



Regional Drug and Therapeutics Centre

Population demographics of patients prescribed opiates in the North of England Integrated care systems

Background

In recent years, there has been increased concern regarding the overprescribing of opioids and associated harms. Opioids are known to be effective analgesics for acute and end of life pain but evidence of their effectiveness for chronic pain (pain that persists or recurs for more than 3 months) is lacking.^{1,2} There is also increasing concern that any potential benefits with long-term use are outweighed by the harms, yet opioids are still widely prescribed for long term use.^{1,3}

Aim

To support greater understanding of the patient populations prescribed opioids, the demographics and the inter-relationships and dependencies between prescribing.

Method

Using the opioid prescribing comparators dashboard provided by the NHS BSA (ePACT2)⁴, the RDTC has analysed the demographics of the unique patients in primary care in the North of England (NoE) Integrated care systems (ICSs) that were prescribed opioid analgesics (excluding injectables, opiates licensed for treatment of addiction, co-dydramol and co-codamol). Additionally, an analysis of the demographics of all opioid related hospital admissions was carried out using the Hospital Episode Statistics dataset.⁵

Results

Typically, prescribing of opioids in females was more widely distributed across a broader range of age bands; 50-79 years, than male patients; 55-69 years (Figure 1). However, opiate use in females aged 50-64 years was more pronounced than the England average for North East North Cumbria (NENC), Cheshire & Merseyside (C&M), Healthier Lancashire & South Cumbria and Greater Manchester. Similarly, opiate use in males aged 60-64 years was more pronounced than the England average for NENC and C&M. The age bands with the highest proportion of long-term opiate use were between 55-69 years old. Table 1 illustrates the most frequent age band of prescribing, alongside gender and long-term use within this age band.

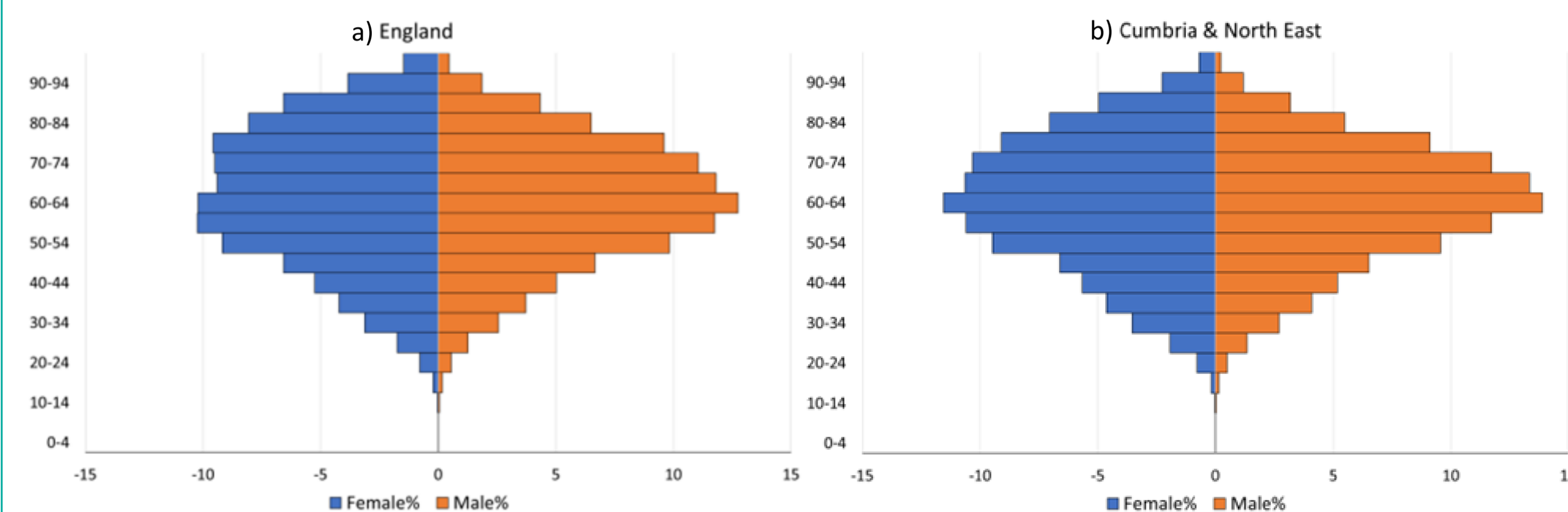


Figure 1. Age and Gender distribution of patients prescribed an opioid in a) England, and b) NENC (real-time EPS data; 21st June – 18th July 2022).

Table 1. Ten localities in the NoE with highest number of total opioid patients (21/6/22 – 18/7/22), the most frequent age band of prescribing and proportion of long-term use in that age band.

CCG (pre-July 2022)	Unique patients/list size	Highest frequency age band	Value in that age band	% male	% of opioid patients in age band that are long term use*
County Durham	0.04223	60-64	2,877	42.6%	85.2%
South Tyneside	0.04216	60-64	897	41.9%	83.3%
Sunderland	0.04153	60-64	1,527	43.5%	86.4%
Northumberland	0.03761	60-64	1,511	42.5%	82.3%
Tees Valley	0.03765	60-64	3,371	41.5%	84.8%
North Tyneside	0.03659	60-64	1,044	42.0%	82.3%
Newcastle Gateshead	0.03470	60-64	2,413	42.1%	84.8%
Blackpool	0.03310	55-59	815	42.6%	89.2%
Barnsley	0.03242	55-59	1,034	40.0%	86.2%
St Helens	0.03078	60-64	742	45.4%	90.4%
England	0.01715	55-59	114,224	39.7%	83.5%
England	0.01715	60-64	117,840	41.6%	82.8%

* Long-term use is defined here as a prescription in the last 28 days and a minimum of 1 prescription every 84 days (3 months) for 3 quarters (9 months).

An analysis of the age, ethnicity and gender for all opioid related hospital admissions⁵ across the NoE (2018-2021) (includes substance misuse and cancer indications), showed that the main age band for admissions was 40-49 years. The gender with the higher proportion of opioid related admissions was male (54.9%-58.7%) and the predominant ethnicity was 'white British'.

However, when weighted for the total number of admissions by ethnicity (Figure 2), it is possible to see how prevalent opiate admissions are within an ethnic group.

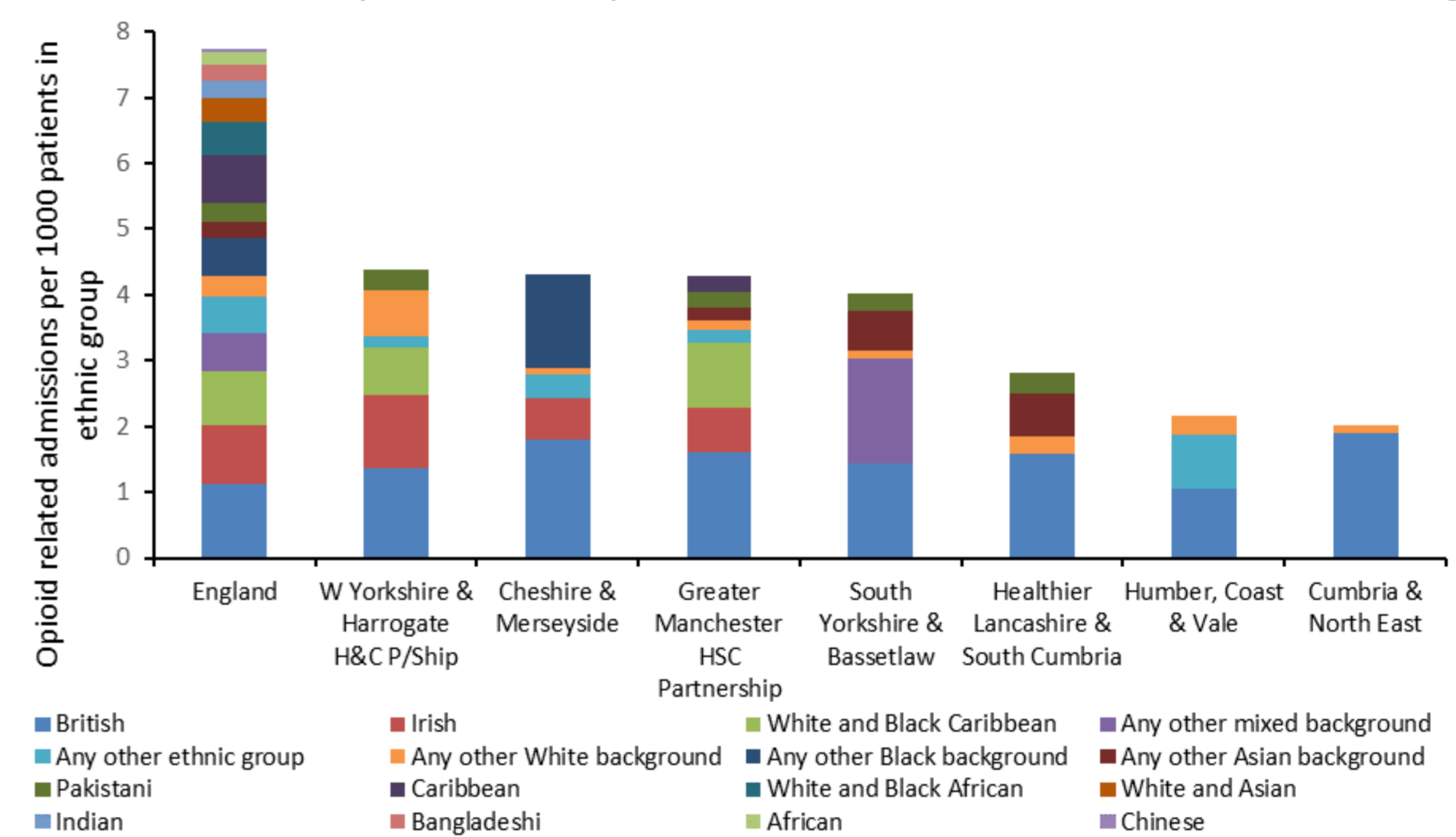


Figure 2. Patient ethnicity for opioid related hospital admissions in the NoE (Apr 2021- Mar 2022).⁵

When the broader population of patients receiving an opiate on prescription (includes opioid-containing compound analgesics and opiate users in the substance misuse service, excludes cancer indication) is considered, there is a moderately strong correlation with both a) Index of Multiple Deprivation (IMD) score ($R^2 = 0.2545$, correlation coefficient = 0.5045) and b) Health deprivation ($R^2 = 0.4069$, correlation coefficient = 0.63788). The relationship noted between higher numbers of patients prescribed opiates with increasing deprivation also translates into higher opioid related hospital admissions (Figure 3).

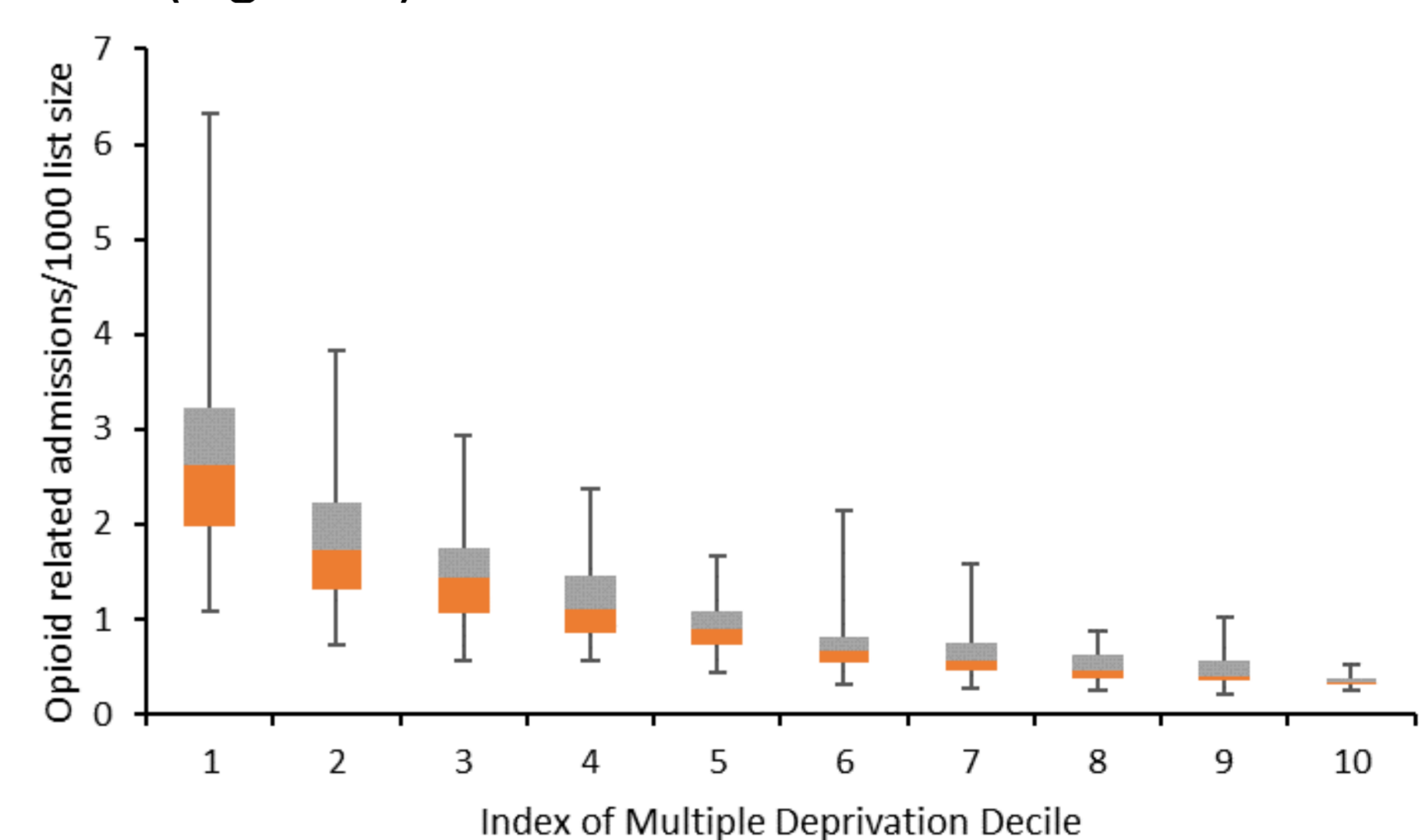


Figure 3. All opioid related hospital admissions (Apr 2021 – Mar 2022); includes substance misuse (weighted for list size) and ranked by the IMD decile (2021).

Conclusion

Targeted interventions should focus on delivery of structured medication review of people prescribed opiates from areas of higher deprivation (IMD 1&2). Further analysis of the patient populations, demographics, financial and sustainability impact and recommended actions are available in the forthcoming RDTC Prescribing for Population Health publication: 'Polypharmacy & Overprescribing; Opioid patient populations' (expected December 2022).

References

- [1] Faculty of Pain Medicine. (updated Jan 2022) Opioids Aware. <https://www.fpm.ac.uk/opioids-aware>
- [2] NICE. (2021) Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain. [NG193] <https://www.nice.org.uk/guidance/ng193>
- [3] Chou, R., Turner, J.A., Devine, E.B., Hansen, R.N., Sullivan, S.D., Blazina, I., Dana, T., Bougatsos, C., Deyo, R.A. (2015) The effectiveness and risks of long-term opioid therapy for chronic pain: A systematic review for a national institutes of health pathways to prevention workshop. *Ann. Intern. Med.* 162 (4). p276-286.
- [4] NHS BSA. (2022) Opioid Prescribing Comparators dashboard. <https://www.nhsbsa.nhs.uk/access-our-data-products/epact2/dashboards-and-specifications/opioid-prescribing-comparators-dashboard>
- [5] NHSD. Hospital Episode Statistics Dataset. Copyright © 2022, re-used with the permission of NHS Digital. All rights reserved.