

Myth busting! Rational opioid prescribing and stewardship

Nicole Nakatsu

Faculty/Presenter Disclosure

- **Faculty:** Nicole Nakatsu
- **Relationships with commercial interests:**
 - **Grants/Research Support:** None
 - **Speakers Bureau/Honoraria:** Fresenius Kabi
 - **Consulting Fees:** None
 - **Other:** None

Mitigating Potential Bias

- Fresenius Kabi, did not, at the time of the presentation produce any narcotics nor did they have any input on the content of the presentation.

Learning Objectives

- By the end of this session participants shall:

In the beginning...

- <https://www.youtube.com/watch?v=Er78Dj5hyeI>

Dr. Alan Spanos for Purdue Pharma, 1998

- “There’s no question that our best, strongest pain medicines are the opioids... but these are the same drugs that have a reputation for causing addiction and other terrible things. Now in fact the rate of addiction amongst pain patients who are treated by doctors is much less than 1% . They don’t wear out, they go on working, they do not have serious medical side effects and so, these drugs which are our best strongest pain medicines, should be used much more than they are for patients in pain.”

Jan 10, 1980 NEJM; 302:123

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

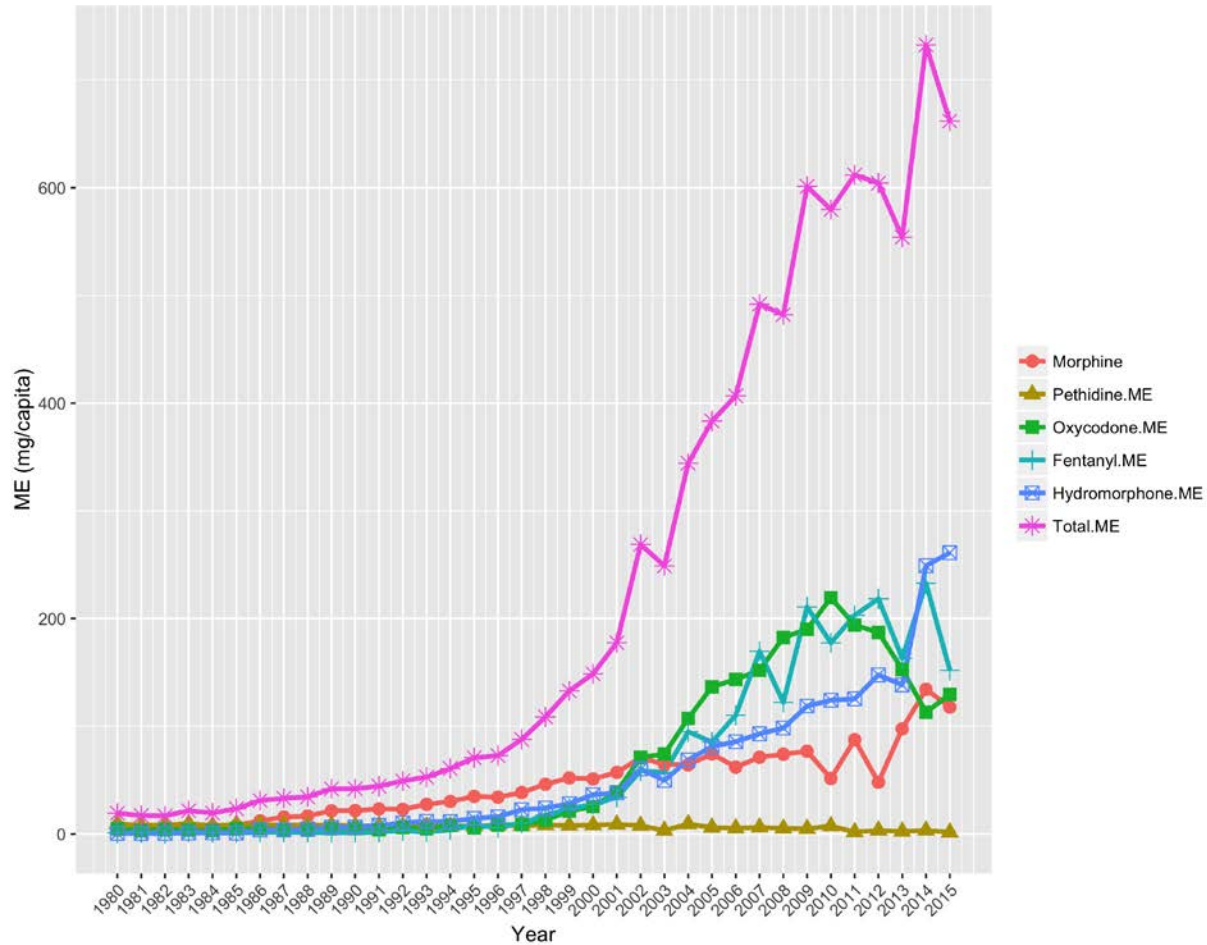
Waltham, MA 02154

Boston University Medical Center

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Canada – Opioid Consumption in Morphine Equivalents

http://www.painpolicy.wisc.edu/sites/www.painpolicy.wisc.edu/files/country_files/morphine_equivalence/canada_me_methadone.pdf



Myth: “Now in fact the rate of addiction amongst pain patients who are treated by doctors is much less than 1%”

- ▶ Metanalysis of 22 278 patients
- ▶ Risk of opioid addiction is 5.5%; ~1 / 18 patients; 95% CI (3.91 – 7.03%)
- Mix of definitions of addiction
- Busse J et al. The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain. CMAJ May 08, 2017 189 (18) E659-E666

Lifetime prevalence of Opioid Use Disorder

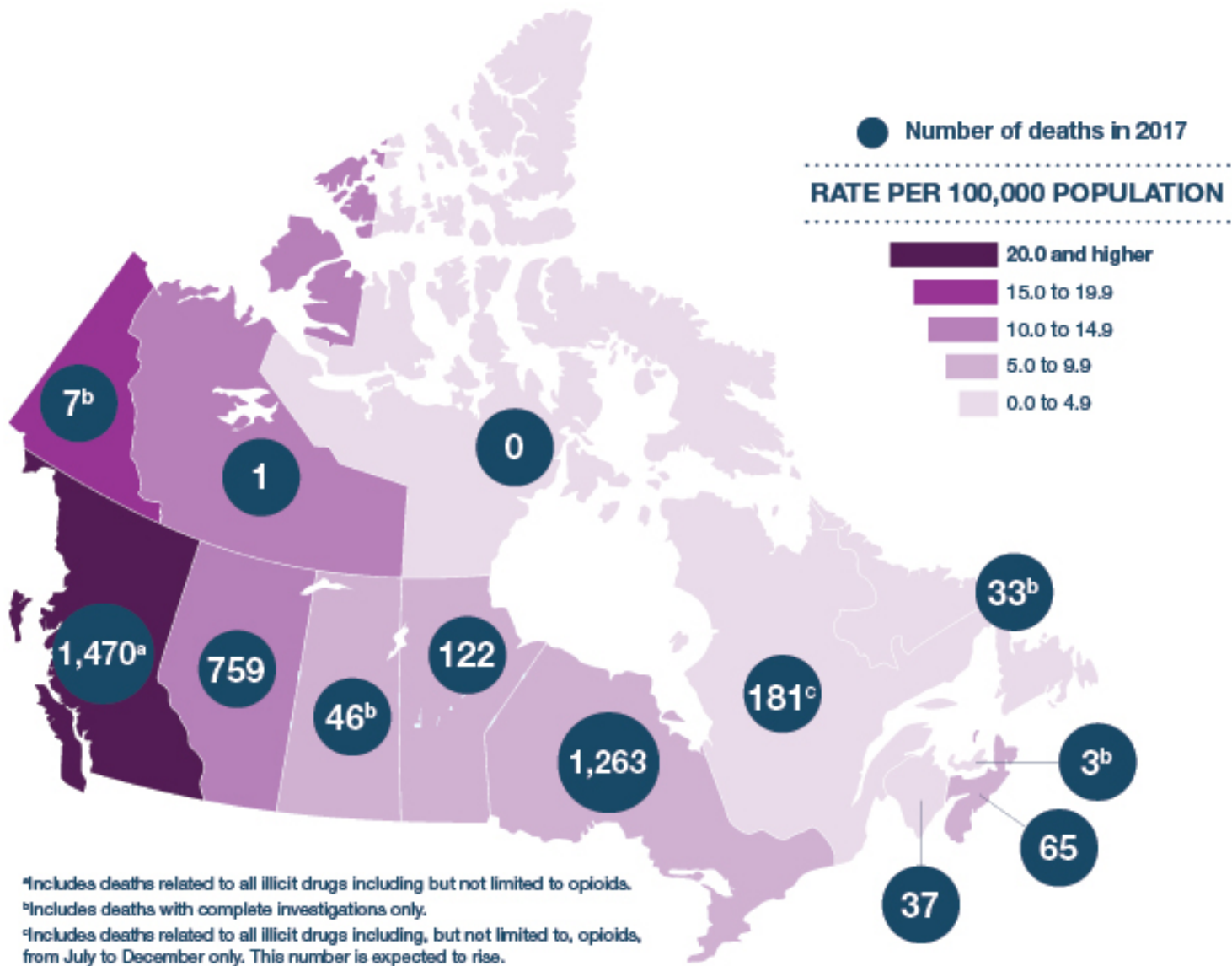
- 705 outpatients on opioid therapy for non-malignant pain (5 or more rx in past 12 months)
- Lifetime prevalence of DSM-5 opioid-use disorders 41.3% (95% CI 37.6-45.0)
 - 28.1% mild symptoms (2-3 criteria)
 - 9.7% moderate symptoms (4-5 criteria)
 - 3.5% for severe symptoms (≥ 6 criteria)
- This excludes tolerance and withdrawal
- Boscarino, JA et al. Opioid-use disorder among patients on long-term opioid therapy: impact of final DSM-5 diagnostic criteria on prevalence and correlates. *Subst Abuse Rehabil.* 2015; 6:83-91.

Myth: “...[opioids] do not have serious medical side effects.”

Fatal Overdose

- ▶ 285 520 patients from a single study
- ▶ Median follow up period 2.6 years over 13 years
- ▶ Annual risk of fatal overdose are dose related
 - <20mg ME daily; 1/1000 patients
 - 50-99mg ME daily; 1/550 patients
 - >100mg ME; 1/430 patients
 - > 200mg ME daily; 1/32 patients

- ▶ Kaplovitch E., Gomes T., Camacho X., Dhalla IA, Mamdani MM, Juurlink DN Sex differences in dose escalation and overdose death during chronic opioid therapy: a population-based cohort study. PloS one 2015;10(8):e0134550



^aIncludes deaths related to all illicit drugs including but not limited to opioids.

^bIncludes deaths with complete investigations only.

^cIncludes deaths related to all illicit drugs including, but not limited to, opioids, from July to December only. This number is expected to rise.

Source: © All Rights Reserved: *National and Regional Trends of Apparent Opioid-Related Deaths (June 2018)*. Health Canada, 2018. Adapted and reproduced with permission from the Minister of Health, 2018.

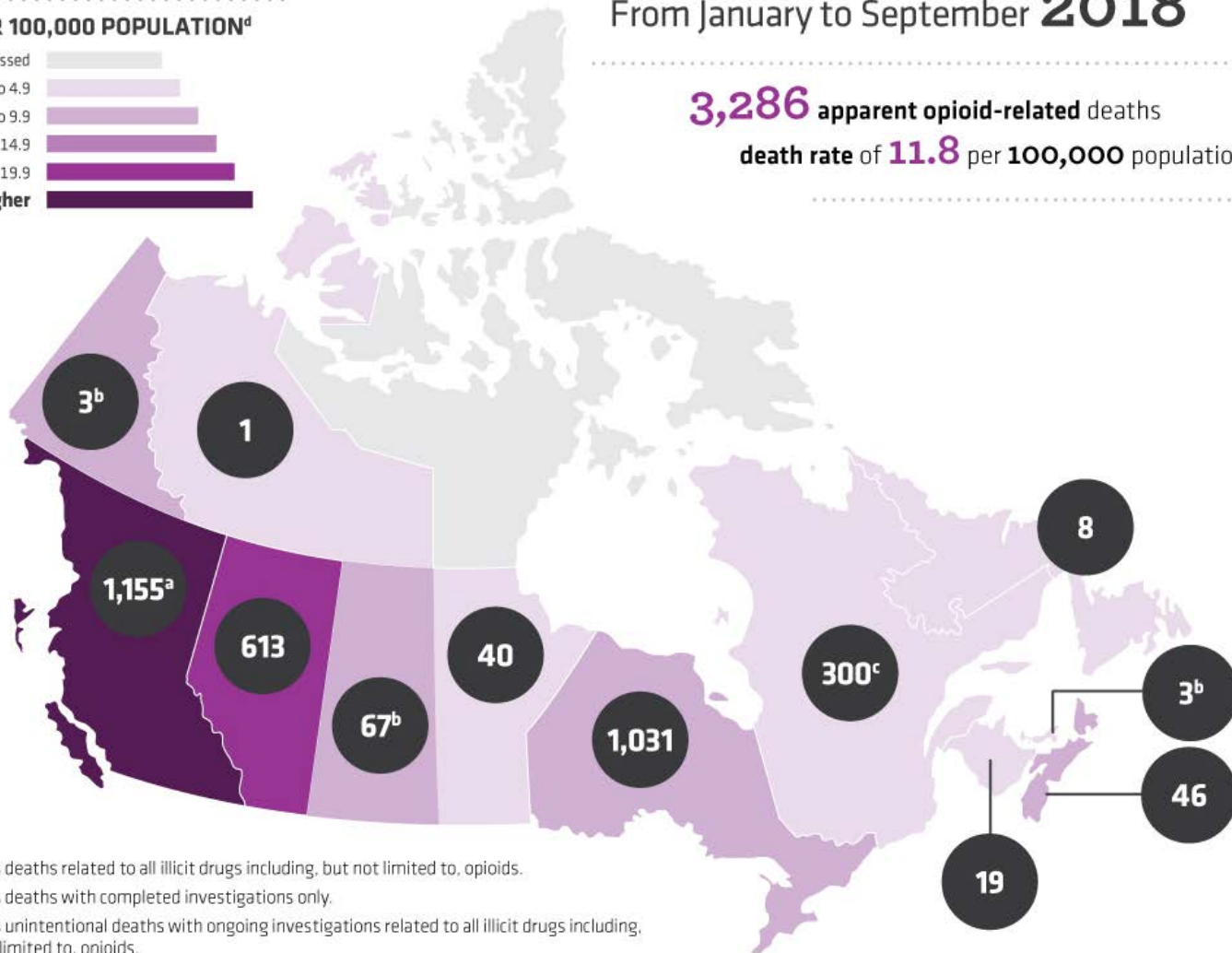
● Number of deaths in 2018 (Jan to Sept)

RATE PER 100,000 POPULATION^d



From January to September **2018**

3,286 apparent opioid-related deaths
death rate of **11.8** per 100,000 population



a Includes deaths related to all illicit drugs including, but not limited to, opioids.

b Includes deaths with completed investigations only.

c Includes unintentional deaths with ongoing investigations related to all illicit drugs including, but not limited to, opioids.

d The estimated annual rate for 2018 is based on available data from January to September 2018.

2018 Data

- January to Sept 2018-3286 opioid related deaths;3038 (92%) unintentional
- 73% involved fentanyl and analogues
- Mostly male (3 out of 4)
 - ▶ Special Advisory Committee on the Epidemic of Opioid Overdoses. National report: Apparent opioid-related deaths in Canada (January 2016 to June 2018). Web Based Report. Ottawa: Public Health Agency of Canada; December 2018. <https://infobase.phac-aspc.gc.ca/datalab/national-surveillance-opioid-harms-mortality.html>

Pain Med. 2016 Jan;17(1):85-98.

Cohort Study of the Impact of High-Dose Opioid Analgesics on Overdose Mortality.

[Dasgupta N](#), [Funk MJ](#), [Proescholdbell S](#), [Hirsch A](#), [Ribisl KM](#), [Marshall S](#).

- Fatal overdose 10x higher in patients prescribed opioids and benzodiazepines vs opioids alone.
- Dose dependent overdose risk

Non-fatal Overdose

- 9940 patients in single study (Washington State)
- Annual overdose rates increased with opioid dose
- <20 mg ME: 0.2% (1 / 500)
- 50-99 mg ME: 0.7% (1 / 143)
- >100 mg ME: 1.8% (1 / 55)
- Dunn KM, Saunders KW, Rutter CM, Banta-Green CJ, Merrill JO, Sullivan MD, Weisner CM, Silverberg MJ, Campbell CI, Psaty BM, VonKorff M. Opioid prescriptions for chronic pain and overdose: a cohort study. *Annals of internal medicine* 2010;152(2):85-92

Suspected Opioid Overdoses EMS Data

- The number of suspected overdose cases that EMS responded to that received naloxone
 - 592 in Winnipeg from Jan – Dec 2018; 19 northern and rural
 - 13549 in BC from Jan – Dec 2018
 - 2640 in Edmonton and Calgary Jan – Dec 2018
 - 196 in Saskatchewan from Jan – Dec 2018
- <https://health-infobase.canada.ca/datalab/national-surveillance-opioid-harms.html>

Myth: “[opioids] which are our best strongest pain medicines, should be used much more than they are for patients in pain

Trial of Opioids vs Optimization with NSAIDS

Pain

- ▶ Metanalysis of 2250 patients from 13 RCTs
- ▶ Follow up period between 1-6 months
- ▶ Median Difference was only 0.49 cm less on 10 cm visual analog scale: 95% CI (1.24cm reduction – 0.26cm gain)
- Minimally important difference is 1 cm reduction



Opioid therapy may result in little or no difference in pain compared to NSAIDS

- Busse J et al. The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain. CMAJ May 08, 2017 189 (18) E659-E666

JAMA. 2018 Mar 6;319(9):872-882. doi: 10.1001/jama.2018.0899.

Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain: The SPACE Randomized Clinical Trial.

Krebs EE^{1,2}, Gravely A¹, Nugent S¹, Jensen AC¹, DeRonne B¹, Goldsmith ES^{1,3}, Kroenke K^{4,5,6}, Bair MJ^{4,5,6}, Noorbaloochi S^{1,2}.

- 240 patients with moderate to severe chronic back or osteoarthritic hip/knee pain
- no difference in pain-related function between opioid vs. non-opioid therapy used in an escalating treat-to-target approach over 12 months
- more adverse events associated with opioid therapy 1.9 vs 0.9 in non-opioid therapy (P=0.03)

Myth: “My patient is already on an opioid...Tylenol isn’t going to do anything.”

Single dose oral oxycodone and oxycodone plus paracetamol (acetaminophen) for acute postoperative pain in adults

Cochrane Systematic Review - Intervention | Version published: 08 July 2009 [see what's new](#)

- 20 studies, 2641 patients
- Oxycodone 15mg alone or oxycodone 10mg plus acetaminophen 650mg vs placebo, single dose study for post-operative pain
- For 50% pain relief over 4-6 hours
 - Oxycodone 15 mg NNT 4.6
 - Oxycodone 10 mg + acetaminophen 650mg NNT 2.7

Myth: We can tell who is at risk for problematic opioid use.

HARMS Program (High-yield Approach to Risk Mitigation and Safety) <http://harmsprogram.ca/>

- Took risk mitigation strategies from addictions literature and applied to the management opioids in chronic non-cancer pain
- Urine drug testing (UDT) and prescribing based on risk stratification
- Risk stratification is dynamic and changes with UDT results and clinical behaviour/observations
- 1 / 5 patients risk stratified as “low risk” had a urine drug testing result that changed management

Myth: It doesn't really matter if I give 3 days or a week supply so I'd rather give more so my patient doesn't have to come back to see me.

Increasing the days supply of the first opioid prescription is associated with lower likelihood of opioid discontinuation.

- Increasing the days supply of the first opioid prescription is associated with lower likelihood of opioid discontinuation.
- 1-2 day supply 0.9% using opioids longer than 1 year
- 3-4 days supply 1.1% using opioids longer than 1 year
- 5-7 day supply 2% using opioids longer than 1 year
- 8-10 day supply 4% using opioids longer than 1 year
- 11-14 day supply 6.9% using opioids longer than 1 year
- 15-21 day supply 9.3% using opioids longer than 1 year
- ≥ 22 days supply 24% using opioids longer than 1 year
- Shah A, et al Factors Influencing Long-Term Opioid Use Among Opioid Naïve Patients: An examination of Initial Prescription Characteristics and Pain Etiologies. *J Pain*. 2017;doi:10



Opioid Prescribing at Hospital Discharge Contributes to Chronic Opioid Use

Susan L. Calcaterra, MD MPH^{1,2}, Traci E. Yamashita, MS³, Sung-Joon Min, PhD⁴, Angela Keniston, MSPH², Joseph W. Frank, MD MPH^{1,5}, and Ingrid A. Binswanger, MD MPH^{1,6}

¹Division of General Internal Medicine, Department of Medicine, University of Colorado Denver School of Medicine, Aurora, CO, USA; ²Division of Hospital Medicine, Department of Medicine, Denver Health Medical Center, Denver, Colorado, USA; ³School of Medicine, Undergraduate Medical Education, University of Colorado Denver School of Medicine, Aurora, CO, USA; ⁴Division of Health Care Policy and Research, Department of Medicine, University of Colorado School of Medicine, Aurora, CO, USA; ⁵VA Eastern Colorado Health Care System, Denver, CO, USA; ⁶Institute for Health Research, Kaiser Permanente Colorado, Denver, CO, USA.

BACKGROUND: Chronic opioid therapy for chronic pain treatment has increased. Hospital physicians, including hospitalists and medical/surgical resident physicians, care for many hospitalized patients, yet little is known about opioid prescribing at hospital discharge and future

CONCLUSION: Opioid receipt at hospital discharge among opioid naïve patients increased future chronic opioid use. Physicians should inform patients of this risk prior to prescribing opioids at discharge.

- 1/4 of opioid naïve patients were prescribed (and filled) an opioid on discharge
- 16.6% of those were on opioids 1 year post discharge

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- Calcaterra et al. Opioid prescribing at discharge contributes to chronic opioid use. *J Gen Intern Med.* 2016;31(5):478-485.
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