

An approach to shift first-line opioid for acute pain management in orthopaedic surgery towards morphine

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REGION

WHAT WAS DONE?

The use of first-line opioid was shifted from oxycodone to morphine at the Department of Orthopaedic Surgery, Amager and Hvidovre Hospital, DK.

WHY WAS IT DONE?

Patients undergoing acute orthopaedic surgery experience significant pain. The choice of pain-relieving treatment is based on national guidelines and regulatory actions. Considering the U.S. Opioid Crisis and the risk of opioid addiction, it was in 2022 politically decided by the Capital Region of Denmark to focus on consumption patterns of opioids. **Morphine** is considered an opioid with a lower risk of misuse and was **recommended as the first-line opioid**.

HOW WAS IT DONE?

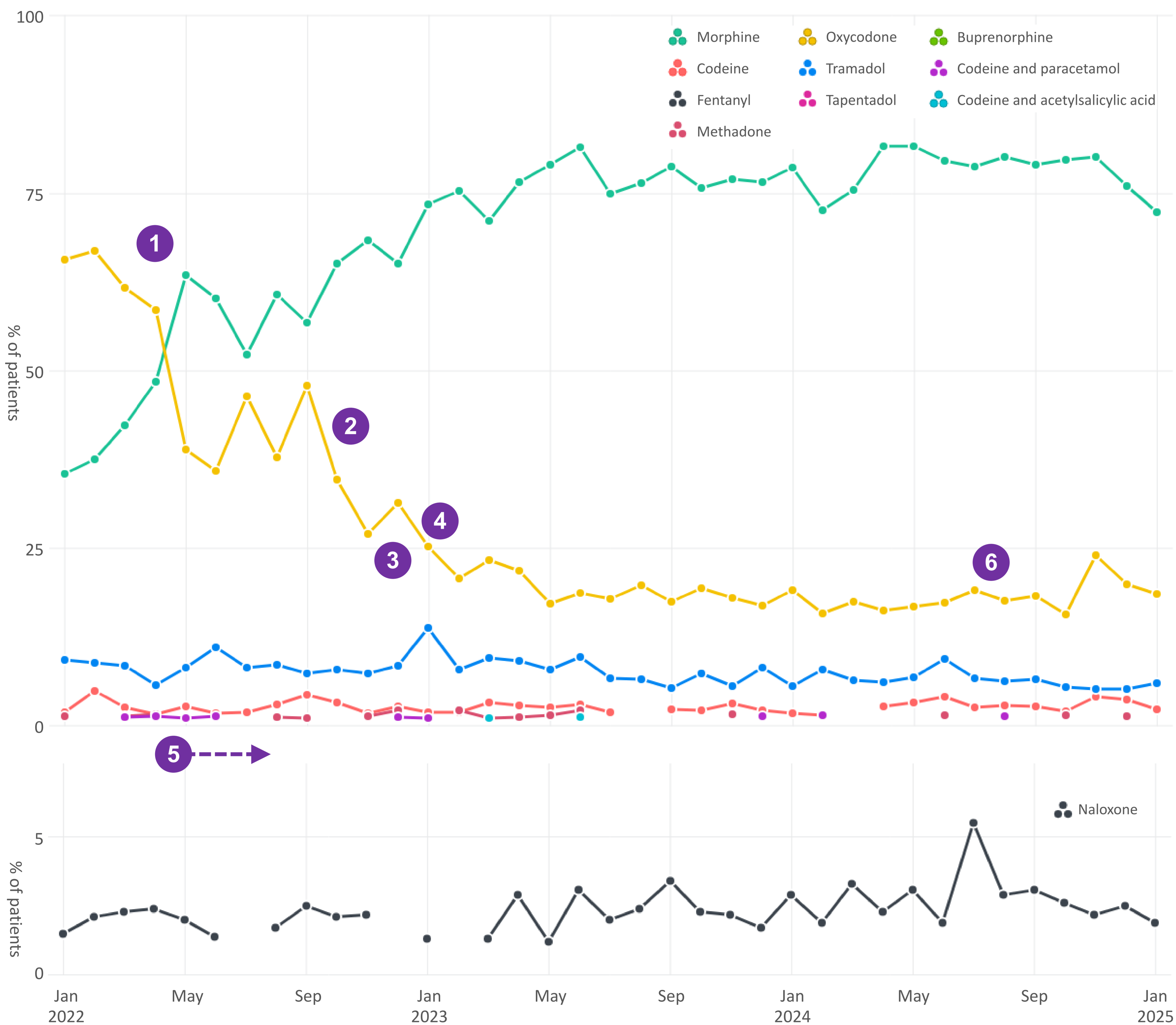
Oral opioid administration was continuously monitored and evaluated. At the same time, administration of the antidote naloxone was recorded.

Total numbers of patients varied from 351-562/month.

Data was retrospectively drawn from EPIC using the SlicerDicer module; the period was Jan 2022 to Jan 2025.

The initiative included:

- 1 **education** of clinicians about the risk of opioid misuse
- 2 **e-mail follow-up** to clinicians **reinforcing** that morphine was the first-line opioid
- 3 revision of **pre-filled electronic prescription packages** used at the ward and operating theatre
- 4 publication and implementation of a **regional guideline** specifically aimed at **acute pain management in the orthopaedic surgery setting**
- 5 ongoing **support from pharmaceutical staff** to facilitate appropriate selection of opioids
- 6 publication of a **regional guideline** for opioid use in **acute pain management** recommending oxycodone at estimated glomerular filtration rate > 30 ml/min



ACHIEVEMENT

Oral opioid administration effectively shifted towards morphine, with the proportion of patients treated with **oral morphine increasing from 40% to approximately 80%**.

There was no trend toward increased use of naloxone.

The shift has remained stable for the past 12 months.

WHAT NEXT?

The political and clinical focus on opioid consumption is strengthened, guidelines are revised, and new regional action plans are initiated to further decrease the total opioid usage.

... **the work continues...**