

Opioid Stewardship: Improving and Monitoring Opioid Usage Following Carpal Tunnel Surgery



Dr. Olubukunola (Buki) Ayeni MD, MPH; Dr. Daniel Martin MD, MSc; Dr. Chadwick Wu; Dr. Jennica Platt MD, MSc; Dr. Romy Ahluwalia MD; Dr. Thomas Constantine MD; Dr. Alex Golger MD; Dr. Jerome Edelstein MD



Lessons Learned

Consistent with the literature, the findings indicated that carpal tunnel surgery postoperative pain is ephemeral. This should be factored into clinician prescribing practices to enhance patient outcomes while addressing the opioid crisis.

Description

Carpal tunnel syndrome is one of the most common surgical procedures performed in Humber River Hospital's (HRH) Plastic Surgery Clinic. Most clinicians are trained to prescribe opioids to patients following this procedure. However, recent literature supports the fact that clinicians prescribe on average 15 to 20 opioid pills per patient in excess for hand surgery. Anecdotally, patients report minimal pain following the surgery and often describe not requiring opioid pain medicine despite being prescribed opioids. As a result, the clinicians at HRH endeavored to find out if pain is adequately addressed after carpal tunnel surgery and if there is any room for improvement in terms of opioid stewardship.

Actions Taken

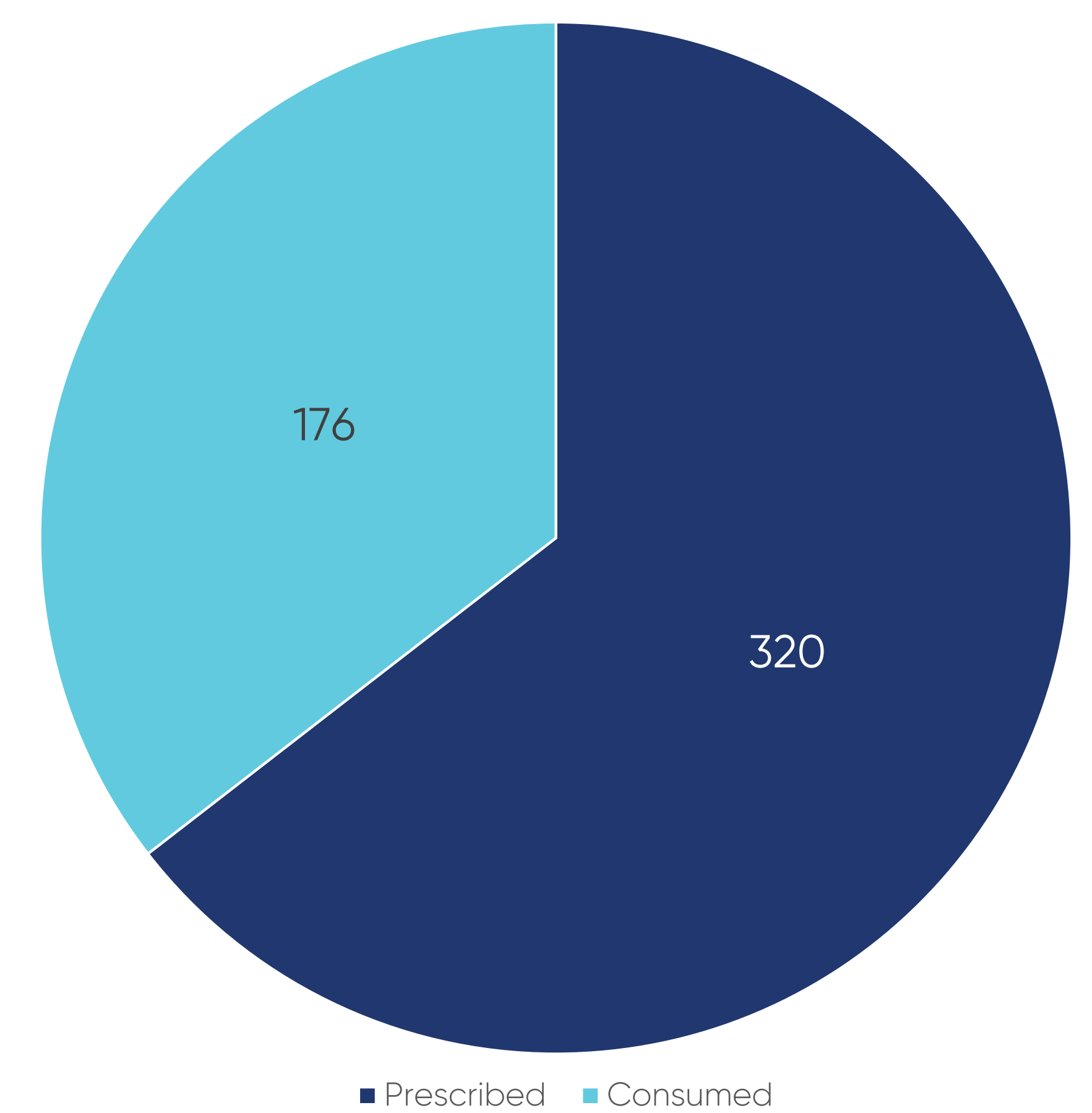
An anonymous questionnaire was developed for patients to complete following carpal tunnel surgery. Patients' levels of pain and their pain medicine requirements were measured daily for 2 weeks. Results were analyzed to determine how much and what type of pain medicine was required by each patient during their postoperative recovery.

Summary of Results

Our results showed that clinicians were effectively managing patients' pain. Additionally, most patients found that their pain was acute and rated their pain as mild to minimal by the fifth day after surgery. Furthermore, patients required at most 15 opioid tablets following carpal tunnel surgery, despite some being prescribed, on average, 30 or more opioid tablets.

Figure 1. Of the 496 opioids tablets prescribed, patients only required 176 opioids tablets.

Total Consumed vs. Prescribed Opioids



Average Pain Score

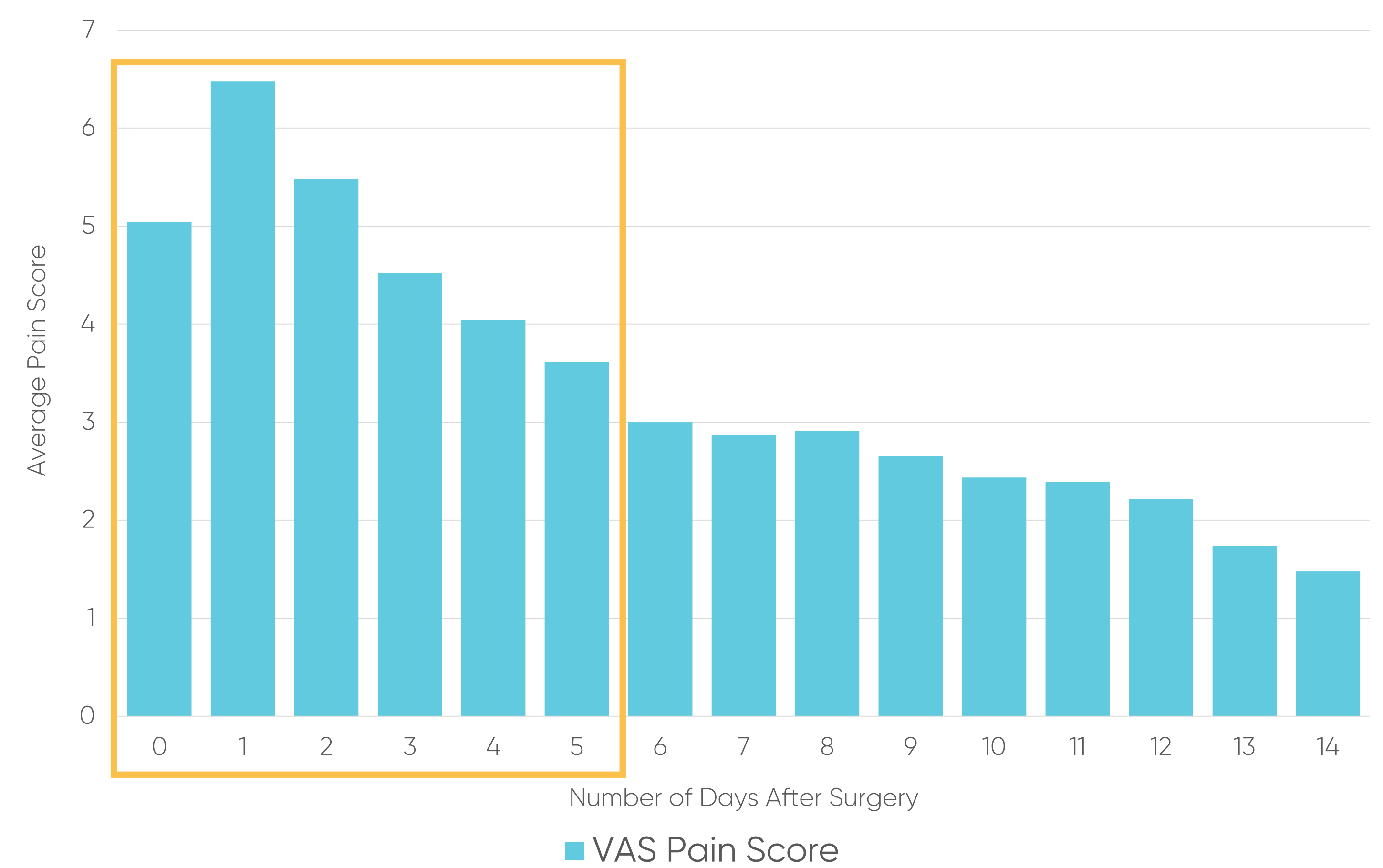


Figure 2. Average pain score after carpal tunnel surgery. Using the Visual Analogue Scale (VAS) to score pain on a scale from 0 (no pain) to 10 (worst possible pain), patients were experiencing pain levels below 4 on average by the fifth day after surgery.

Opioids Per Day

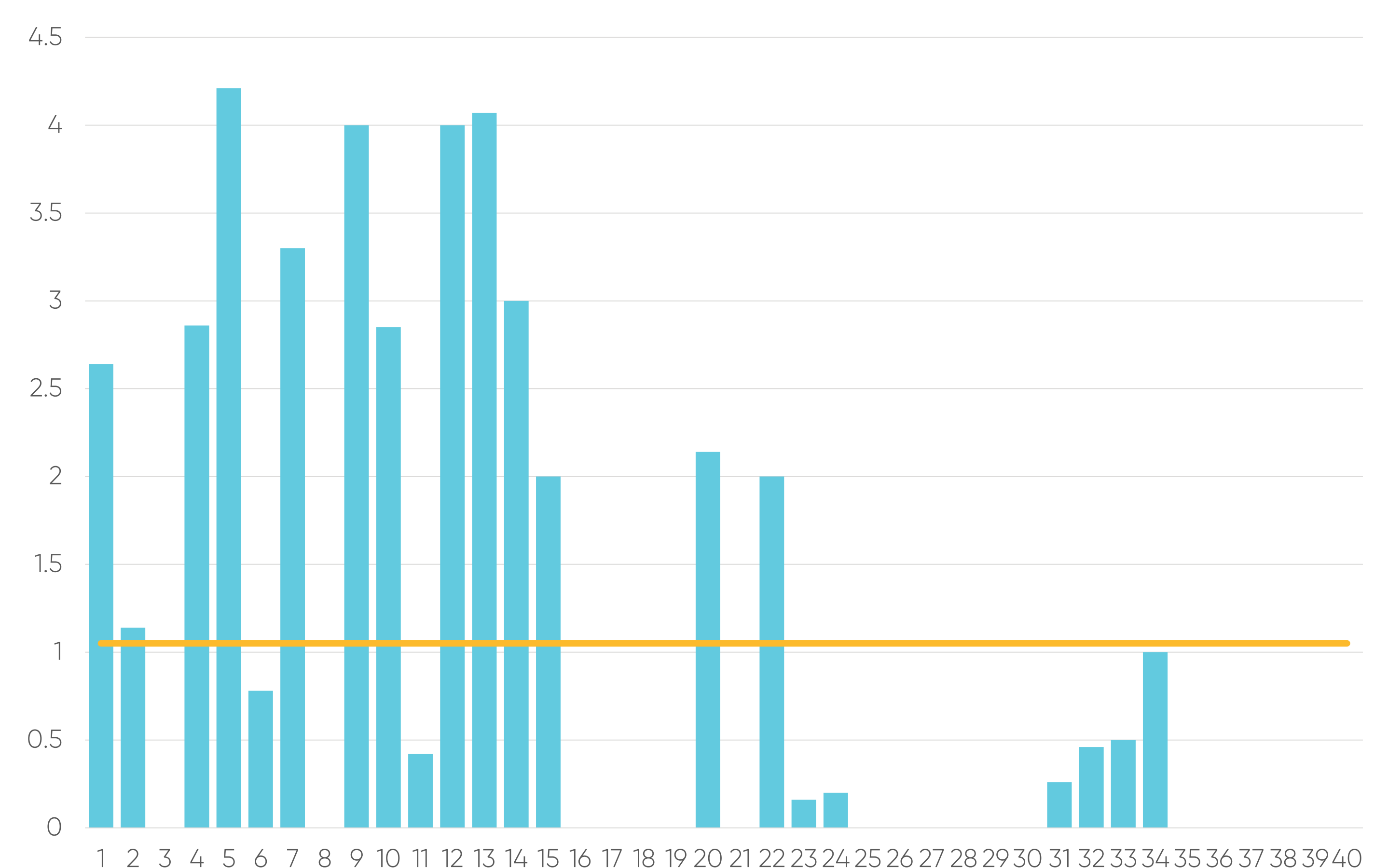


Figure 3. Number of Opioids Tablets Consumed per day.