

**Sefton**

# **Prescribing Costs Profile**

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Data, Insight, Business Intelligence, & Performance

## Document Control

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### Document Ownership

Role	Name/Title
Author	Gemma Monaghan – Data collation, analysis & mapping Claire Brewer – Interpretation & analysis
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Release Authority	Wayne Leatherbarrow Service Manager – Performance & intelligence.

### Distribution

Open

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## Introduction / Methodology

As part of a national programme to improve the openness and availability of government information prescribing cost and type data is collated by central government from all GP Practices.

In addition, data is available for the number of patients in a specific GP Practices in a Lower Level Super Output Area (LSOA). It is possible, therefore, to very roughly estimate the cost of specific drugs by LSOA by apportioning the cost across LSOA based on the number of patients in each LSOA. In order to make the cost data comparable in terms of presentation it is then displayed as a rate per head.

This methodology does assume that costs and uptake of a specific drug are evenly spread across registered patients within a GP Practice area. This is unlikely to be the case, and hence the results should be seen as a gross generalisation over broad areas.

The analysis also assumes that drugs are prescribed only for the purpose named within the British National Formulary (BNF) Categories which is not always the case. Additionally some specific drugs for some conditions have particularly high costs, and as a result the data shown is by rank rather than absolute cost as those are not necessarily comparable.

Whilst this data is, therefore, more illustrative of GP Practice prescribing policies than small level geographic distribution it does provide a 'broad brush' indication of areas that are worthy of further investigation, and highlights or reinforces existing understanding of the health and well-being landscape across Sefton.

## Sefton Overview

To a certain extent as expected prescribing costs reflect the overall age structure and relative levels of deprivation within the borough, although levels are perhaps more biased towards deprivation levels rather than age than might have been expected (Figures 1a-c).

Over the last three years there has been some fluctuation in cost geography, though the overall patterns of least cost in Crosby and south east Southport remain. Some of this fluctuation might

reflect the prescribing practices of some individual GP Practices, though particularly high costs across the very south of the Borough remains a clear pattern.

The following highlights issues relating to specific areas of interest based on categories within the BNF.

### *Cardiovascular System (Figures 2a-c/3a-c)*

This data illustrates a contradiction between areas where prescribing costs relating to hypertension and heart failure are highest in the less deprived areas of the Borough, actual Standardised Admission Ratios (SARs) for Heart Disease are highest in the predominantly most deprived areas of the Borough. This contradiction requires further investigation and could be a result of a number of reasons including being a result of higher levels of awareness and hence earlier intervention in less deprived areas.

### *Antidepressants/ Antipsychotics (Figures 4a-c/5a-c)*

The patterns for these drug costs more closely match the patterns of hospital SARs for these areas such as 'self-harm'. However, one question for further analysis might be if prescribing in these areas is so high why are there continued issues with high rates of hospital admission relating to these conditions? There may be opportunities in these areas for more and/or alternative forms of support for citizens.

### *Dementia Drugs (Figures 6a-c)*

Although overall at present the levels of prescription for these drugs is relatively low, it is clear that there is a significant potential issue in terms of issues relating to old age across much of Sefton, and population trends suggest this will continue and intensify over the next two decades.

### *Substance Dependence Drugs (Figures 7/8/9a-c)*

Prescribing costs associated with drug and alcohol dependence support does not directly seem to reflect the known areas of concern for the use of drugs. The pattern would seem to primarily reflect prescribing practice across GP surgeries. Further analysis might be useful to identify opportunities to improve uptake or prescribing in other areas where concerns over alcohol and drug misuse are highest in the Borough.

### *Diabetes Drugs (Figures 10a-c)*

Whilst there are many contributing factors to the development of diabetes one high risk factor is that of obesity. Given the patterns of high prescribing costs for diabetes within Southern Southport and South and East of the Borough; these might be areas that would benefit most from focussed activity around diet and weight management support.

### *Respiratory System Drugs (Figures 17/18/19a-c)*

There are specifically intense respiratory issues - as identified through prescribing costs - in the south of the Borough. Whilst correlation is not causation the areas highlighted tend to be areas of intense industrial activity or traffic / housing density. These suggest areas for further targeted investigation to identify potential causes such as higher levels of pollution.

## Conclusion

Whilst the data as analysis using this methodology should be used with caution when used in combination with other public health related information it can both add an extra dimension to current analysis and identify potential issues requiring further assessment.

These include:

- Contradiction in heart related prescribing and hospital admissions incidence
- Opportunities for targeted intervention using incidence and prescribing data for Mental Health concerns
- Review of substance misuse interventions, targeting, and support patterns across the Borough.
- Potential for targeted interventions around patterns of diabetes prescribing
- Review need for closer pollution monitoring and association with respiratory conditions around port, traffic, and industrial developments.

## Appendix 1 – Detail Mapping

The following maps show the distribution of prescribing costs per patient (hence adjusting for the number of patient registrations within an area) within an LSOA ranked in 10% percentiles.

Figure 1. TOTAL Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

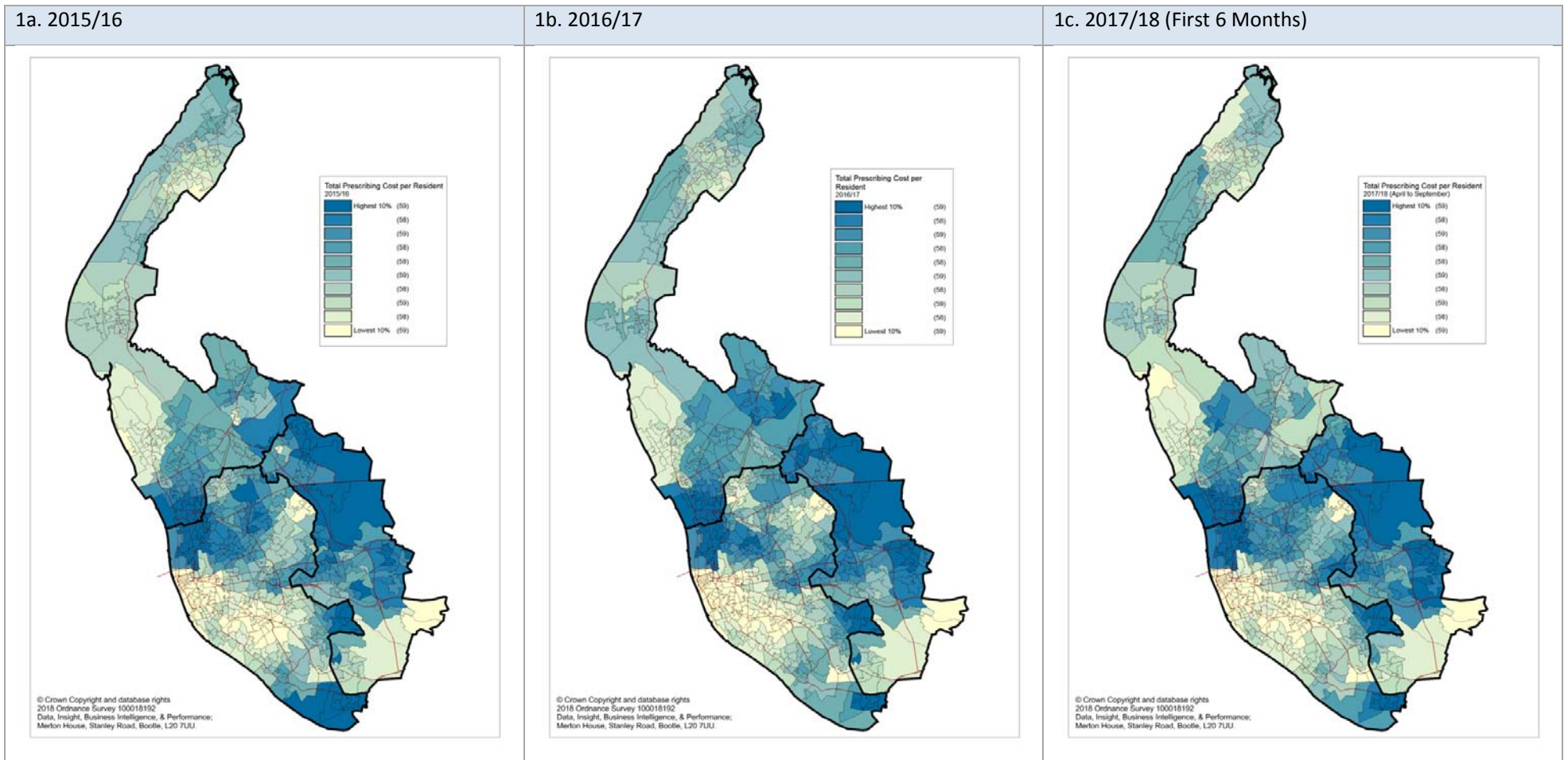


Figure 2. Cardiovascular System- Total Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

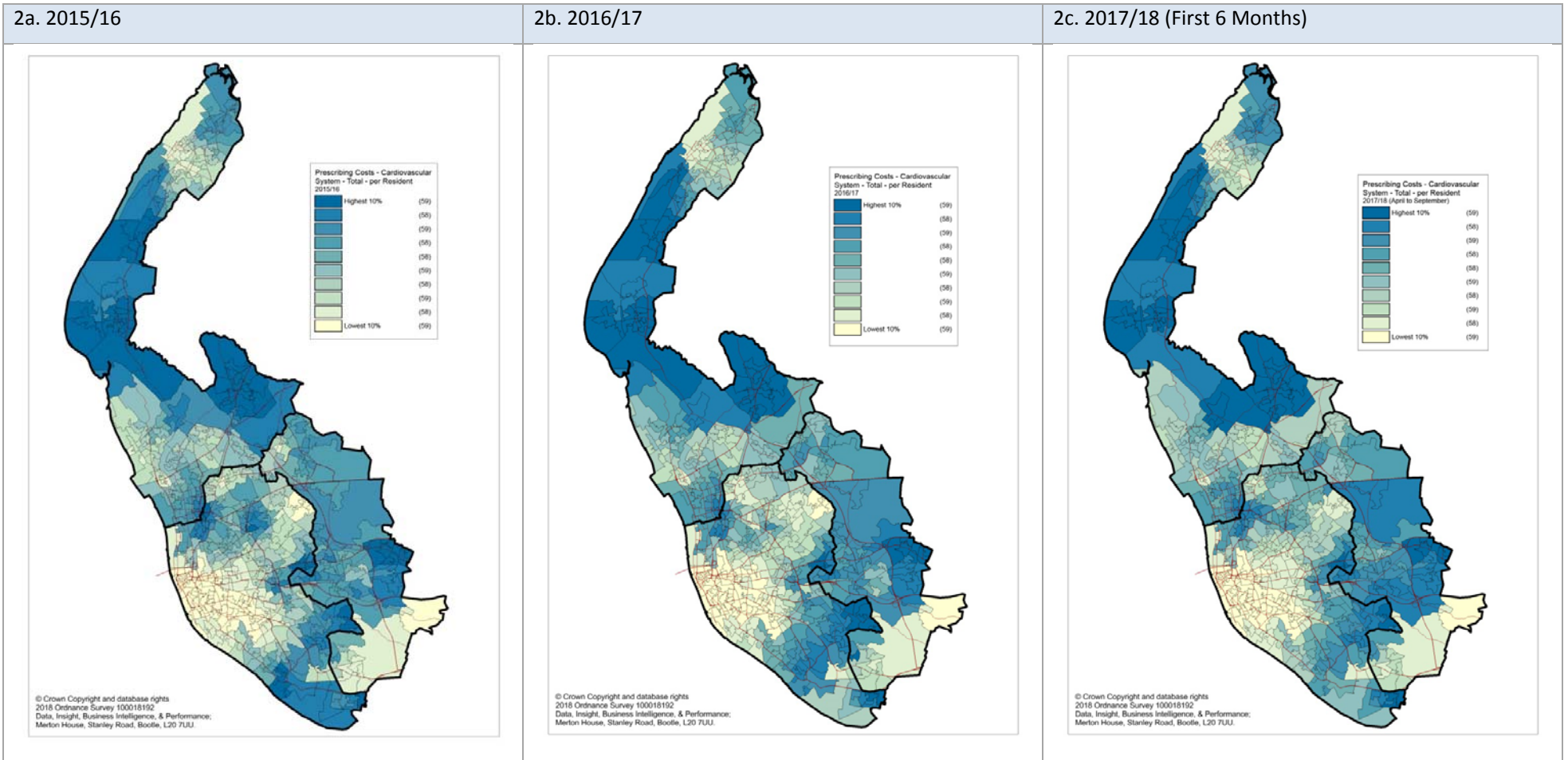


Figure 3. Cardiovascular System - Hypertension / Heart Failure Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

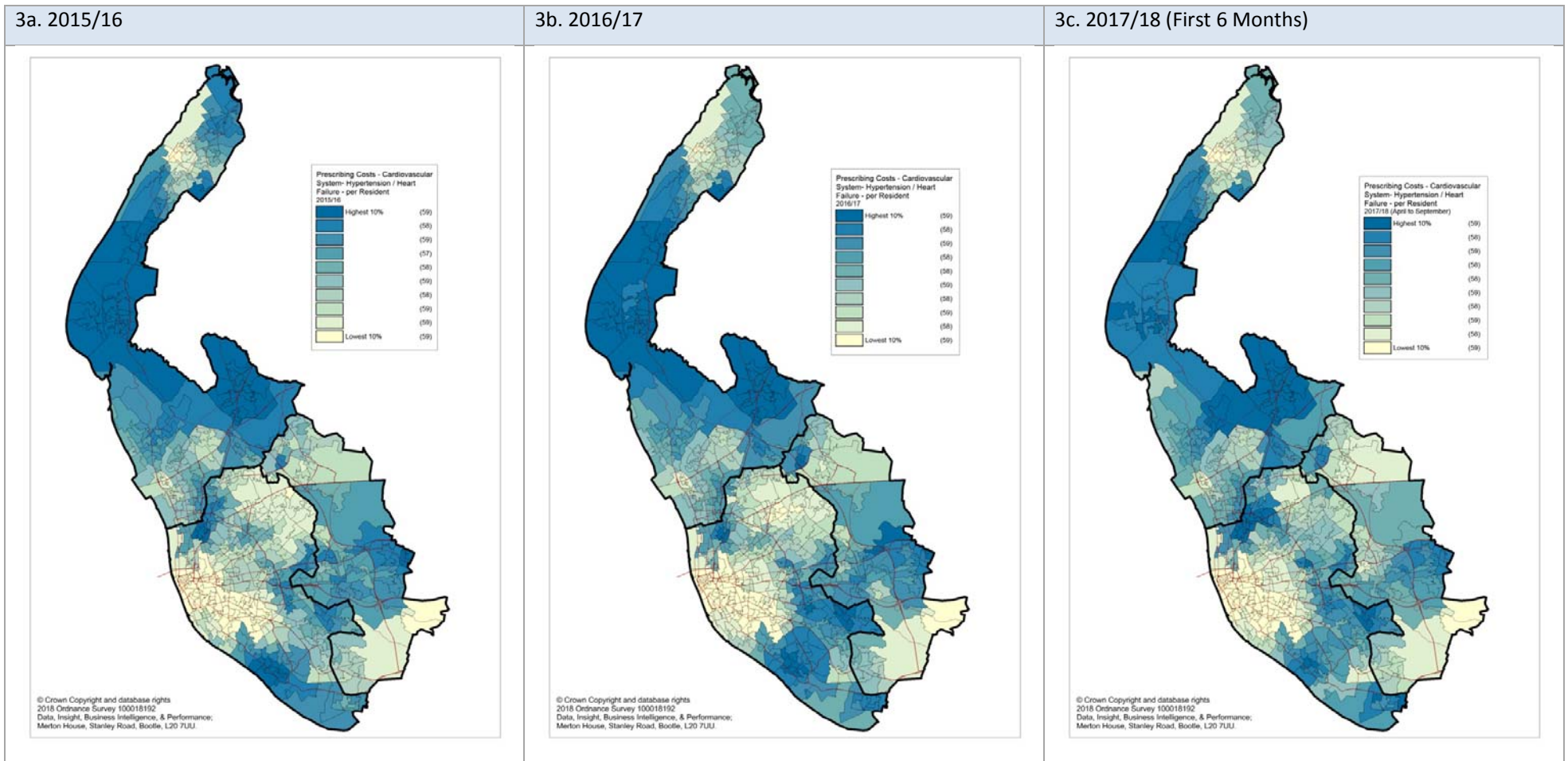




Figure 4. Central Nervous System – Antidepressants Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

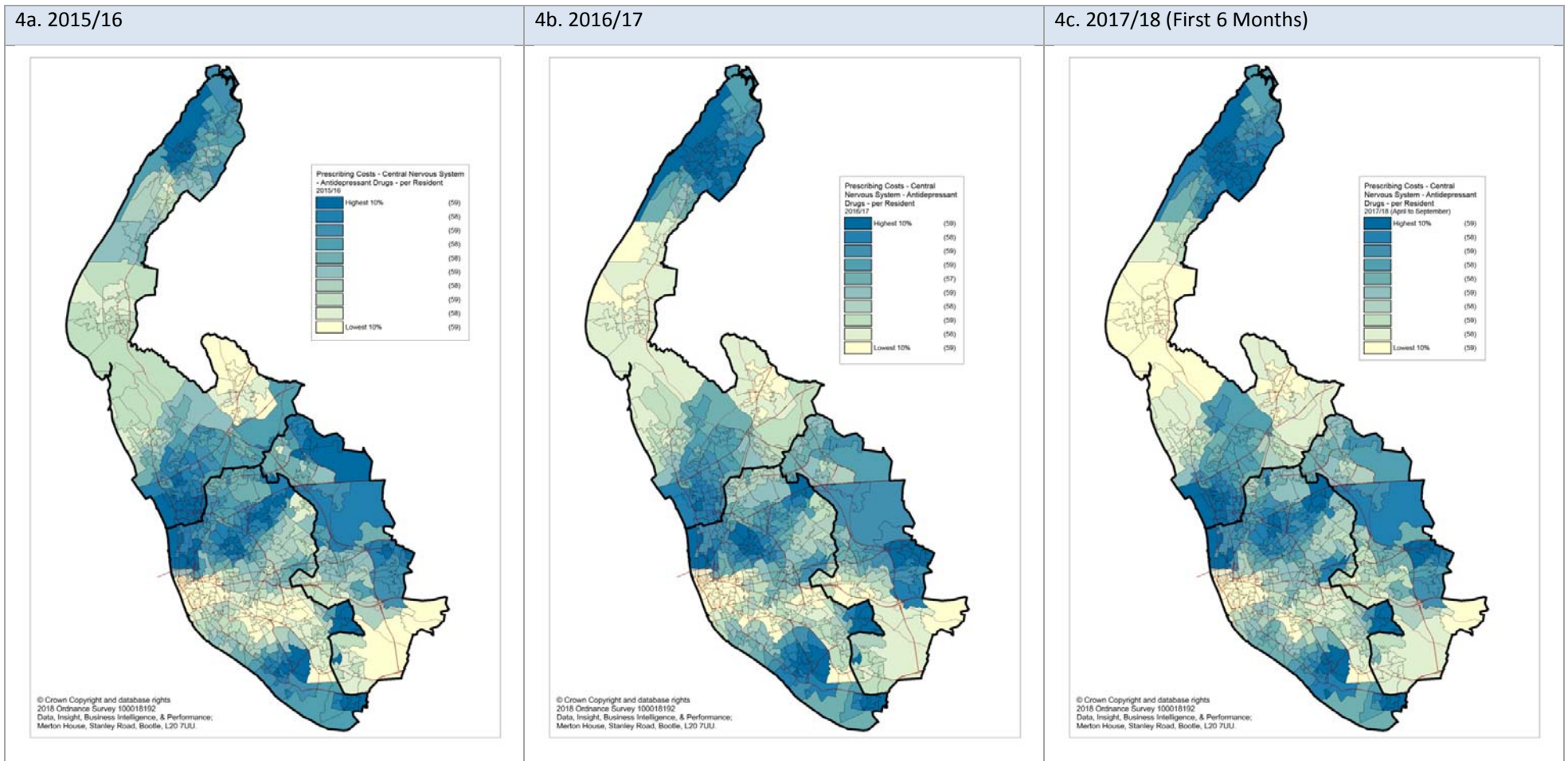


Figure 5. Central Nervous System – Antipsychotic Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

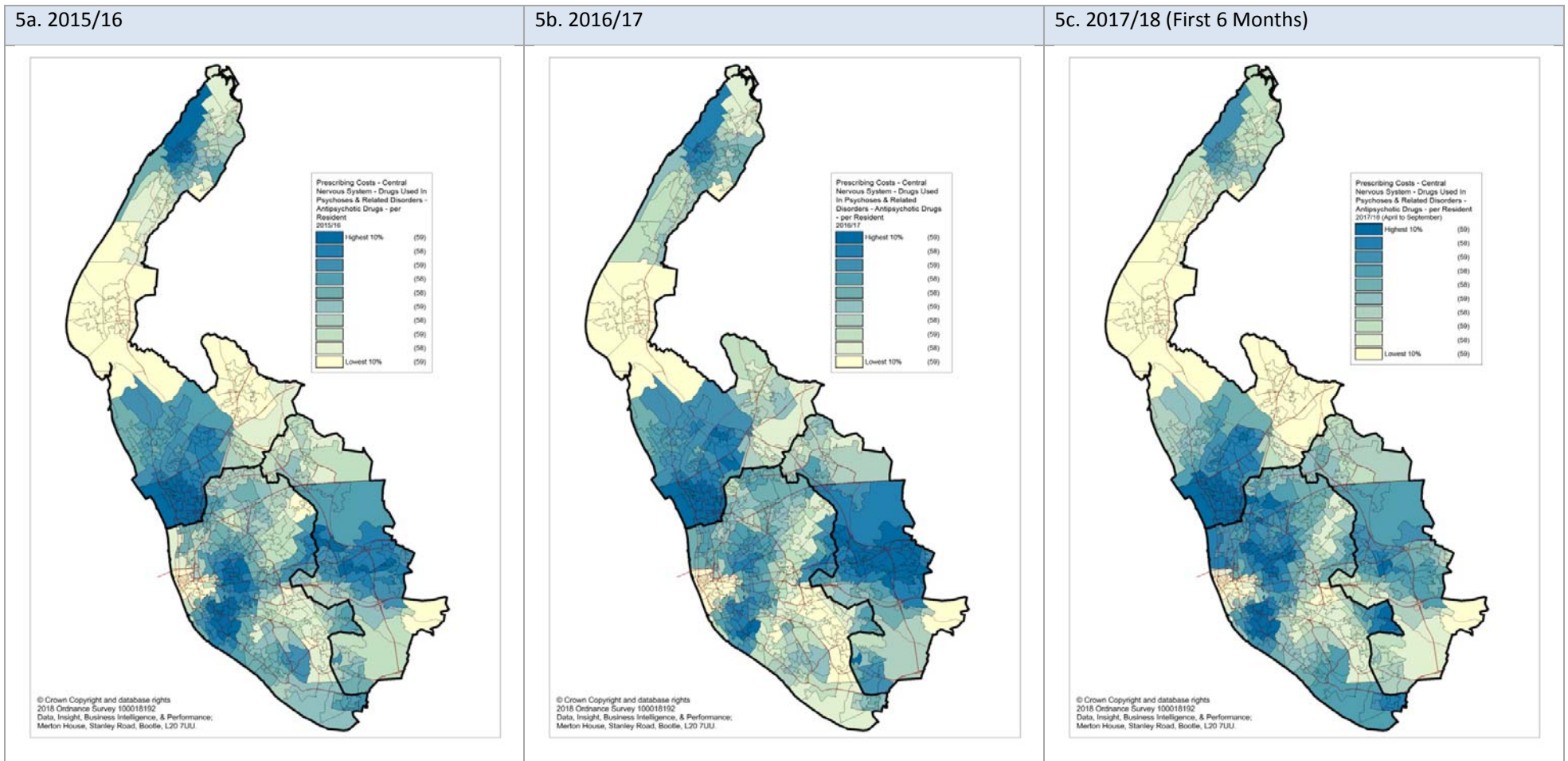


Figure 6. Central Nervous System – Dementia Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

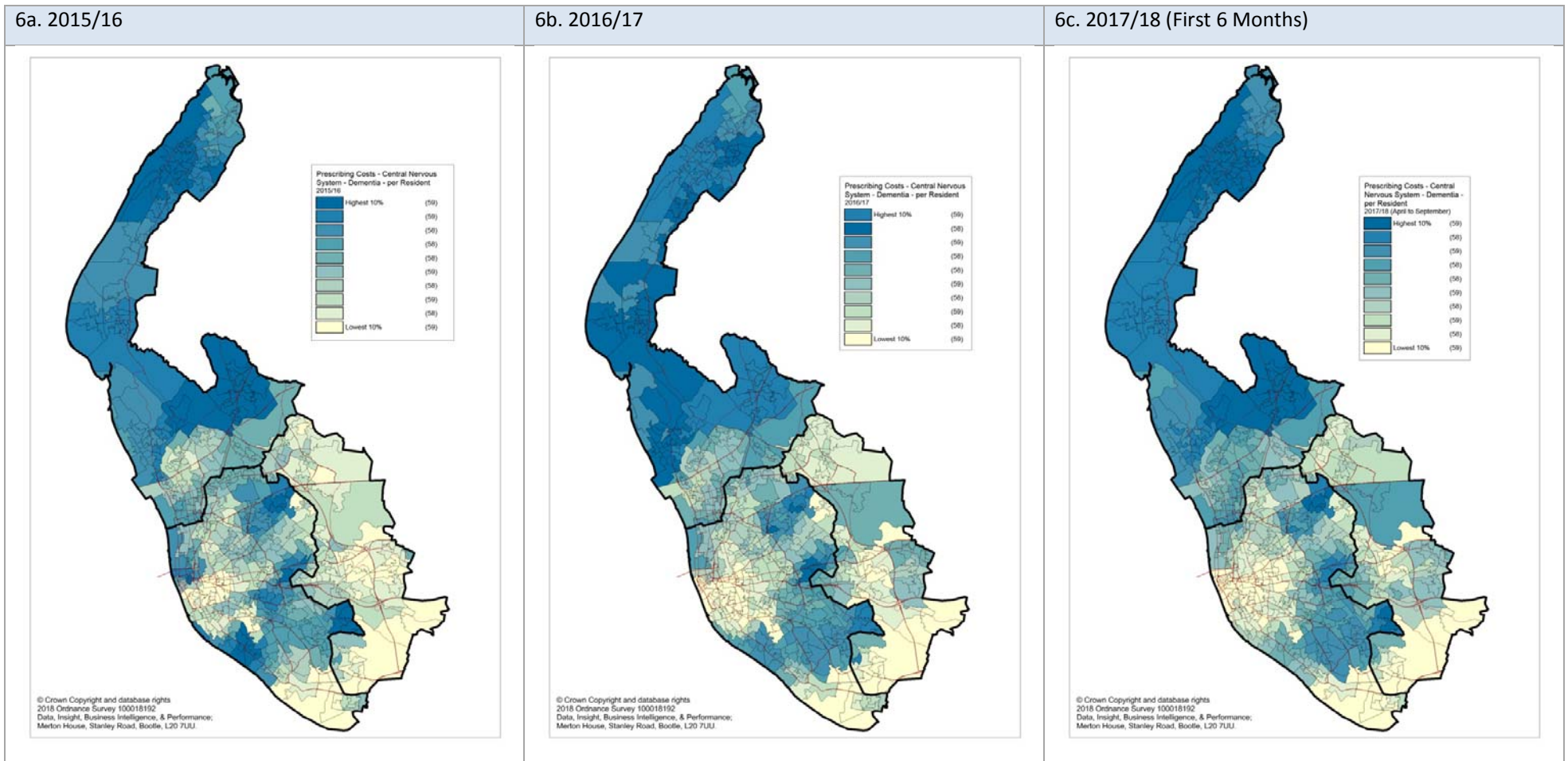


Figure 7. Central Nervous System – Drugs Used in Substance Dependence – Alcohol Dependence Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

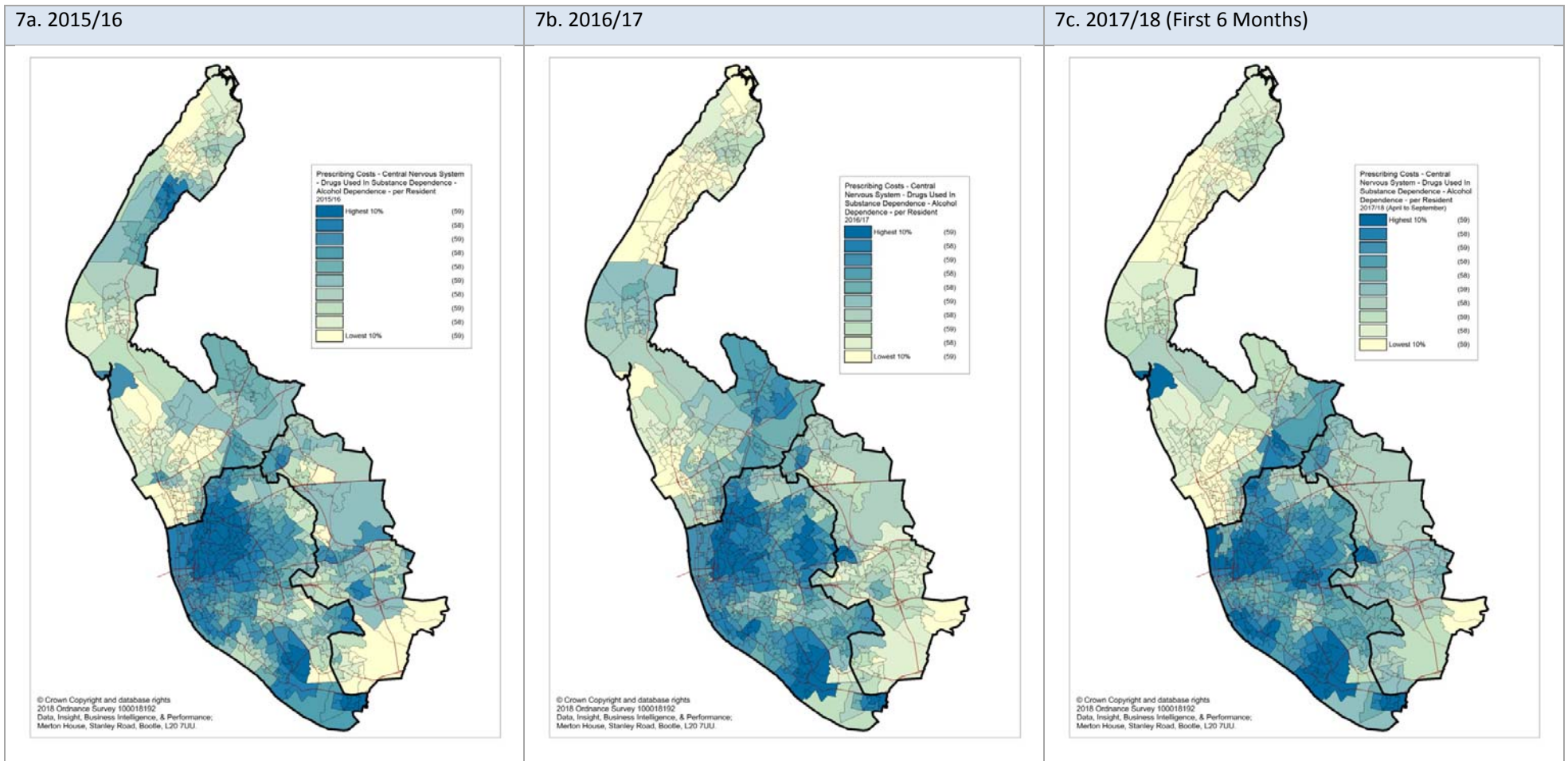


Figure 8. Central Nervous System – Drugs Used in Substance Dependence – Nicotine Dependence Average Prescribing Cost per Patient Distributed Across LSOAs

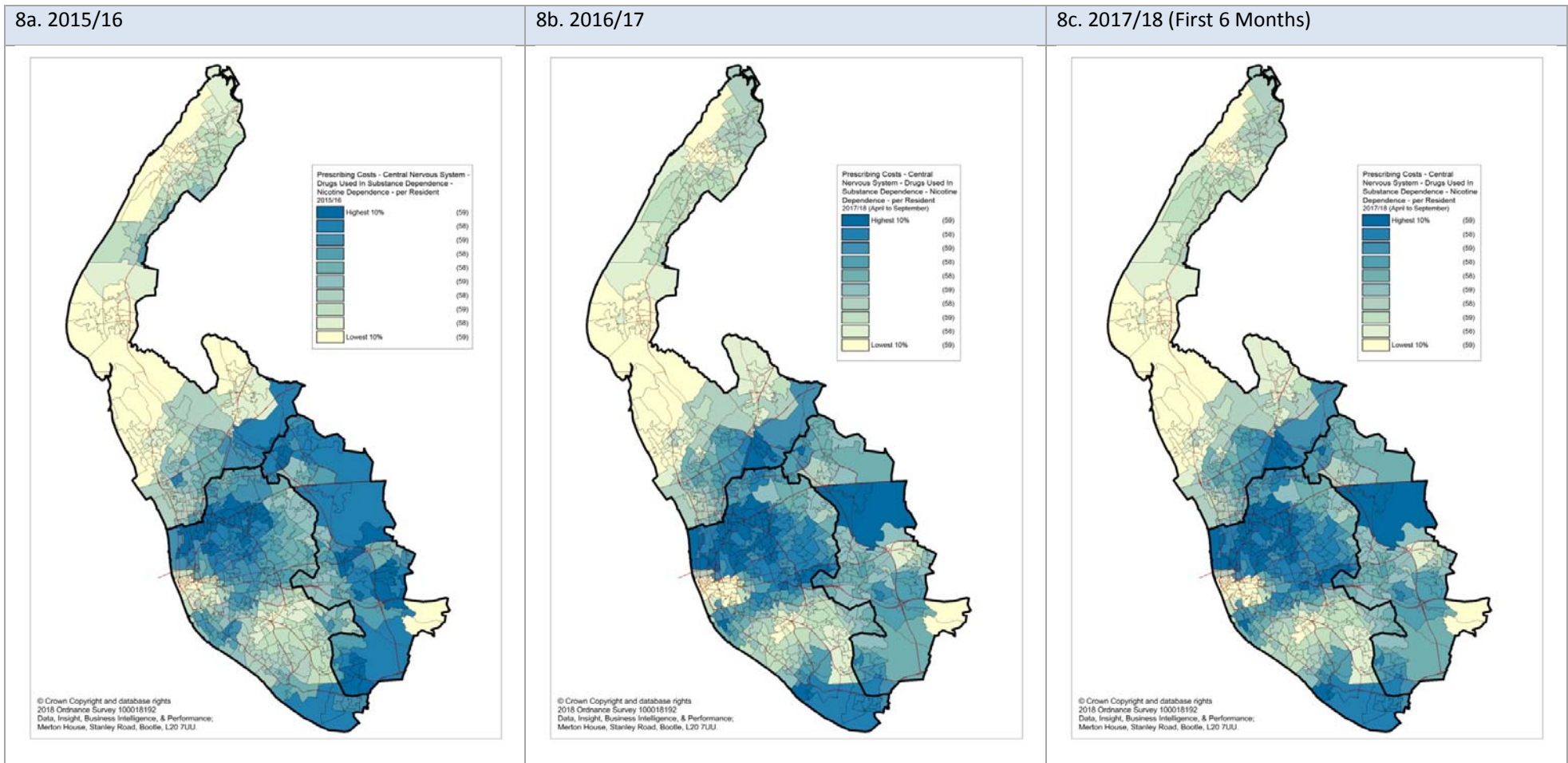


Figure 9. Central Nervous System – Drugs Used in Substance Dependence – Opioid Dependence Average Prescribing Cost per Patient Distributed Across LSOAs

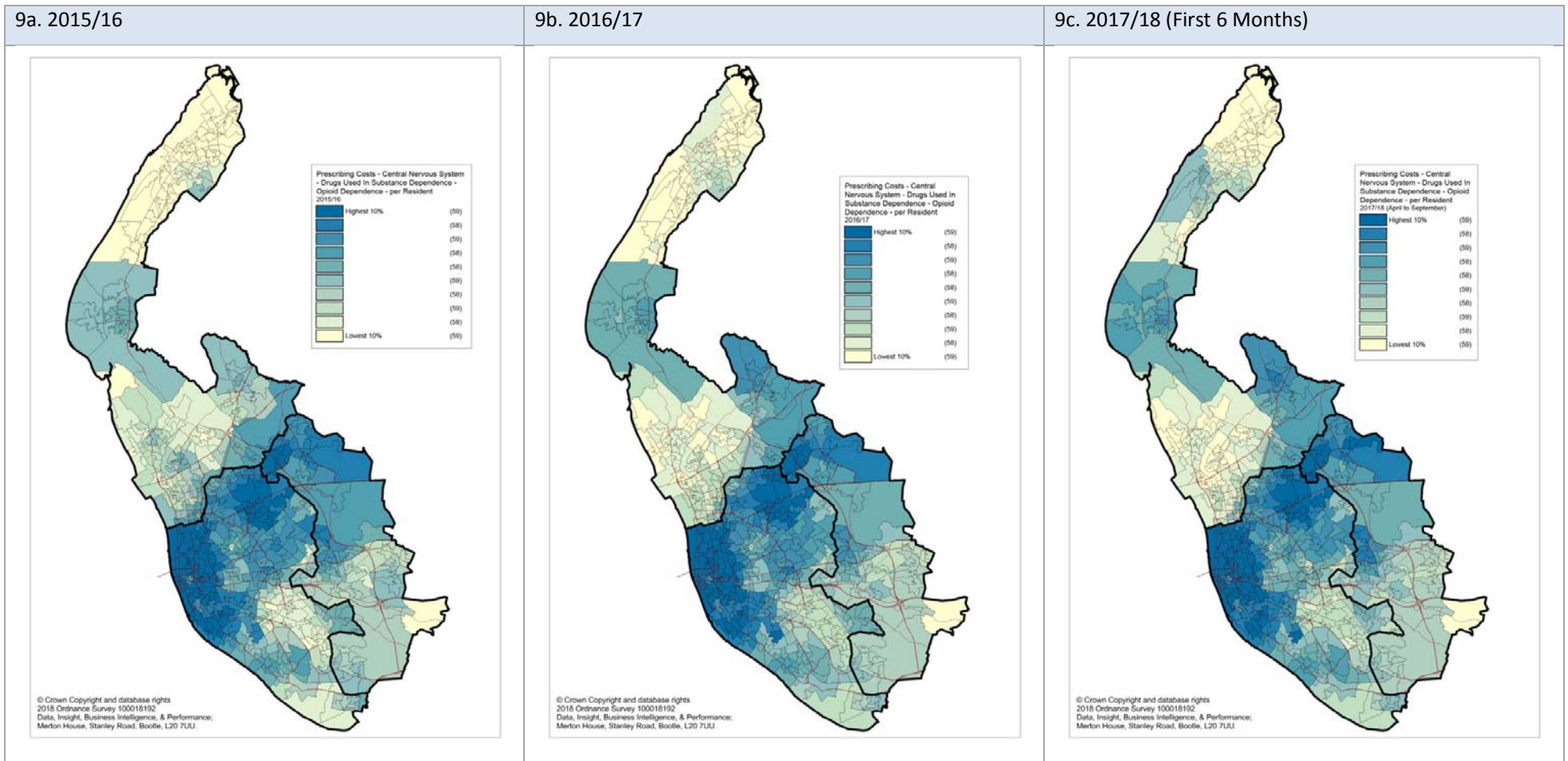


Figure 10. Endocrine System – Drugs Used in Diabetes Average Prescribing Cost per Patient Distributed Across LSOAs

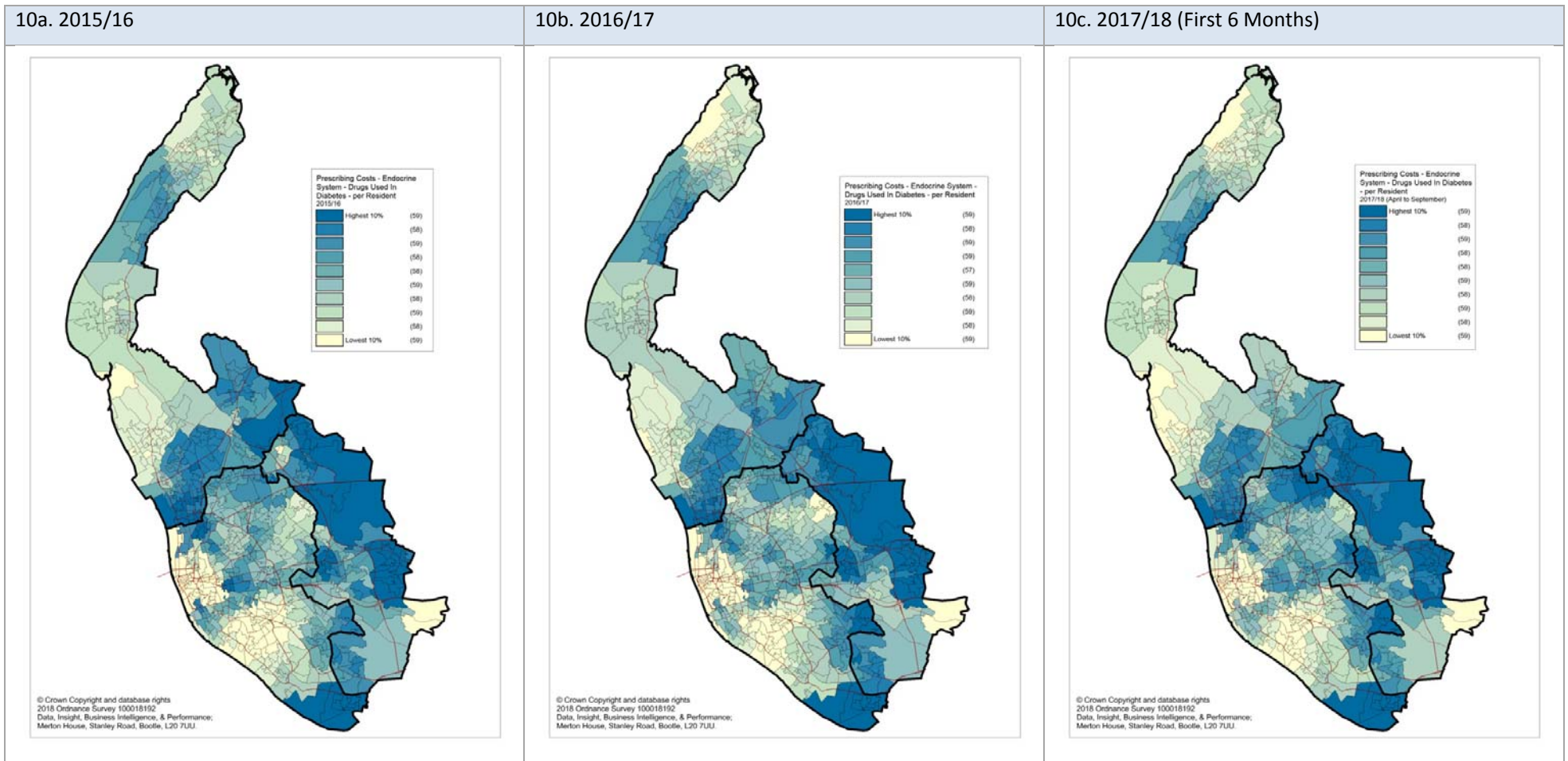


Figure 11. Endocrine System – Thyroid and Anti-Thyroid Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

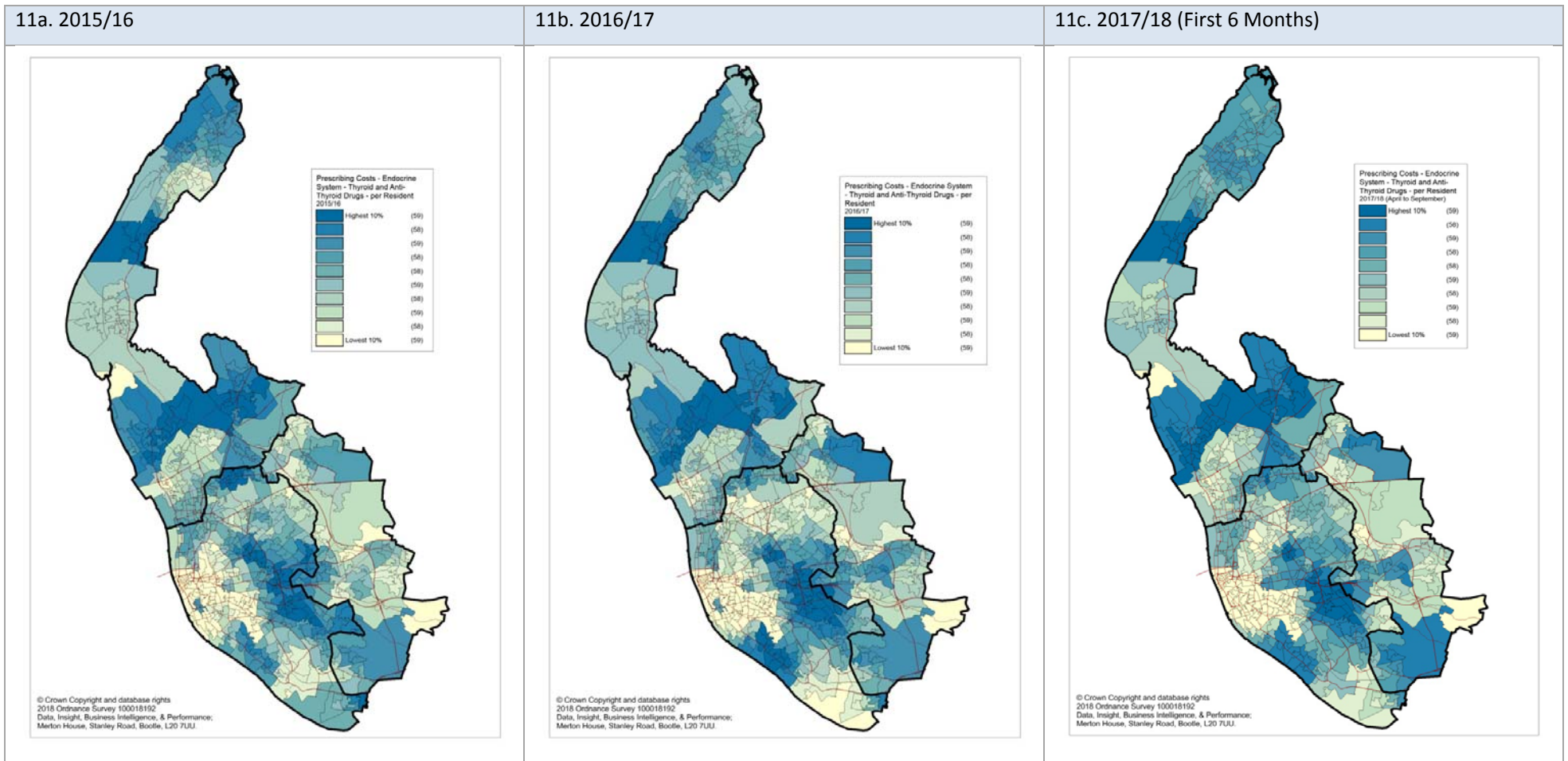




Figure 12. Eye – Treatment of Glaucoma Average Prescribing Cost per Patient Distributed Across LSOAs

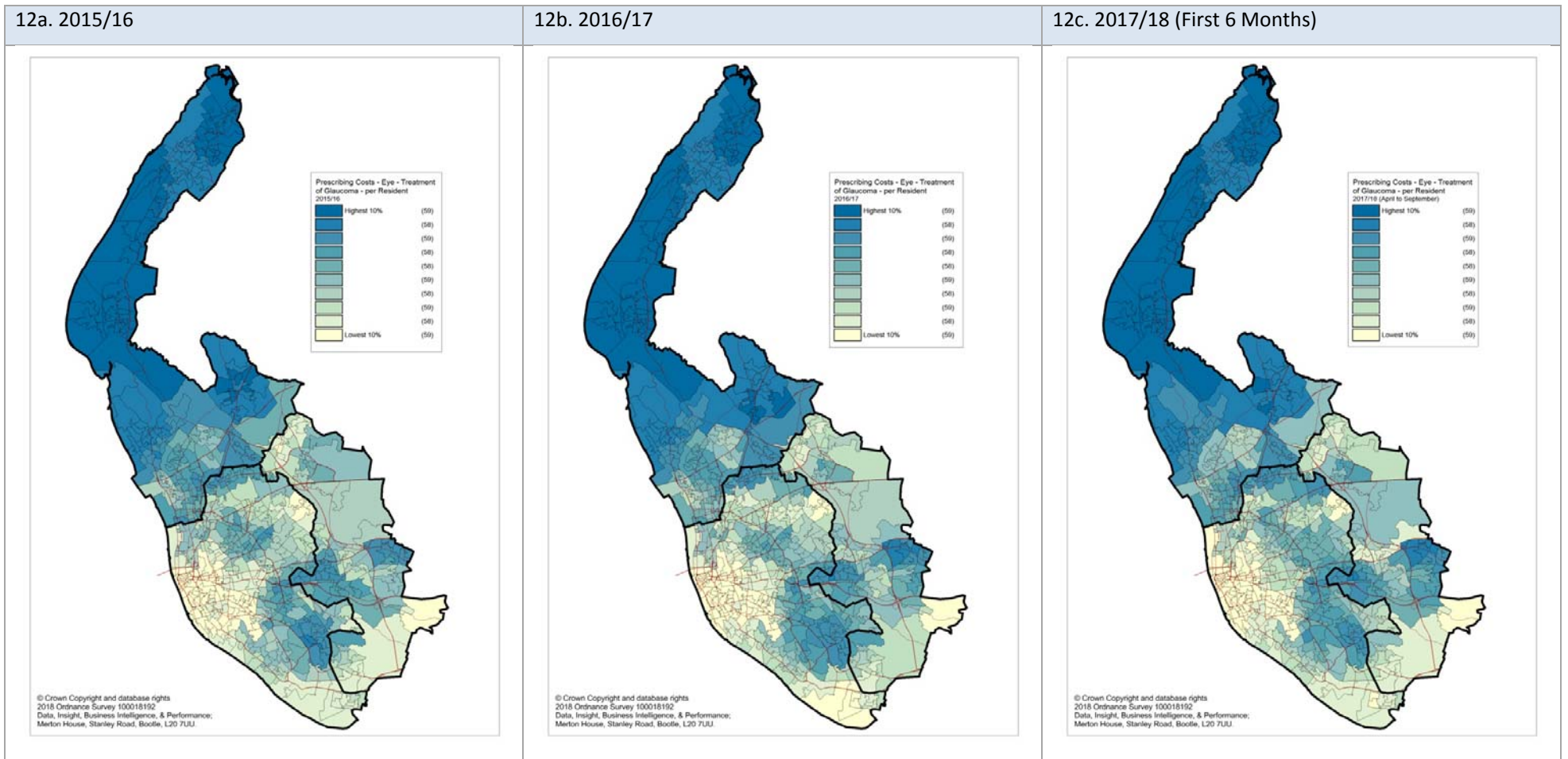


Figure 13. Infections, Antibacterial Drugs – Penicillin Average Prescribing Cost per Patient Distributed Across LSOAs

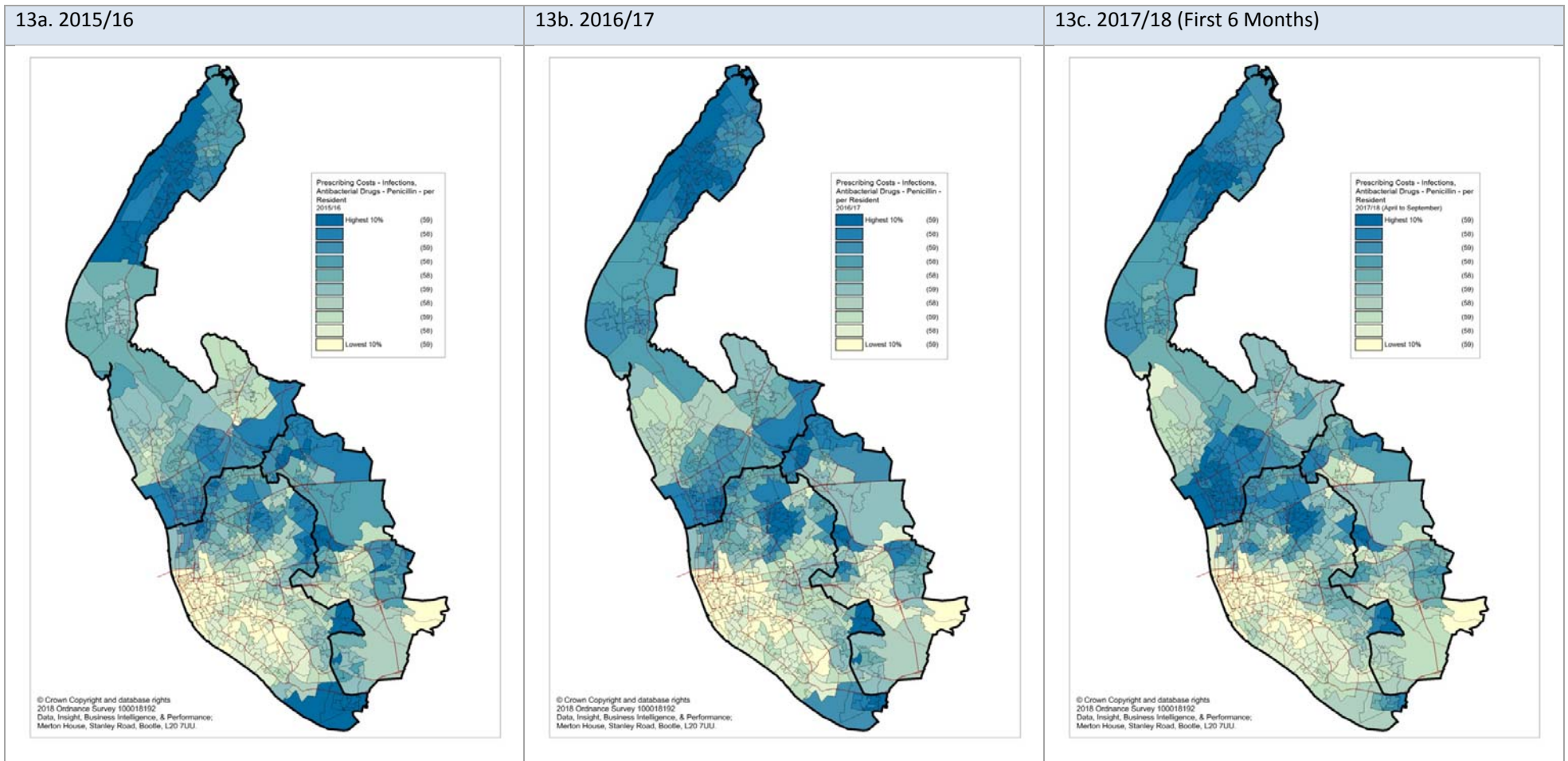


Figure 14. Obstetrics, Gynae & Urinary Tract Disorders – Contraceptive Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

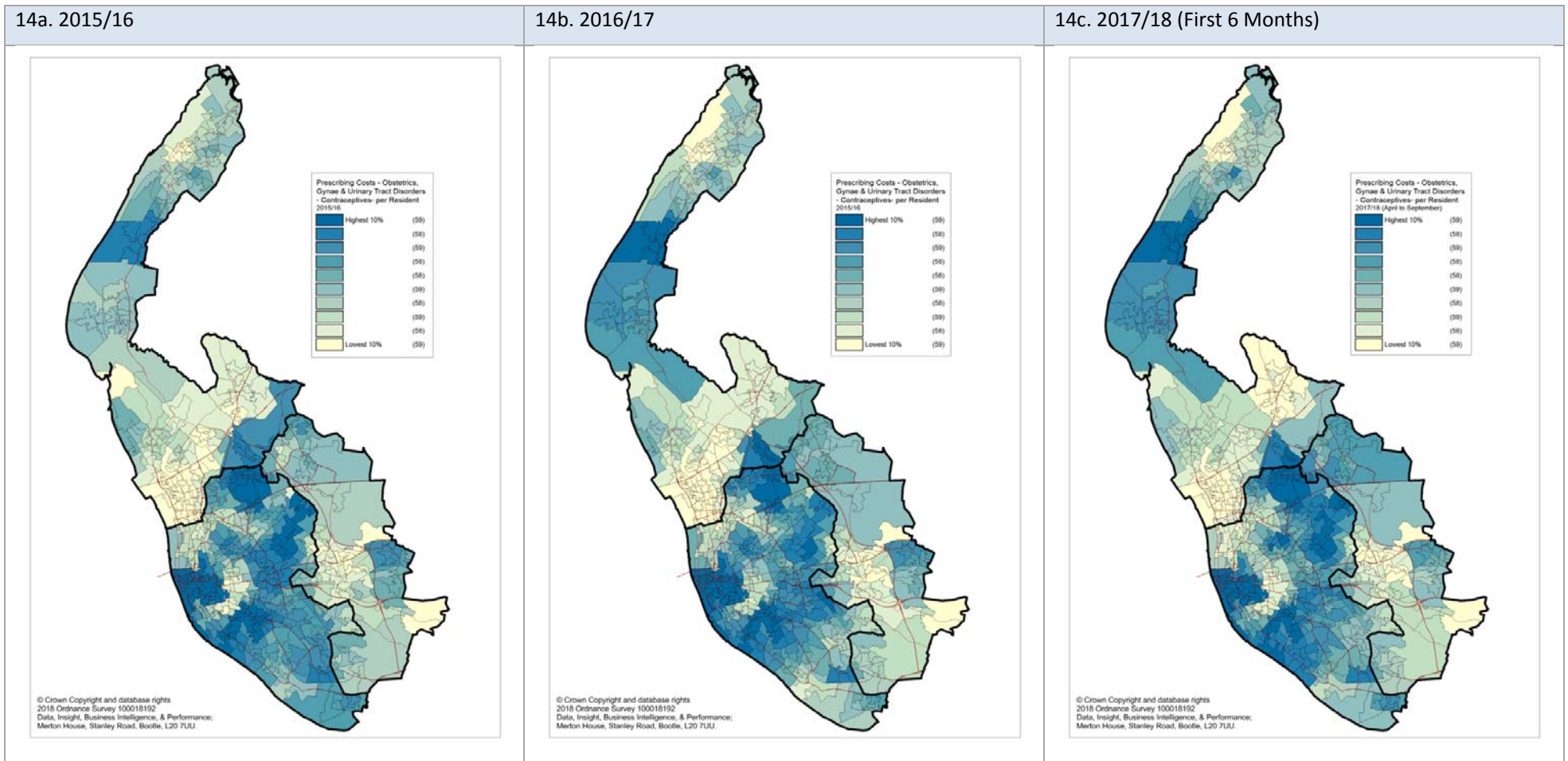


Figure 15. Nutrition & Blood – Total Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

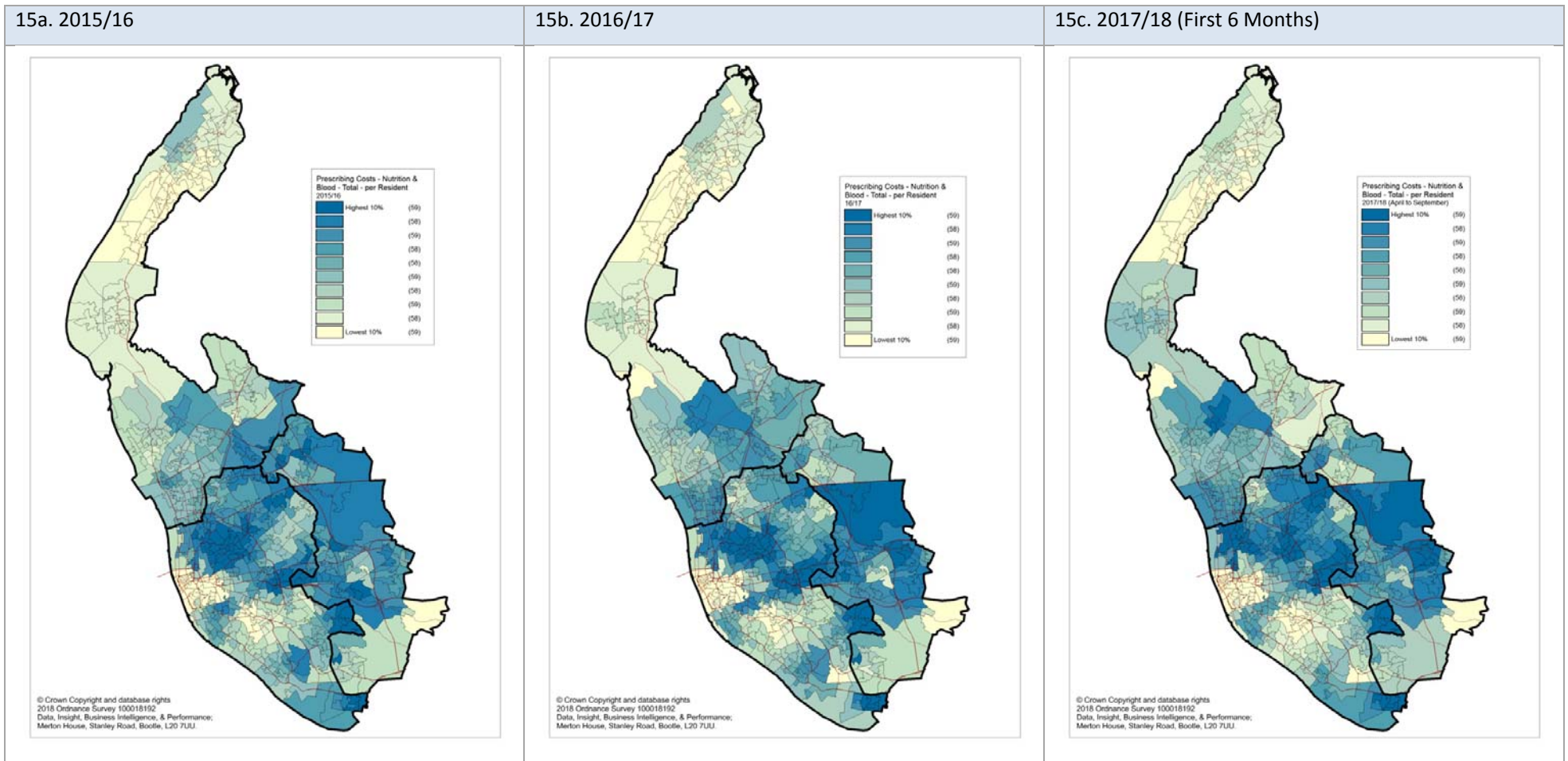


Figure 16. Nutrition & Blood – Vitamin – Vitamin D Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

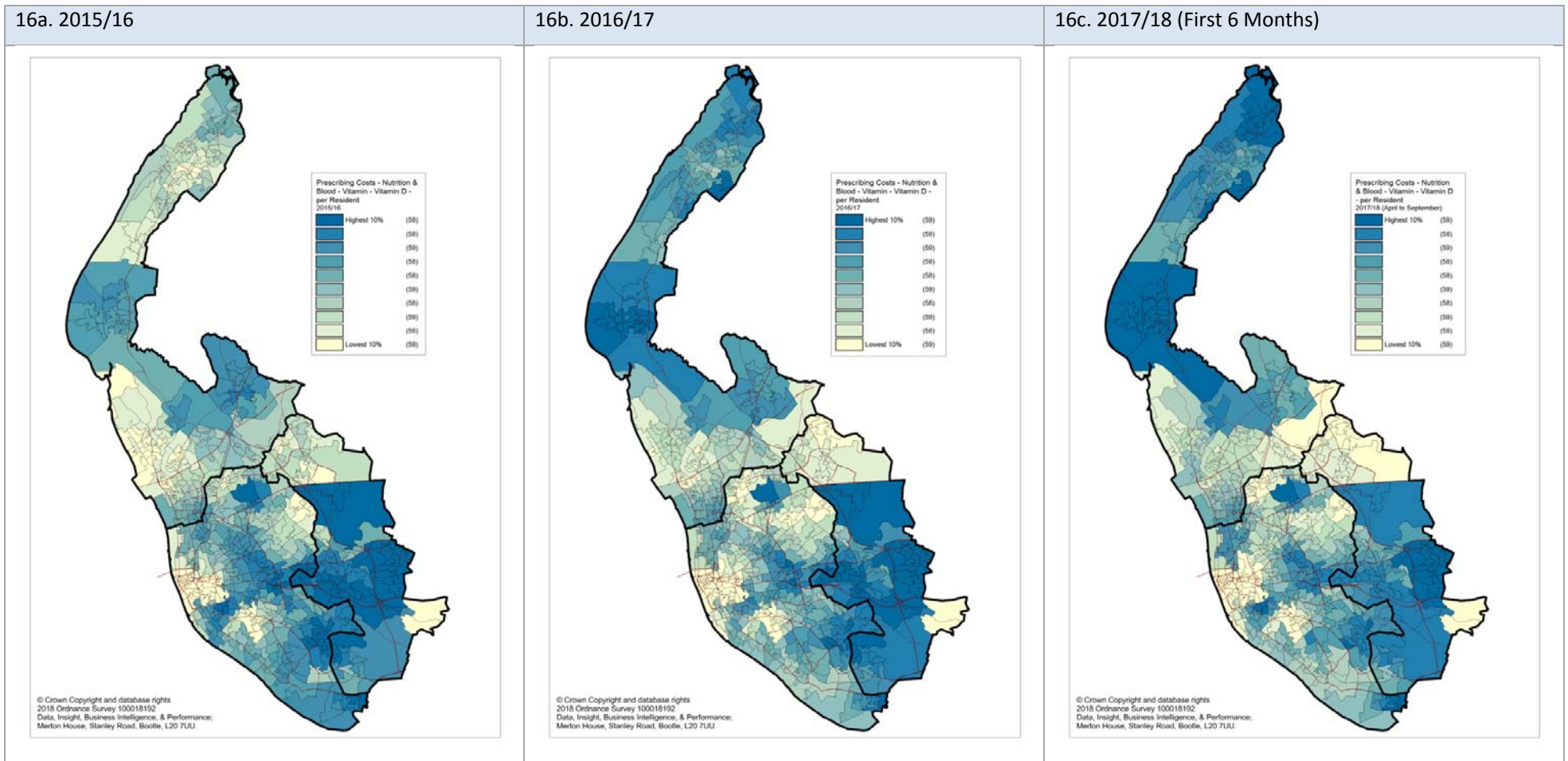


Figure 17. Respiratory System – Total Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

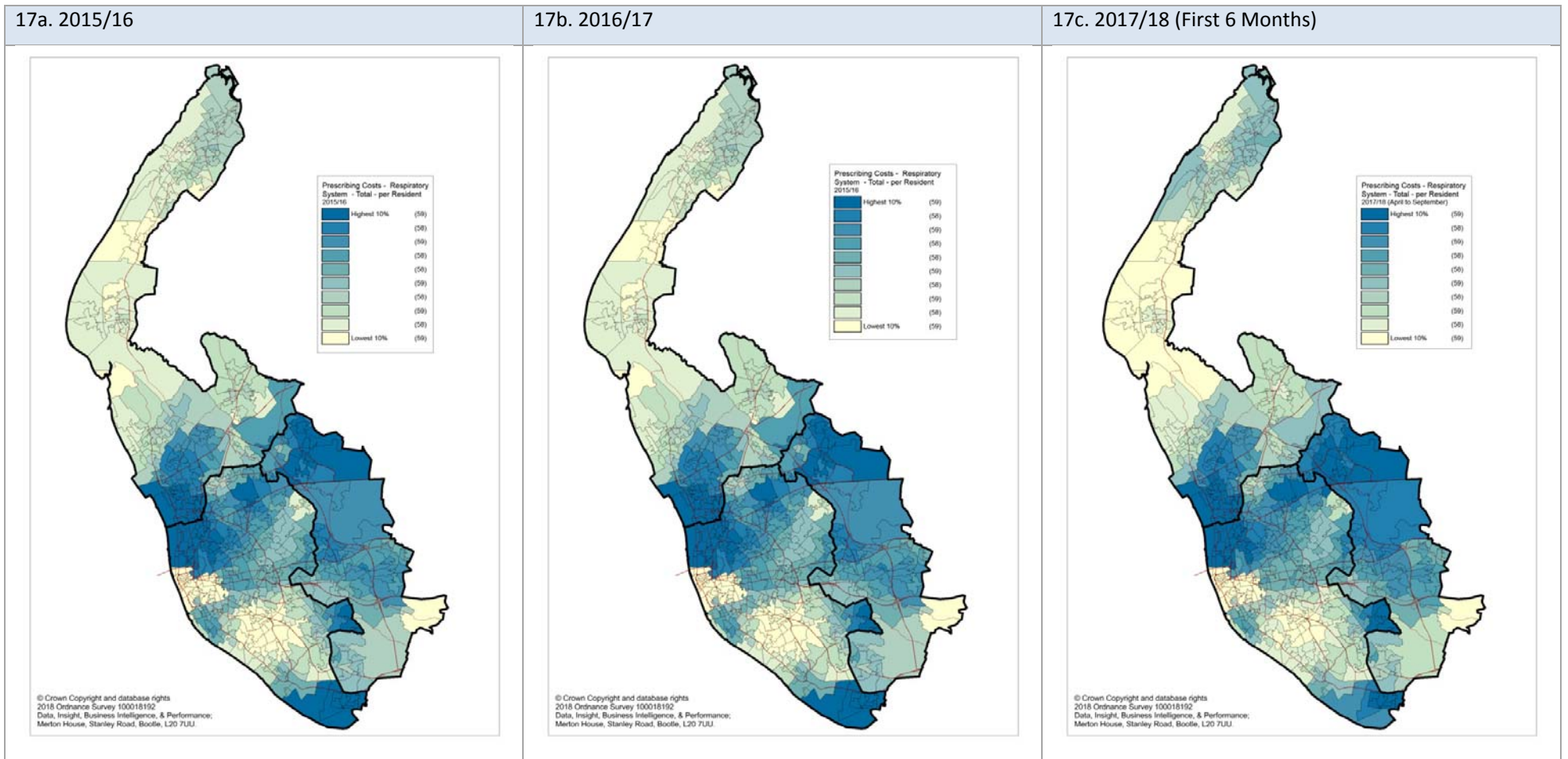


Figure 18. Respiratory System – Bronchodilator Drugs Average Prescribing Cost per Patient Distributed Across LSOAs

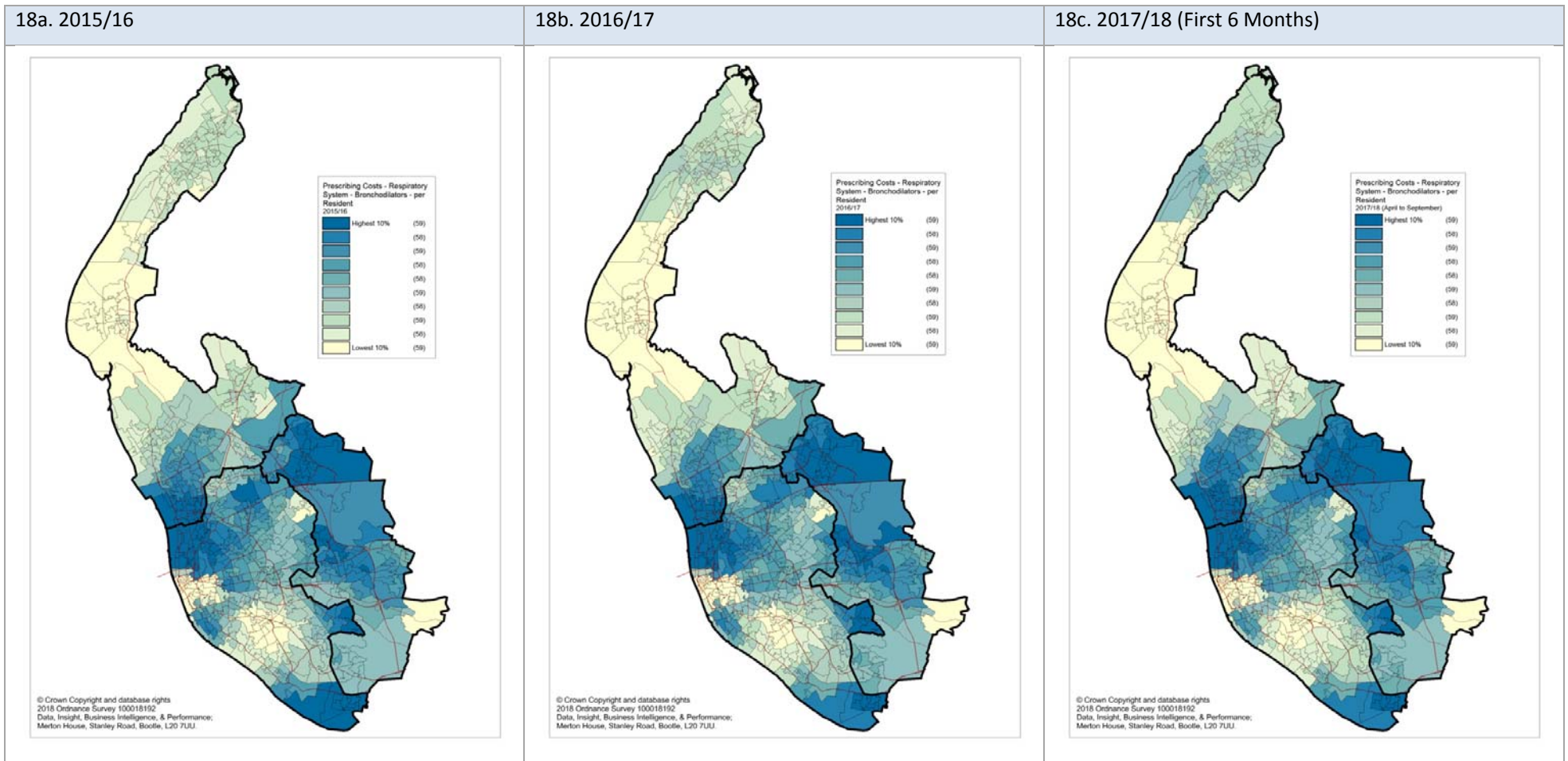
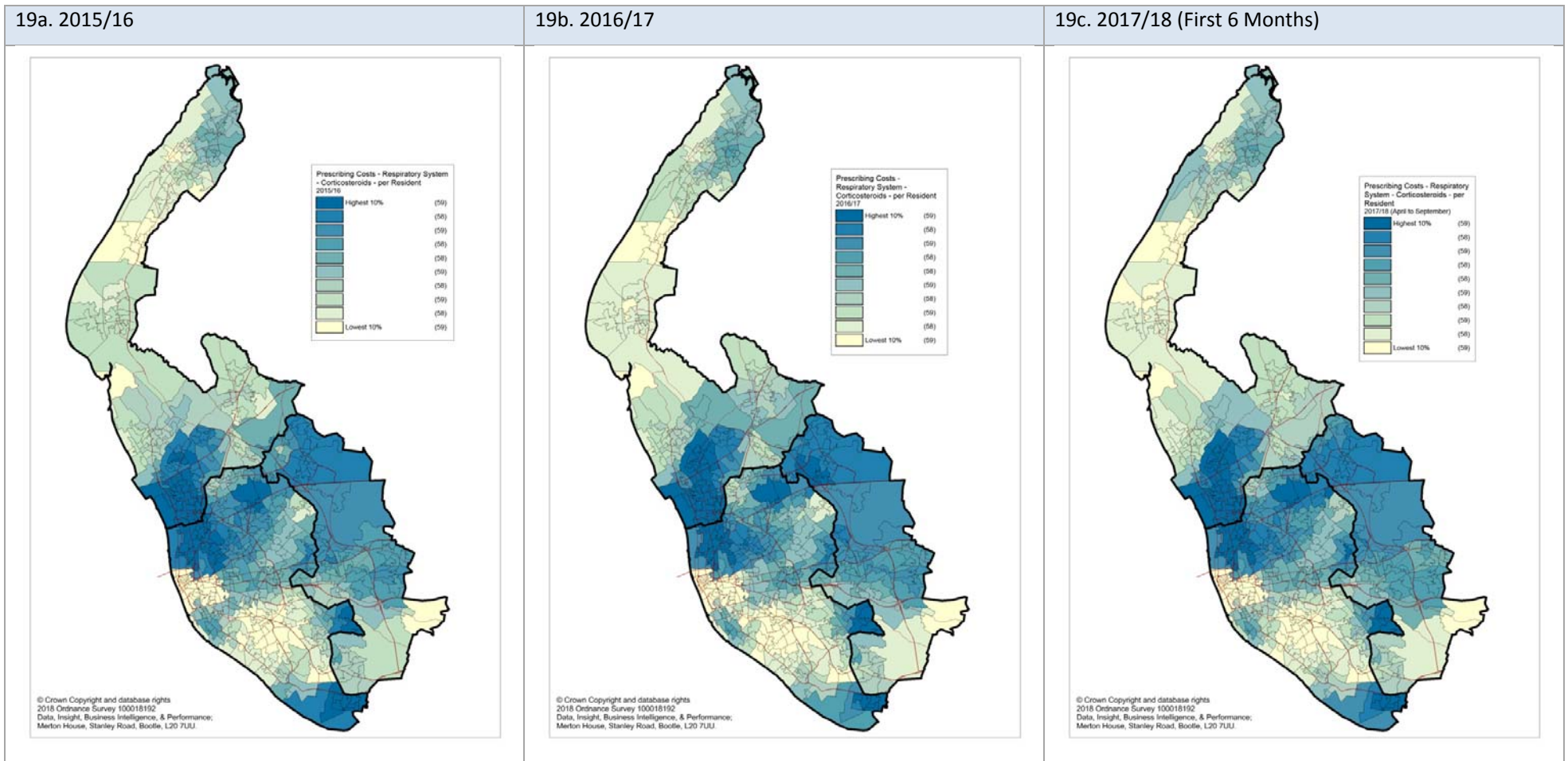


Figure 19. Respiratory System – Corticosteroids Drugs Average Prescribing Cost per Patient Distributed Across LSOAs





## Sources

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**GP Practice Prescribing Costs Data Extract -**

Averaged per Month by Finance Year associated with British National Formulary Categories. Tom Hood (South Sefton CCG) / Tom Roberts (Sefton NHS)

**Numbers of Patients Registered at a GP Practice: LSOA Level (April Snapshots)**

<https://data.gov.uk/dataset/numbers-of-patients-registered-at-a-gp-practice-lsoa-level>