.D. School of Medicine
Kalamazoo Michigan

Objectives

- Describe the current state of the opioid crisis
- Link elements of the making of the opioid crisis with medical education
- Plan opportunities for medical learners to respond to the opioid crisis

The Opioid Crisis

The Opioid Crisis

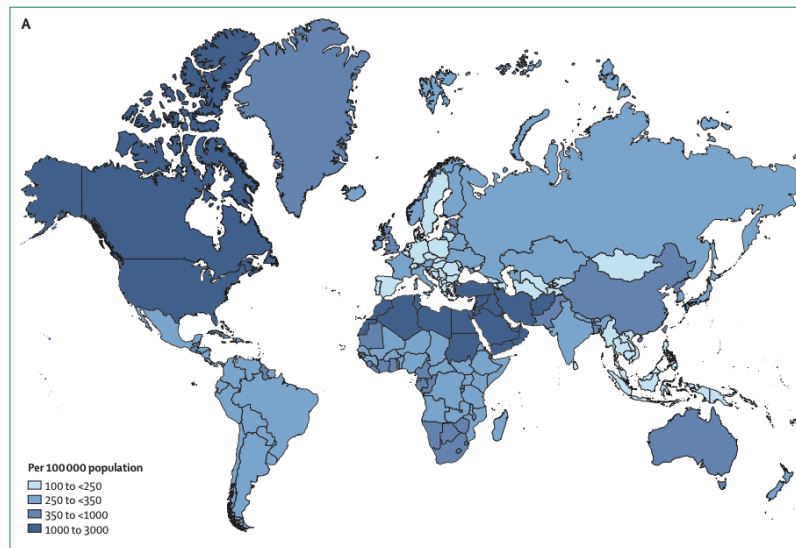


Proportion of Deaths Related to Opioid Use by Age Group in 2001, 2006, 2011, and 2016

Leung PTM, Macdonald EM, Stanbrook MB, Dhalla IA, Juurlink DN. A 1980 Letter on the Risk of Opioid Addiction. N Engl J Med 2017 Jun;376(22):2194-5

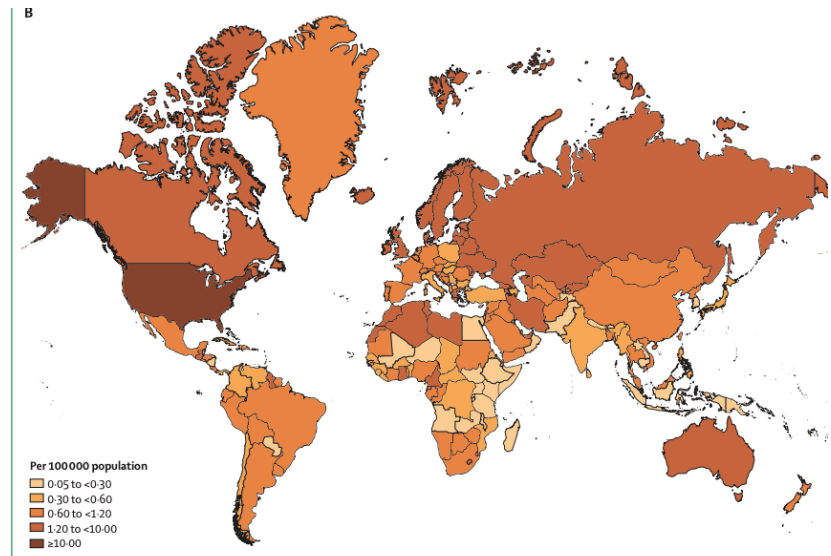
Estimated age-standardised opioid dependence cases per 100000 population

Degenhardt L, Grebely J, Stone J, Hickman M, Vickerman P, Marshall BDL, et al. Global patterns of opioid use and dependence: harms to populations, interventions, and future action. Vol. 394, The Lancet. Lancet Publishing Group; 2019. p. 1560–7



Estimated age-standardised opioid overdose deaths per 100000 population

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The Making of a Crisis

The making of a crisis

Porter J, Jick H. Addiction rare in patients treated with narcotics. N Engl J Med 1980;302:123-123

ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

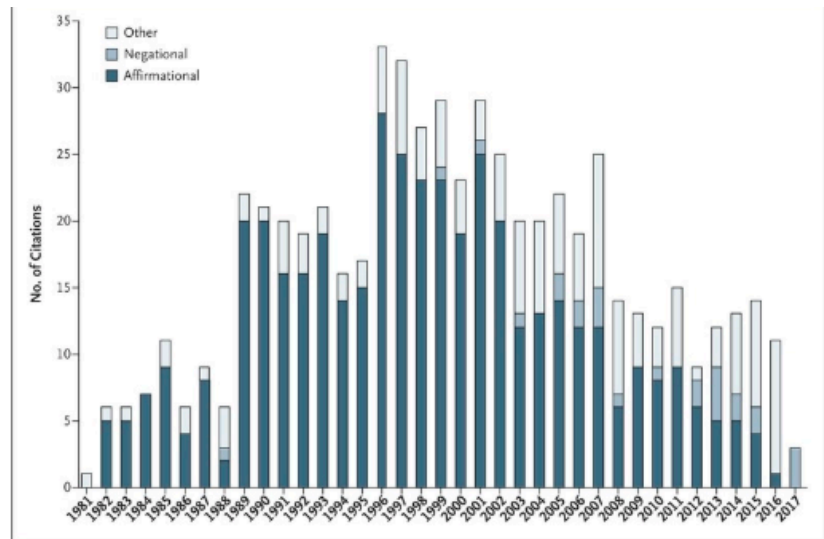
To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients¹ who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,² Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

JANE PORTER
HERSHEL JICK, M.D.
Boston Collaborative Drug
Surveillance Program
Boston University Medical Center

Waltham, MA 02154

1. Jick H, Miettinen OS, Shapiro S, Lewis GP, Siskind Y, Slone D. Comprehensive drug surveillance. JAMA. 1970; 213:1455-60.
2. Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. J Clin Pharmacol. 1978; 18:180-8.

Leung PTM, Macdonald EM, Stanbrook MB, Dhalla IA, Juurlink DN. A 1980 Letter on the Risk of Opioid Addiction. N Engl J Med. 2017;376(22):2194–5.



Number and Type of Citations of the 1980 Letter, According to Year.

Bibliometric Analysis

- 608 articles from publication until March 30 2017
- Increased number of publications citing paper after 1995
- 72.2% of papers reported addiction rare with opioid treatment
- 80.8% of papers did not note that paper referenced hospitalized patients
- 11 stand alone letters (at same time) cited a median of 11 times

The making of a crisis

- Case study from a single Canadian medical school
- 2004-2010
- Handbook reference developed for medical students
- Lectures developed and supported through industry funding
- Non faculty lecturer
 - Persaud N. Questionable content of an industry-supported medical school lecture series: a case study. J Med Ethics 2014 Jun;40(6):414–16.

The making of a crisis

- “There is now strong consistent evidence that opioids relieve chronic neuropathic and nociceptive pains and improve function in placebo-controlled trials with patients who suffer chronic noncancer pain.”
- “[o]pioids were effective in the treatment of [chronic non-cancer pain] overall” the evidence was not characterised as either ‘strong’ or ‘consistent’ in the cited paper and the following cautions were included: “most trials were not long enough to estimate the duration of efficacy of opioids in chronic pain, the potential for opioid tolerance, or long-range adverse effects such as hypogonadism or opioid abuse” and “[m]ost trials that compare opioids with other drugs were not adequately designed as equivalence or noninferiority trials [...] There is a need for well-designed equivalence trials to compare opioids and other drugs.”

Persaud N. Questionable content of an industry-supported medical school lecture series: a case study. J Med Ethics 2014 Jun;40(6):414–16.

The making of a crisis

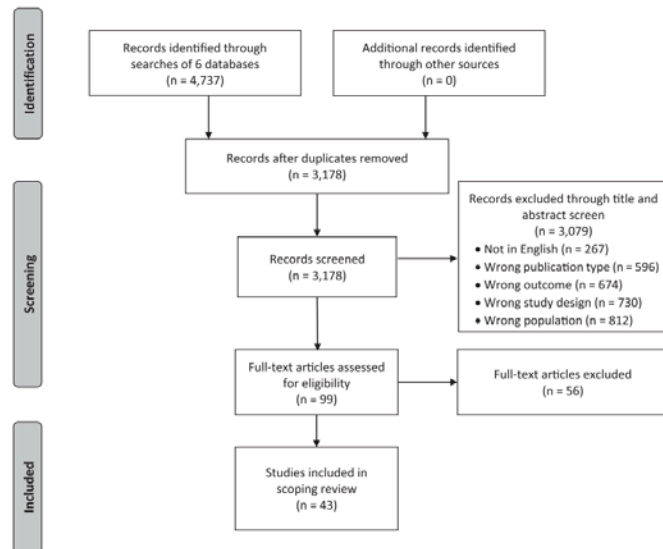
Table 1 Analgesics listed in the WHO pain ladder and lecture version

		WHO pain relief ladder ¹³	'Modified WHO analgesic ladder'
Step 1	Non-opioids±adjuvants	Aspirin, paracetamol	Acetaminophen, aspirin, NSAIDS
Step 2	Mild or weak opioids±non-opioids±adjuvants	Codeine	Tramadol, codeine, oxycodone
Step 3	Strong opioids±non-opioids±adjuvants	Morphine	Hydromorphone, morphine, oxycodone, fentanyl, methadone, buprenorphine
NSAIDs, non-steroidal anti-inflammatory drugs.			

Substance Use Teaching in Medical Schools

Review of Substance Use Education in Medical Schools

Muzyk A, Smothers ZPW,
Akrobetu D, Ruiz Veve J,
MacEachern M, Tetrault JM,
et al. Substance Use Disorder
Education in Medical
Schools: A Scoping Review.
Acad Med. 2019 Nov
1;94(11):1825–34.



Review of Substance Use Education in Medical Schools

- n = 43 papers
- Tobacco n = 20 (47%)
- SUDs broadly n = 15 (35%)
- Alcohol n = 8 (19%)
- Opioids n = 1 (2%)

N=1

- Berland N, Fox A, Tofighi B, Hanley K. Opioid overdose prevention training with naloxone, an adjunct to basic life support training for first-year medical students. Subst Abus. 2017;38:123–128

What is happening?

- Naloxone training for medical students
- DATA training waiver programs integrated into undergraduate curricula and GME programs
- AAMC meeting 2019 gathering data on:
 - × **Recognizing and reducing bias and stigma in the context of pain and addiction**
 - × **Safe- and evidence-based prescribing of non-opioids and opioids**
 - × **Safe and effective treatment of opioid use disorder with medicated assisted therapy**
 - × **Safe and effective treatment of pain and opioid use disorder with non-pharmacologic methods**
 - × **Effective shared decision-making communication skills and strategies, when managing pain and treating addiction.**
 - × **Identification and incorporation of social determinants of health into the delivery of care**

AFMC Response to the Opioid Crisis



Partners and Stakeholders

Project Secretariat:

- Dr. Lisa Graves - Project Lead (Chair)
- Melissa Shahin - Director, Operations & Strategic Initiatives
- Fran Kirby - Project Manager
- Adriana Cull - Project Assistant
- Annie Barrette - Manager, Media and Government Relations

Partners and Collaborators:

- Medical Council of Canada
- **Queen's University, Faculty of Health Sciences, Office of the Professional Development and Educational Scholarship**
- Cathexis Consulting Inc.
- Subject Matter Experts and Expert Reviewers
- Student Content and Design Reviewers

Stakeholders:

- Health Canada, Substance Use and Addictions Program (funders)
- AFMC's Board of Directors
- Representatives from each of the 17 Canadian Faculties of Medicine



Key Activities

- 1 Achieve consensus on competencies - diagnosis, treatment and management of pain within the scope of UGME students.
- 2 Develop a Canada-wide, bilingual competency-based online curriculum.
- 3 Develop a bank of MCQs and OSCEs for use on the national licensing exam of the Medical Council of Canada.
- 4 Share the curriculum widely.

Project Update



Development & Implementation Overview

2018

ENVIRONMENTAL SCANS

Canadian Medical Schools | Health Care Organizations | Literature Reviews

STAKEHOLDER ENGAGEMENT

Town Hall Meetings with medical experts and stakeholders | Government

UGME PAIN AND SUBSTANCE USE DISORDER EXPERTS APPOINTED

NATIONAL HEALTH CARE STAKEHOLDER/PARTNERS RECRUITED

2019

CONSENSUS REACHED ON COMPETENCY-BASED CURRICULUM OUTLINE

CURRICULUM CONTENT DRAFTED, REVIEWED AND EDITED

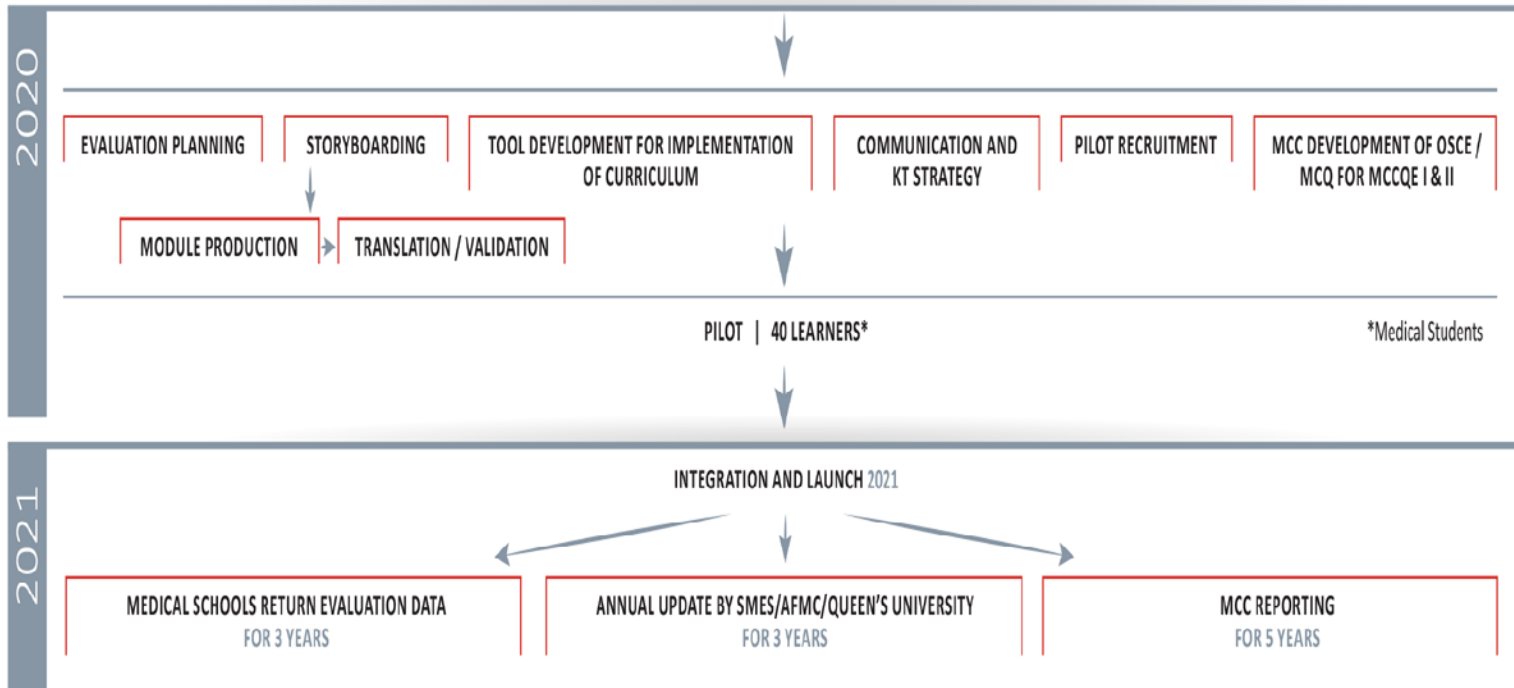
Subject Matter Experts (SMEs) | Expert Reviewers
Medical Language Editor | Overall Reviewers
Student Content & Design Reviewers

VALIDATED AT PROJECT SUMMIT

OCTOBER 2019

Development & Implementation Overview

(Continued)

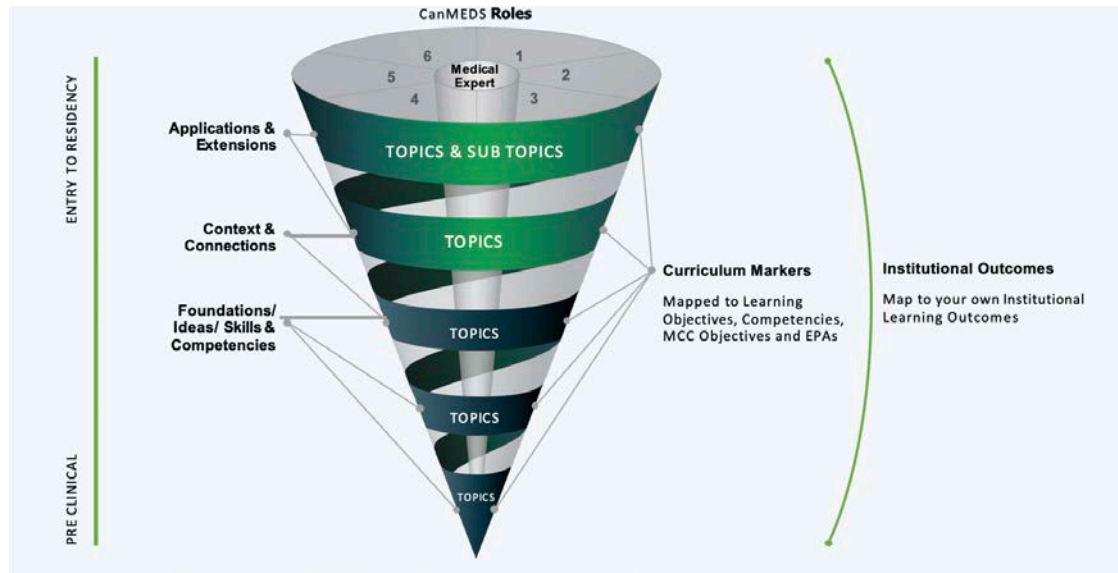




Committees

- Undergraduate Curriculum Expert Committee
- Oversight Committee
- MCQ Assessment Development Committee and the OSCE Assessment Development Committee (MCC)
- Faculty Development Committee

AFMC Curriculum Plan





Modules

FOUNDATIONS

Module 1: Public Health

Module 2: Review of Pain

Module 3: Pathophysiology of Pain and Pharmacology of Opioids

CONTEXT AND CONNECTIONS

Module 4: Opioid Prescribing

Module 5: Recognition of Opioid Use Disorder

Module 6: Cultural Considerations/Legalities/Enhancing Competence



Modules

EXTENSIONS

Module 7: Assessment, Diagnosis, and Management of Pain

Module 8: Safe Opioid Prescribing in Practice

Module 9: Management of Opioid Use

Next Steps

Next Steps

- Naloxone training for medical students
- DATA waiver training
- Integrated curricula for opioids including chronic pain management and substance use disorder training
- Avoidance of stigma directly or indirectly related to opioids and chronic pain
- Incorporate opioids throughout curriculum
- Faculty development
- Resident training and resident faculty development
- Evaluate and disseminate your work



Thank You

Dr. Lisa Graves

Lisa.Graves@med.wmich.edu

Associate Dean for Faculty Affairs

Western Michigan University Homer Stryker MD School of Medicine
Kalamazoo, MI

AFMC Response to the Opioid Crisis

Fran Kirby, Project Manager AFMC

fkirby@afmc.ca

For more information visit <https://afmc.ca/priorities/opioids>

Contact: OPIOIDRESPONSE@AFMC.CA