



Telling Research Impact Stories with Altmetric Data

SCELC 2023



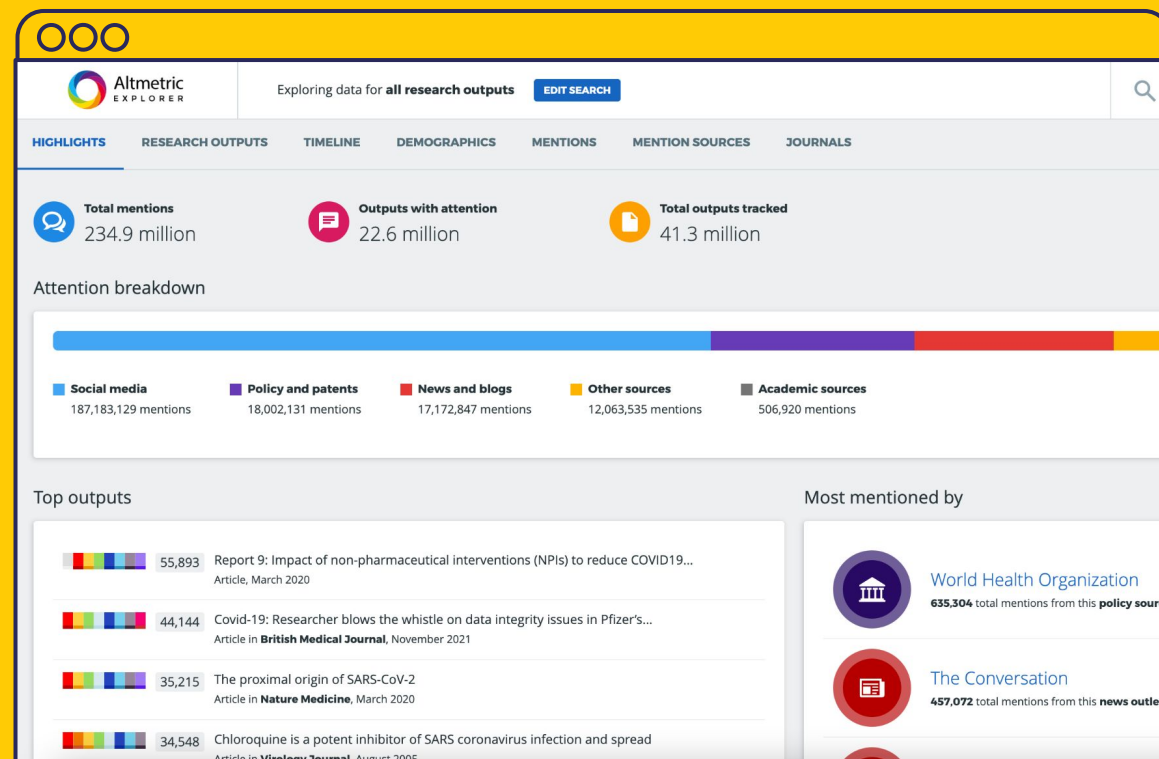
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Agenda

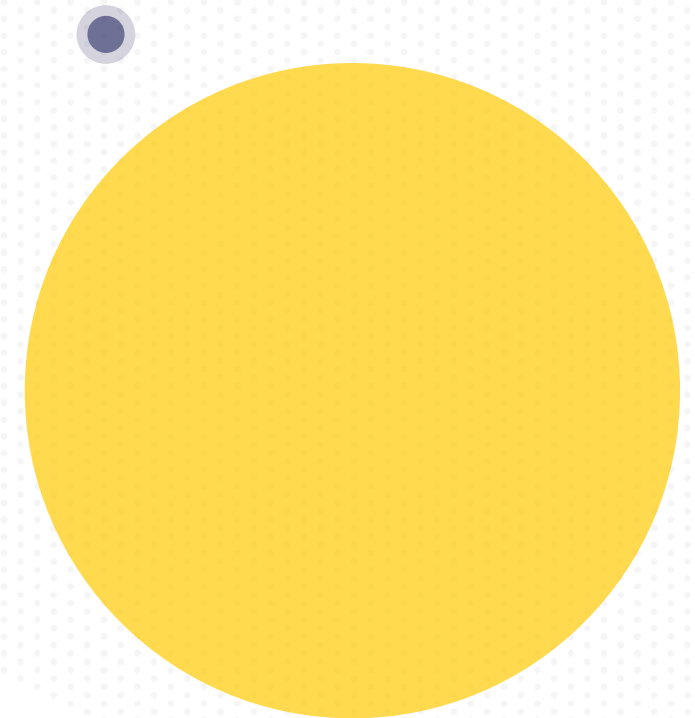
- Intro to altmetrics
- What is impact?
- Examples
- Live demo





ALTMETRICS

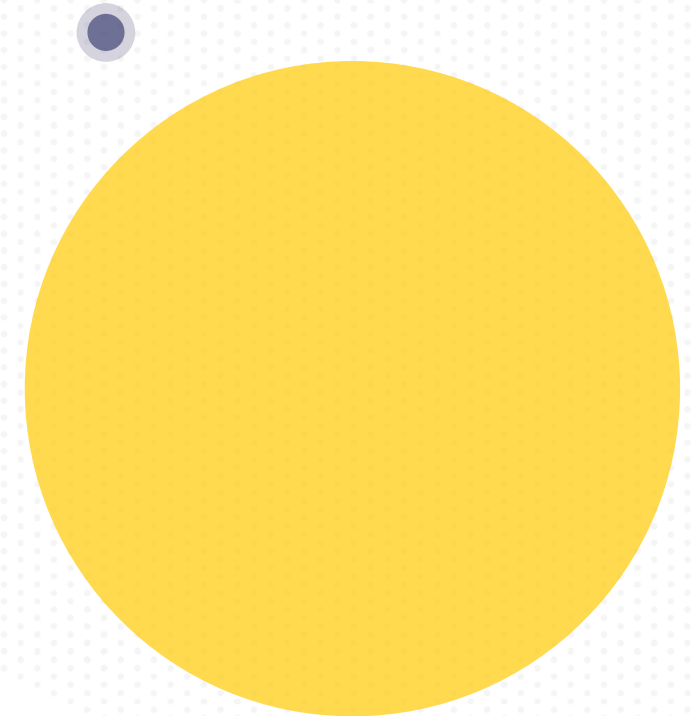
Indicators of non-traditional attention and engagement with digitally published research and scholarship.





ALTMETRICS

Altmetrics capture how people are sharing and talking about research online.





ALternative METRICS



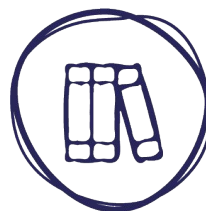
Help explain both the volume and nature of attention research has received online



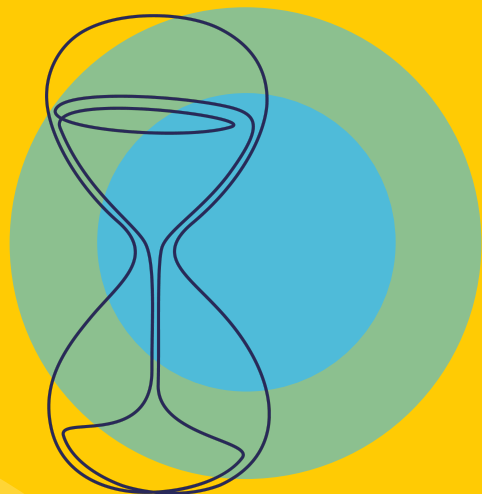
Provide evidence of engagement with diverse audiences and potential impact



Track how many people/outlets have shared or engaged with a scholarly output online



Complementary to citation-based metrics



Citations

Often slow to accrue
(2-5 years)



ALTMETRICS

Immediate



Sources we track



- Policy documents
- News
- Blogs
- Twitter
- Facebook
- Wikipedia
- Faculty Opinions
- Peer Reviews
- Videos
- Patents
- Q&A (Stack Overflow)
- Reddit



Defining Impact



Defining Impact

An 'effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.'⁽¹⁾

<https://impact.ref.ac.uk/casestudies/FAQ.aspx>





Defining Impact

An 'effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, **beyond academia.**'⁽¹⁾

<https://impact.ref.ac.uk/casestudies/FAQ.aspx>





Most stakeholders that research is meant to reach do not publish or do research themselves. They do talk about research.



General Public



Government &
Policy Makers



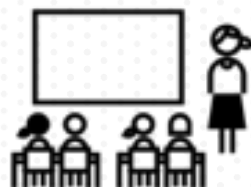
Investigators



Research
communicators/
watchdogs



Practitioners



Advocacy/
Non-profits



Tech Transfer



Interested parties



GOING BEYOND

“Dissemination is not impact: even if you have impressive numbers of reads, downloads, views or listens, how do you know if anyone learned anything from it, benefited, or did anything different as a result? **Keep asking, ‘what happened next?’**”⁽¹⁾

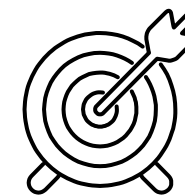
What makes a 4* research impact case study for REF2021? Mark Reed, Bella Reichard, Jenn Chubb, Ged Hall, Lucy Jowett and Alisha Peart <https://www.fasttrackimpact.com/single-post/2017/12/19/What-makes-a-4-research-impact-case-study-for-REF2021>. March 19, 2019.



Altmetric \neq Impact



Research
Output

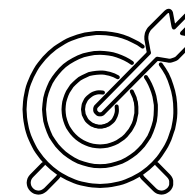


Research
Impact

Challenge: how to bridge the gap between the
research and its impact?



Research
Output



Research
Impact

Altmetric can be used to gather evidence to
underpin the impact and add to the narrative



Discover **pathways to impact** using
Altmetric data, including:



Policy mentions



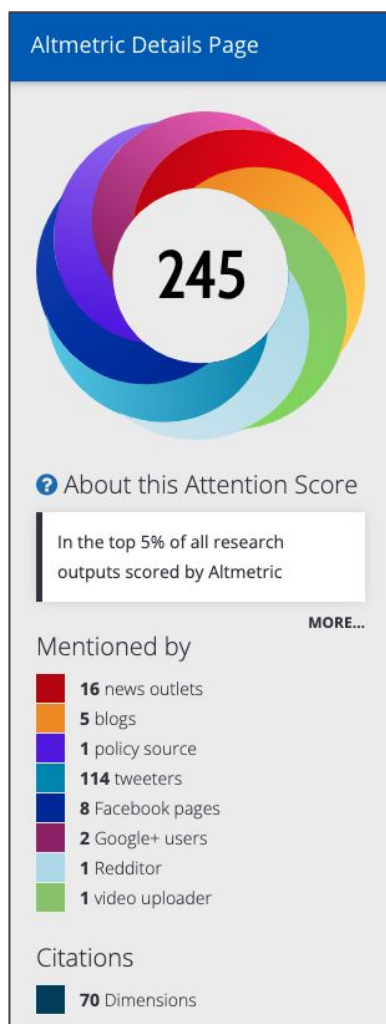
Patent mentions



News mentions



Twitter mentions



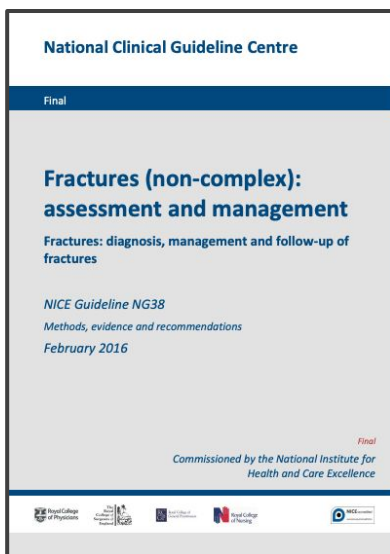
Oral administration of morphine versus ibuprofen to manage postfracture pain in children: a randomized trial

Canadian Medical Association Journal, October 2014
10.1503/cmaj.140907



Policy mentions

Oral administration of morphine versus ibuprofen to manage postfracture pain in children: a randomized trial

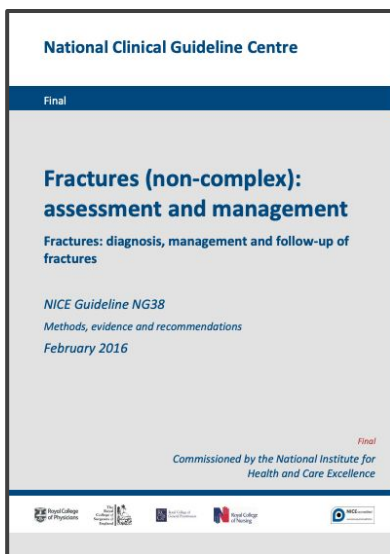


Review question: What is the most effective initial acute pharmacological management to alleviate pain in patients with a suspected long bone fracture (tibia and fibula, humerus, radius and ulna, or unspecified) in acute care settings?



Policy mentions

Oral administration of morphine versus ibuprofen to manage postfracture pain in children: a randomized trial



Review question: What is the most effective initial acute pharmacological management to alleviate pain in patients with a suspected long bone fracture (tibia and fibula, humerus, radius and ulna, or unspecified) in acute care settings?

Oral NSAIDs versus oral morphine (children)

Moderate quality evidence from a single RCT of 134 patients demonstrated no clinical difference between the interventions for change in pain score, with no serious imprecision.

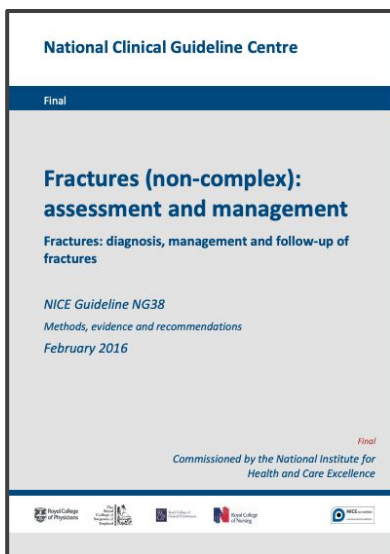
Moderate evidence from a single RCT of 134 patients demonstrated a clinical benefit with oral NSAIDs between the interventions for incidence nausea, with serious imprecision.

Moderate quality evidence from a single RCT of 134 patients demonstrated a clinical harm of oral NSAIDs over oral morphine in the reduction of further need for analgesia, with serious imprecision.



Policy mentions

Oral administration of morphine versus ibuprofen to manage postfracture pain in children: a randomized trial



Review question: What is the most effective initial acute pharmacological management to alleviate pain in patients with a suspected long bone fracture (tibia and fibula, humerus,

Recommendations and link to evidence

Children

1. For the initial management of pain in children (under 16s) with suspected long bone fractures of the legs (femur, tibia, fibula) or arms (humerus, radius, ulna), offer:
 - oral ibuprofen, or oral paracetamol, or both for mild to moderate pain
 - intranasal or intravenous opioids for moderate to severe pain (use intravenous opioids if intravenous access has been established).

Recommendations

NSAIDs over oral morphine in the reduction of further need for analgesia, with serious imprecision.



Mass media mentions

Oral administration of morphine versus ibuprofen to manage postfracture pain in children: a randomized trial

LIFE PARENTING For Kids With Broken Bones, Ibuprofen Is Safer And Just As Effective As Morphine



REUTERS

BY KATHRYN DOYLE
Tue Oct 28, 2014 1:37pm EDT

(Reuters Health) – The narcotic drug morphine is not the best choice for pain relief in kids with broken bones, a new study suggests.

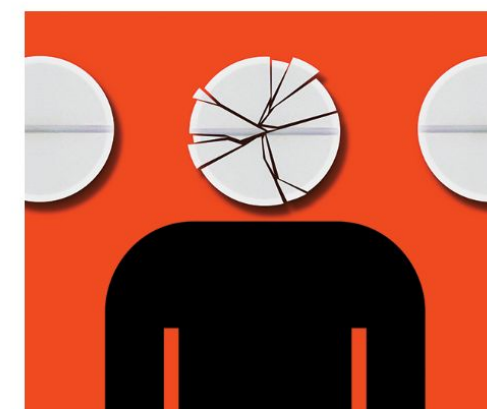
Mother Jones

Inside a Massive, Successful Effort to Stop Prescribing So Many Opioids

One medical group has figured out a way to sidestep the dangerously addictive drugs.



JULIA LURIE
Reporter
[Bio](#) | [Follow](#)



Blog & Podcast:



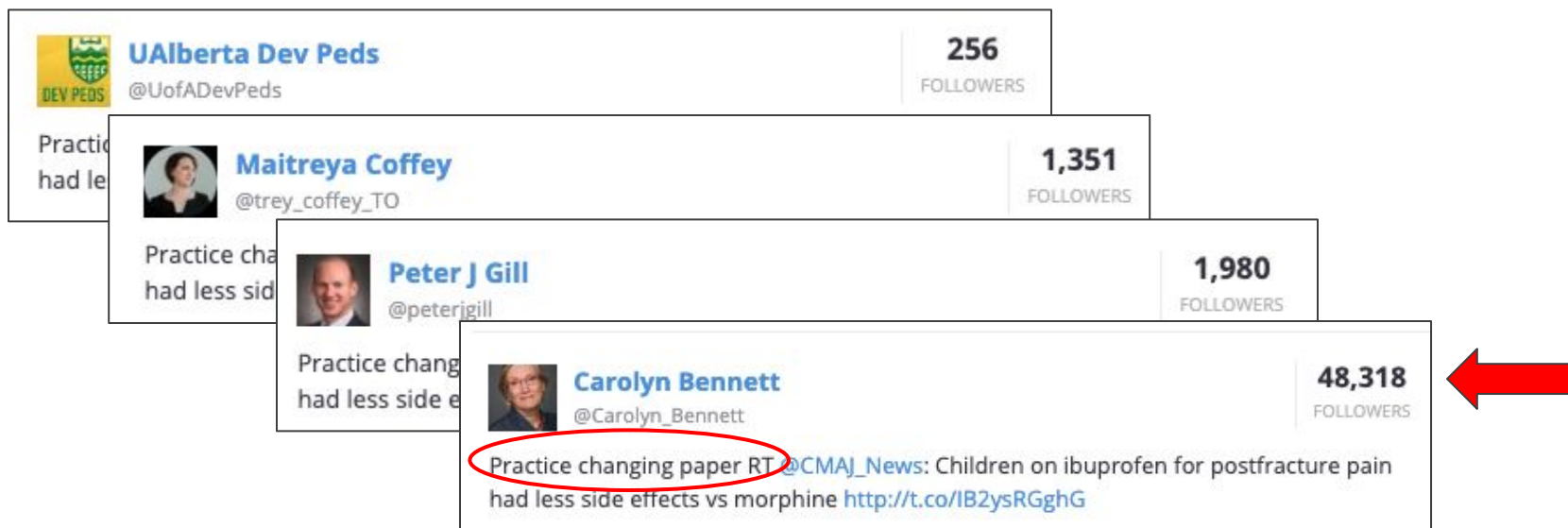
EMERGENCY MEDICINE CASES

Bringing you Canada's brightest minds in Emergency Medicine



Social media mentions

Oral administration of morphine versus ibuprofen to manage postfracture pain in children: a randomized trial





Forming a narrative

- Use plain language; avoid jargon
- Add context when you can, e.g. instead of listing the number of news outlets, give a bit more detail!
- Don't use the Altmetric Attention Score unless you provide more context
- What kind of impact are you trying to describe?
 - Global impact - consider highlighting number of countries
 - Academic impact - consider highlighting post publication peer reviews
 - Public impact - looks to news, social media, wikipedia, etc.



Forming a narrative

Use altmetrics to describe the reach and impact of your work

“This work informed non-complex fracture guidelines from the National Institute for Health and Care Excellence recommending that pediatric patients receive ibuprofen to manage mild to moderate pain...



Forming a narrative

Use altmetrics to describe the reach and impact of your work

“This work informed non-complex fracture guidelines from the National Institute for Health and Care Excellence recommending that pediatric patients receive ibuprofen to manage mild to moderate pain. More broadly, this research has influenced conversations in mass media surrounding opioid addiction; it has also been described on social media as “practice changing” research by clinicians and government officials, evidencing the dissemination of this work to audiences beyond academia.”



Forming a narrative

Use altmetrics to describe the reach and impact of your work

Short summary with numbers:

“In addition to being cited 70 times, this paper has been mentioned in 16 news outlets including NPR and Reuters. It was also cited in the non-complex fracture guideline from the National Institute for Health and Care Excellence.”

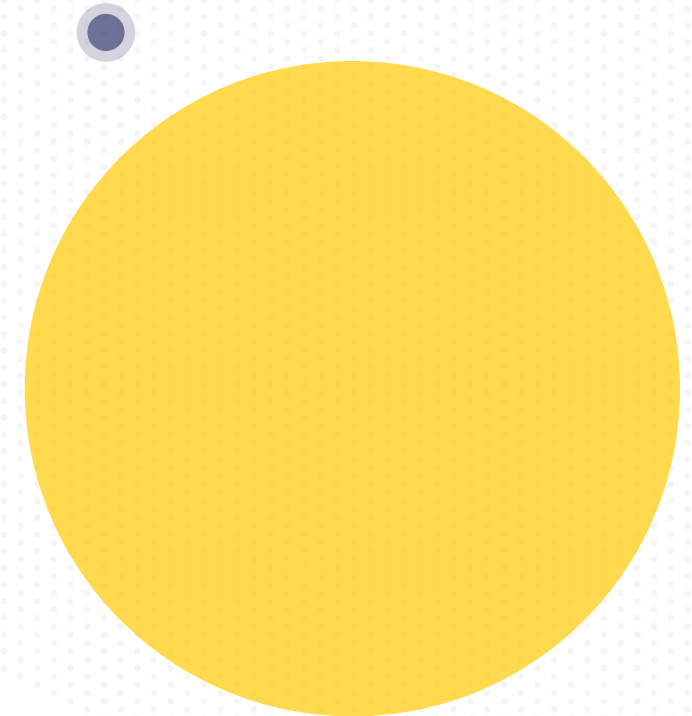


Summary of Impact for Loyola Marymount University

LMU research has been mentioned over 14,800 times online in a variety of places.

- Our research has been mentioned in 1,808 news stories in 56 countries, including:
 - 59 stories in the The Conversation
 - 50 stories in Yahoo! News
 - 22 stories in The Washington Post
- LMU research has influenced 240 policy documents in 31 countries, including:
 - 29 documents from World Bank
 - 27 documents from Asian Development Bank
 - 25 documents from National Bureau of Economic Research

[Let's take a look](#)





Thank you!

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