



NHS Data Analysis Results

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CONTENT

1. Background and context
2. Key insights
3. Recommendations

BACKGROUND AND CONTEXT

The analysis covered a 30-month reporting period from 01/2020 to 06/2022

Includes 3 datasets provided by the NHS for appointment data and X (Twitter) data

Additional data for a comprehensive analysis

IMPORTANT TIME FRAME

MARCH 2020	COVID 19's First Lockdown
DECEMBER 2020	Start of Vaccination Program
NOVEMBER 2021	OMICRON Variant
MARCH 2022	End of COVID-19 restrictions; NHS continuing routine care services
JULY 2022	NHS restructuring; changed to the Integrated Care Board, replacing the CCGs

DATA LIMITATIONS

- The supplied files spanned various periods and metrics, with formats ranging from daily to monthly views.
- While the supplementary data came from trustworthy sources, the results derived from these points should be interpreted with care.
- All files used in the analysis underwent thorough cleaning to ensure accuracy.

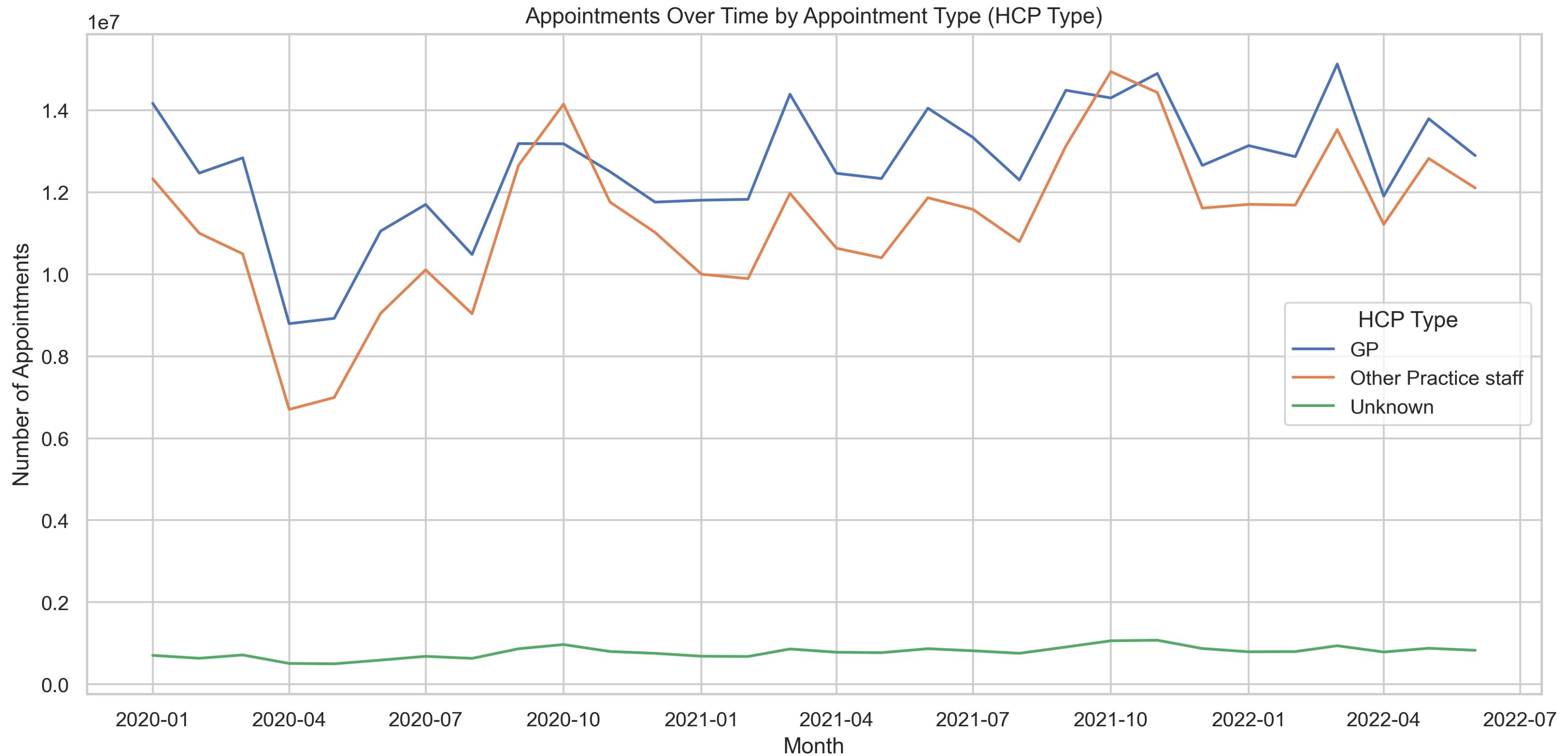
Two main questions posed by the NHS are:

Has there been adequate staff and capacity in the networks?

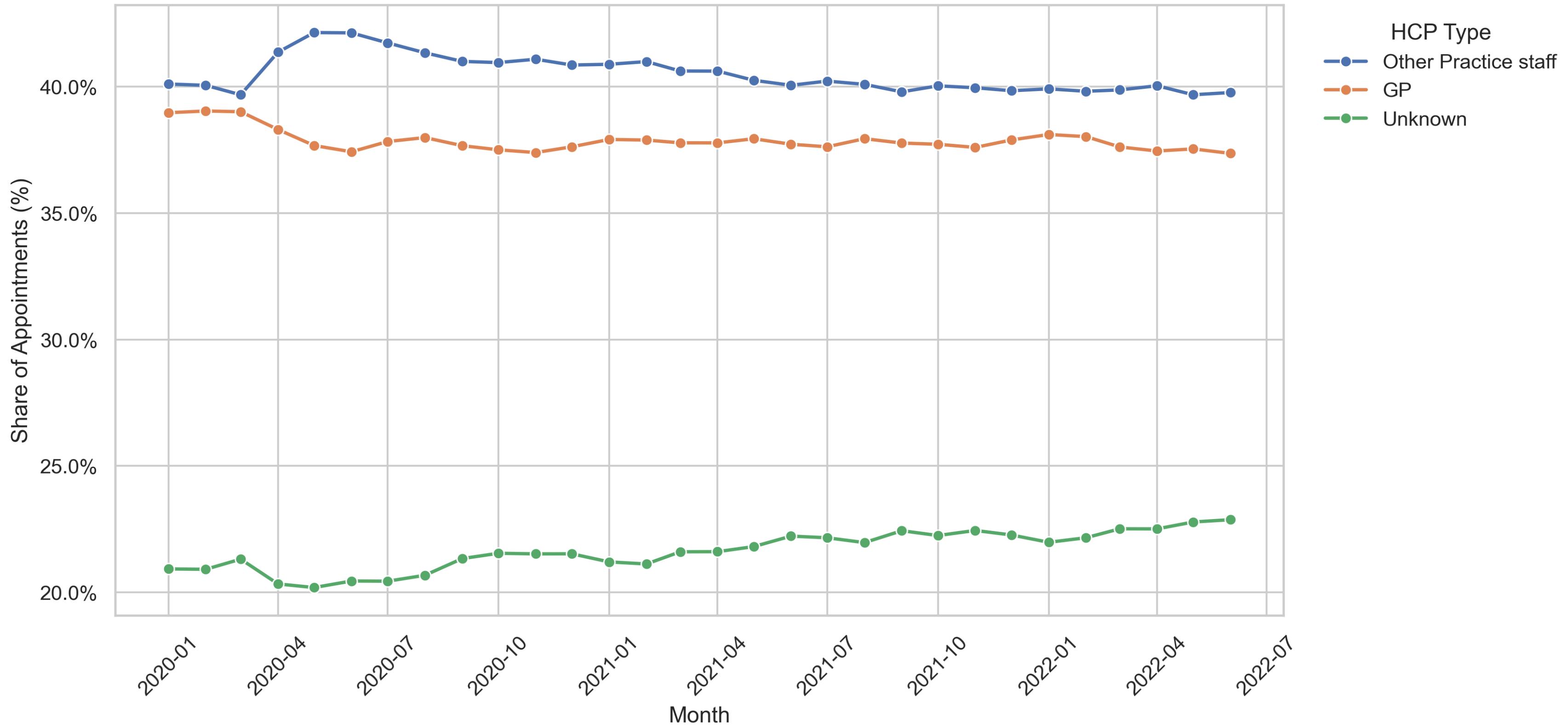
What was the actual utilisation of resources?

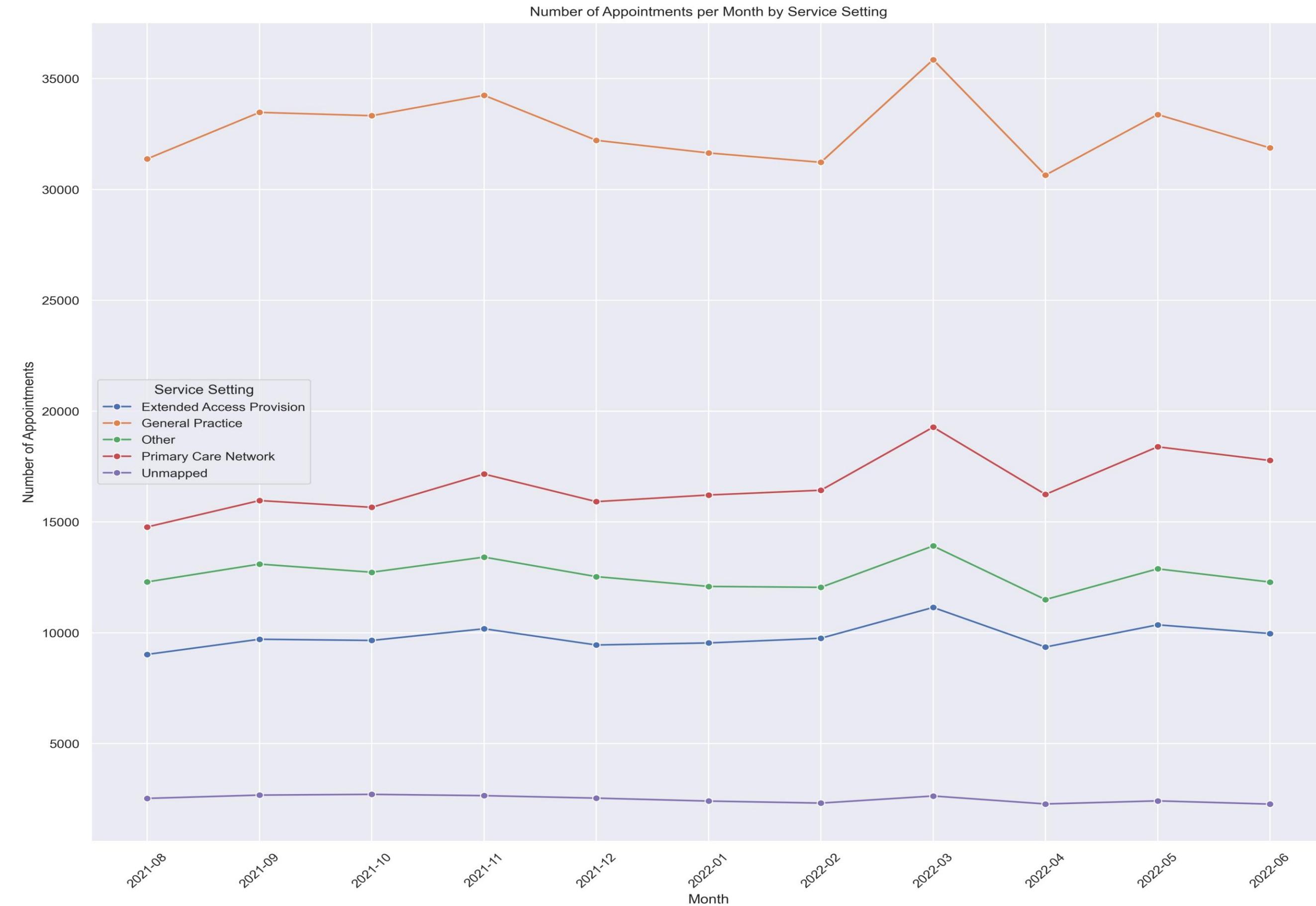
Q1

Has there been adequate staff and capacity in the networks?

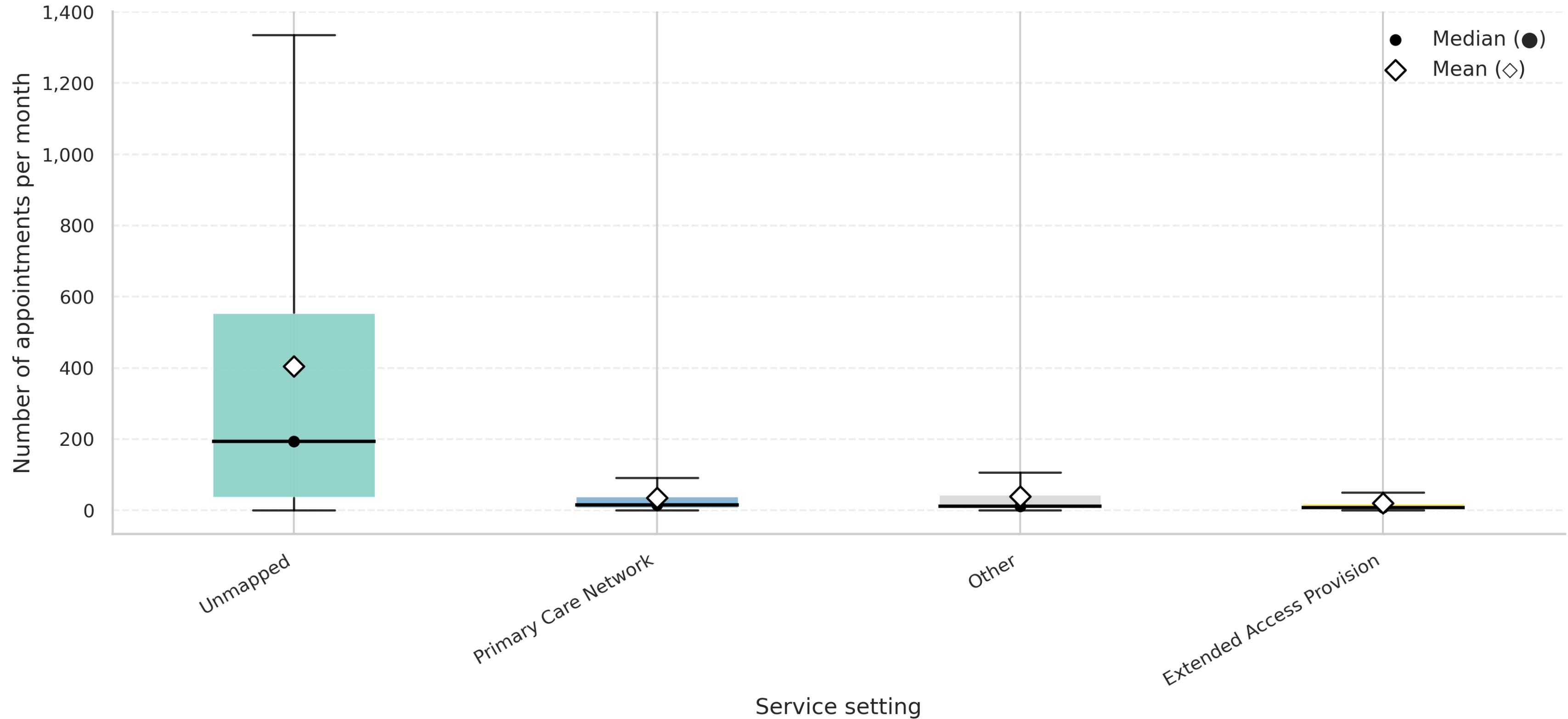


Healthcare Professional Types Over Time — Share of Monthly Appointments

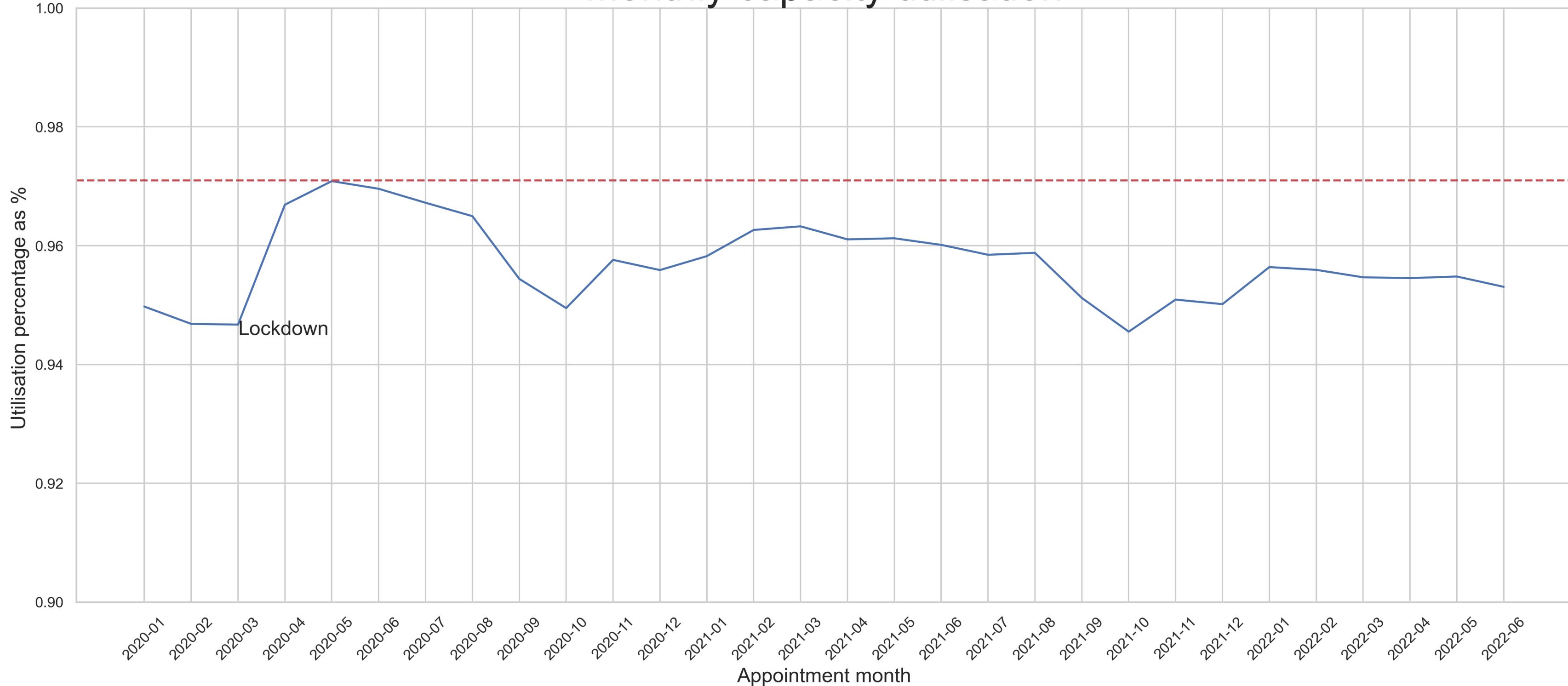




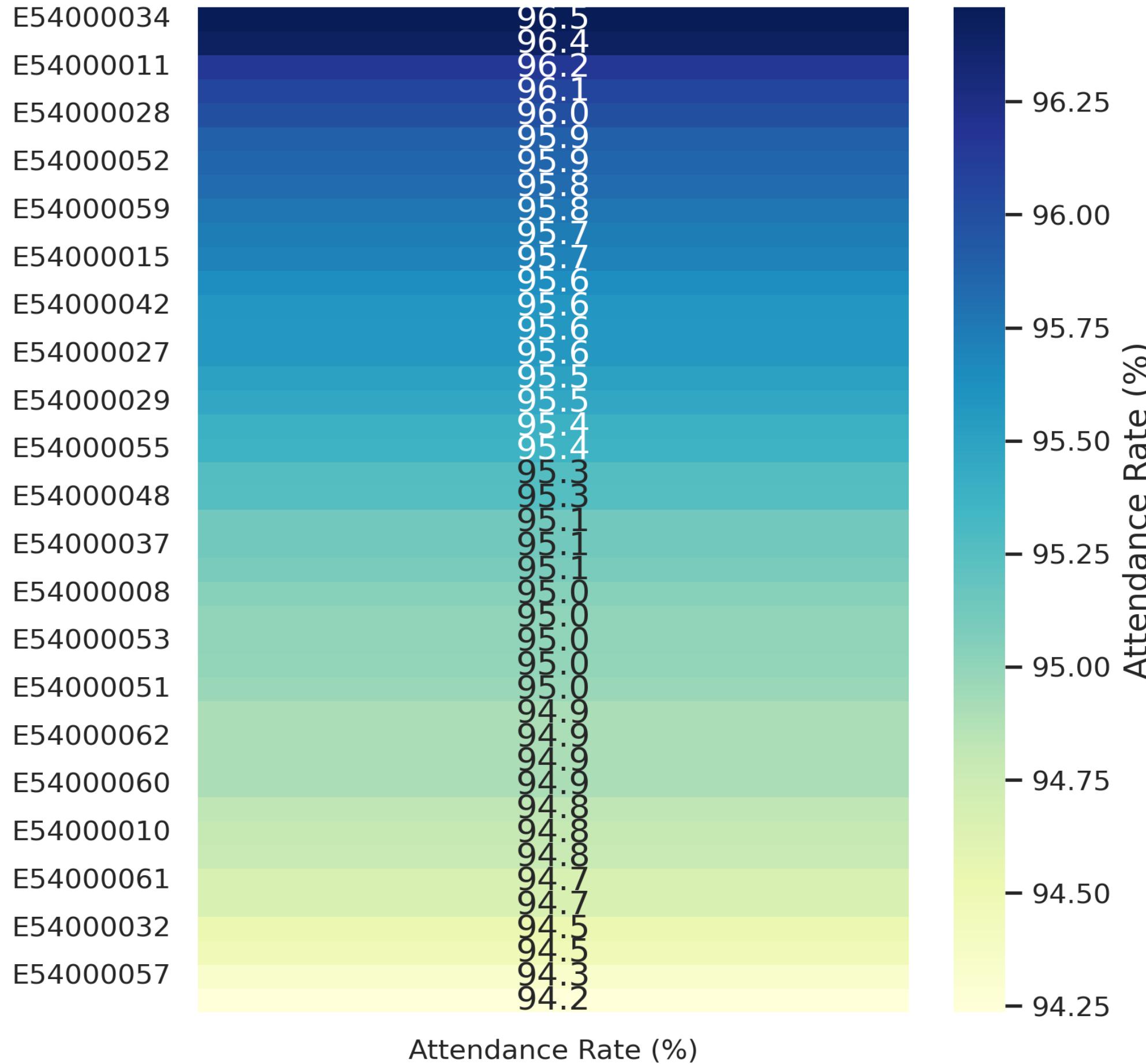
Appointments by Service Setting — Distribution per Month (Excluding GP)



Monthly capacity utilisation



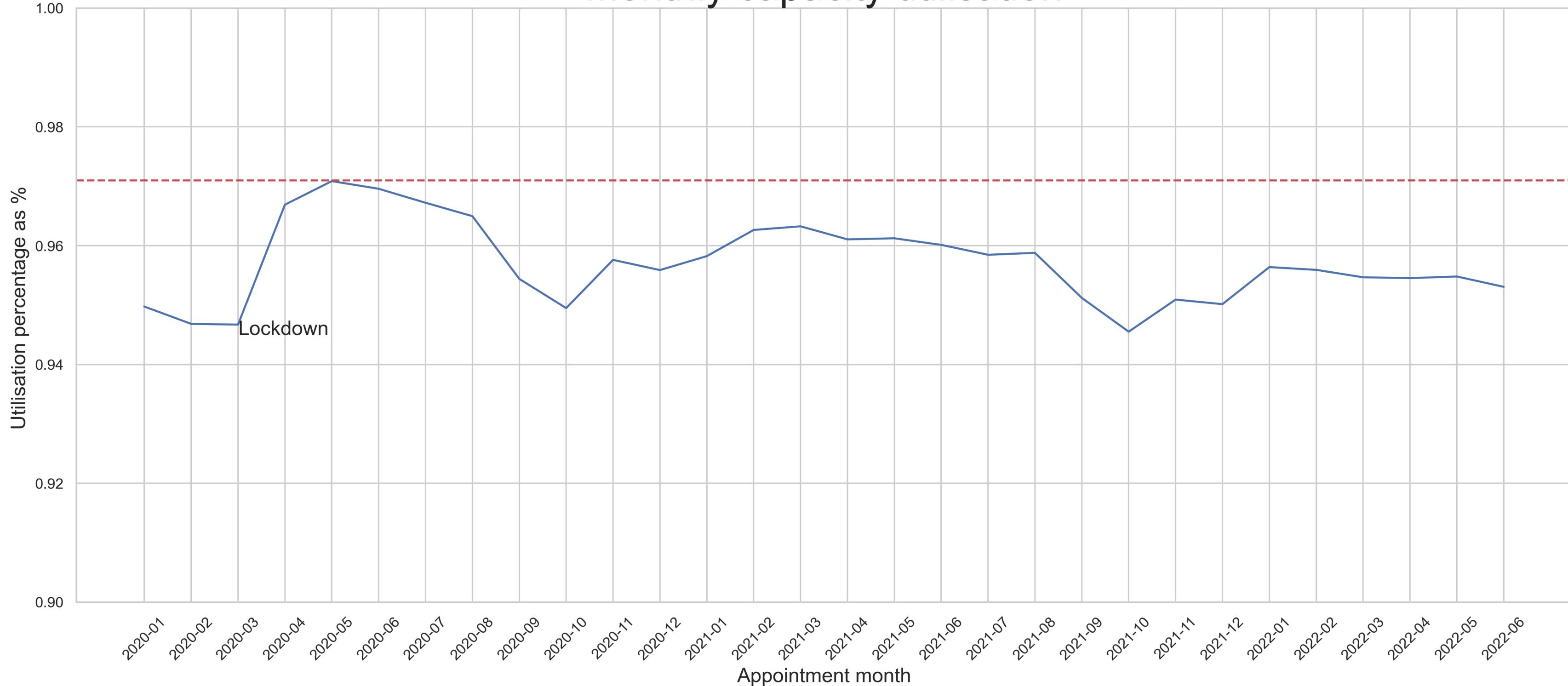
Regional Attendance Rate (ICB ONS)

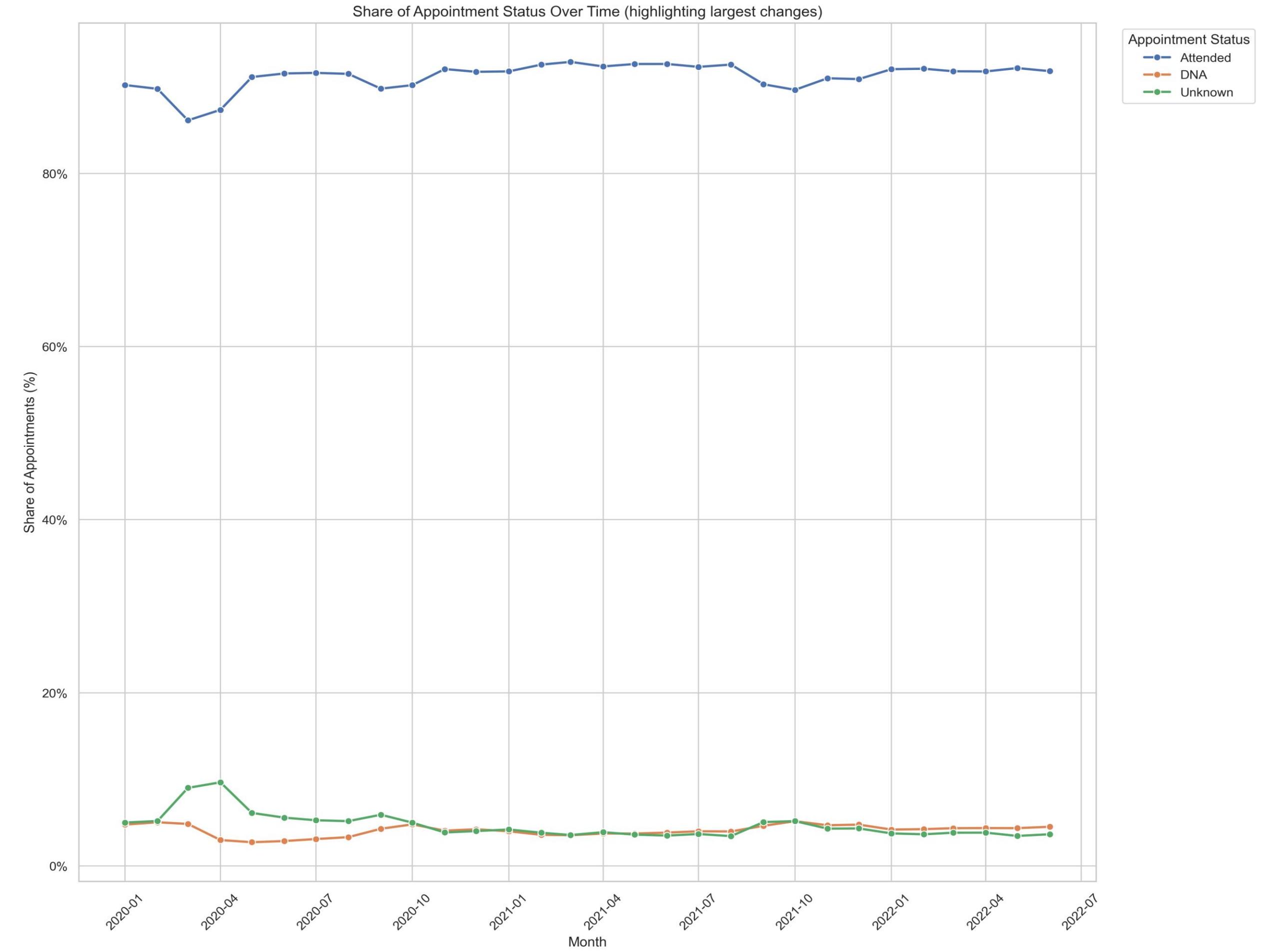


Q2

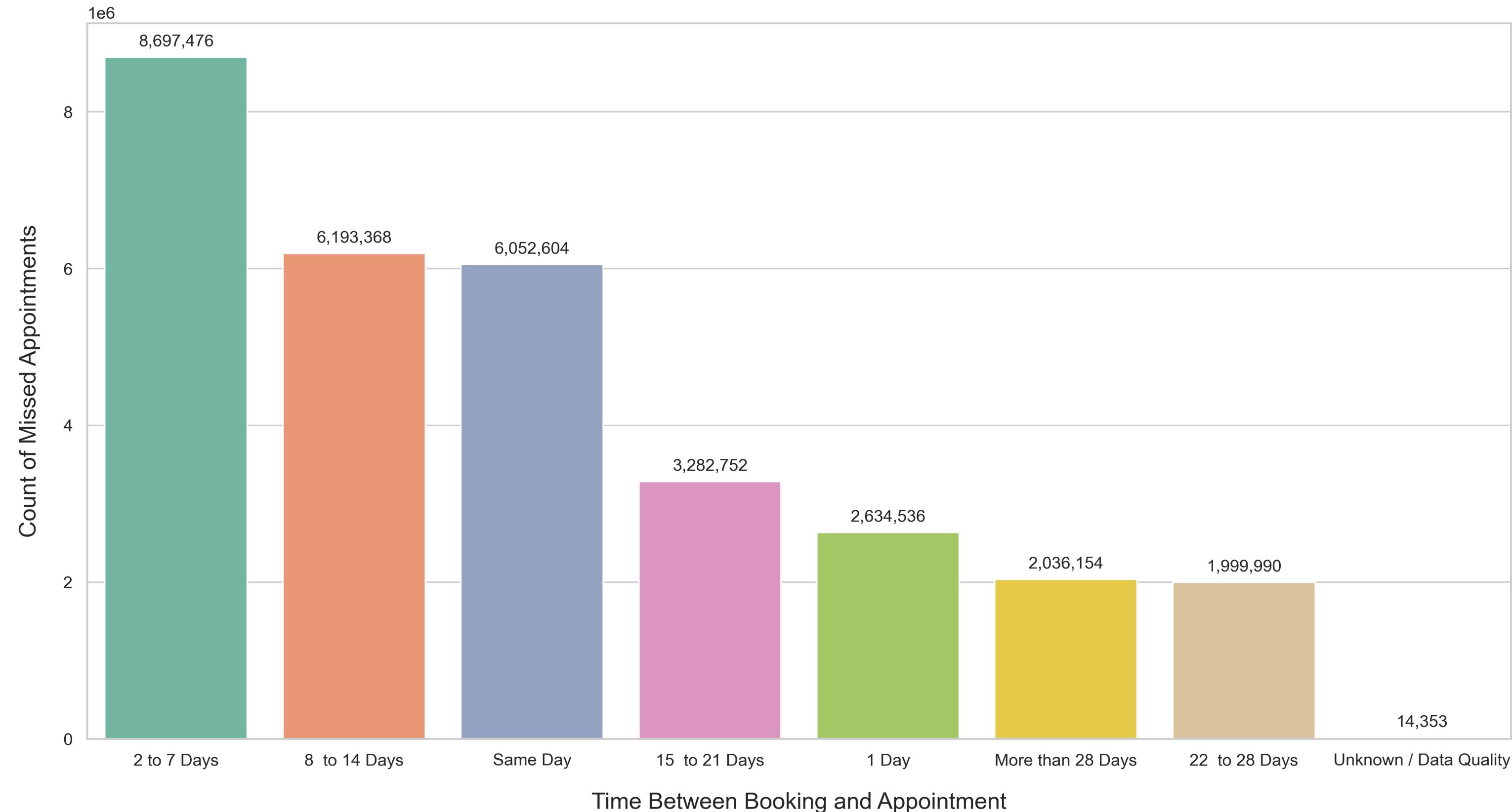
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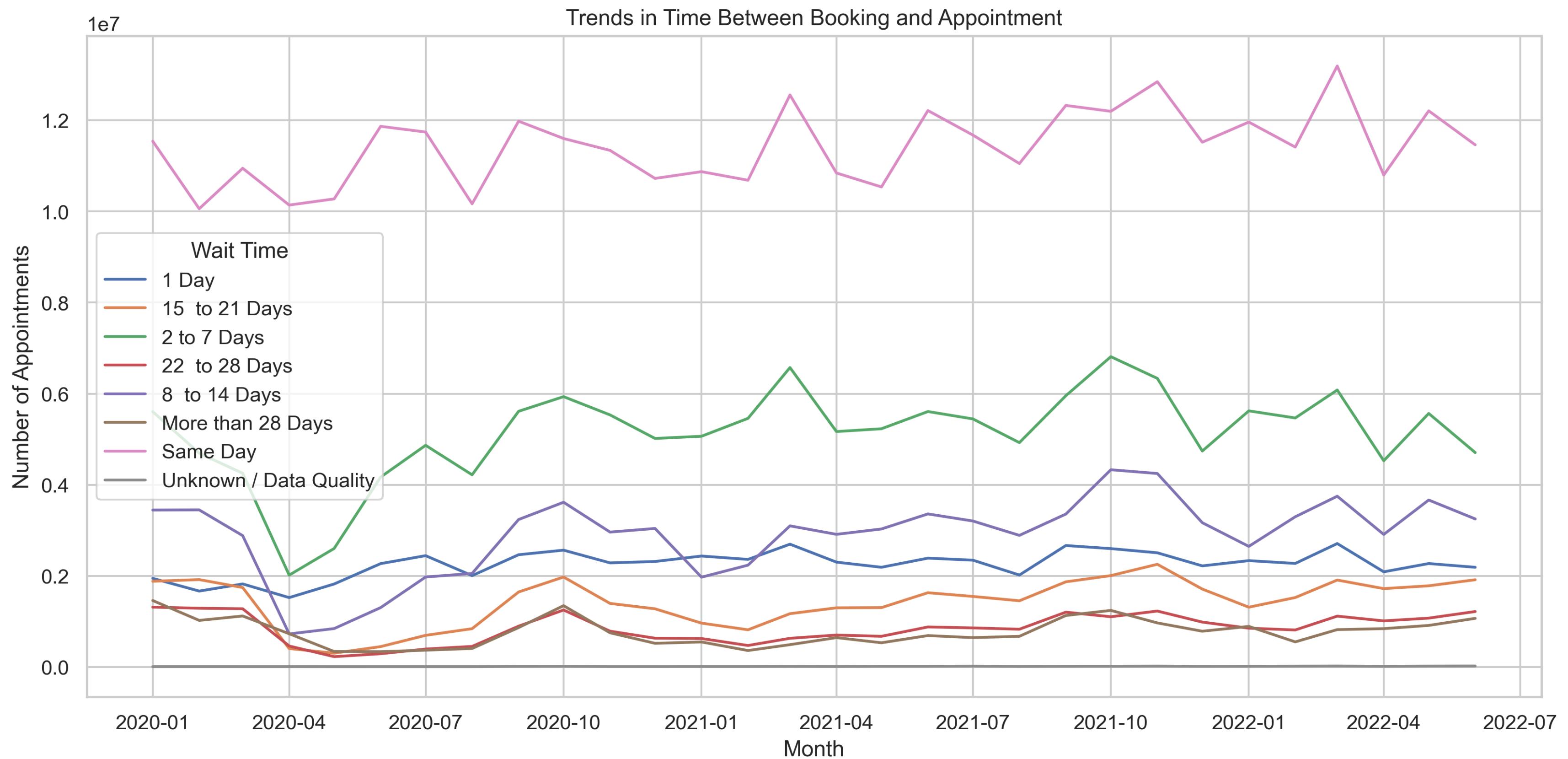
Monthly capacity utilisation

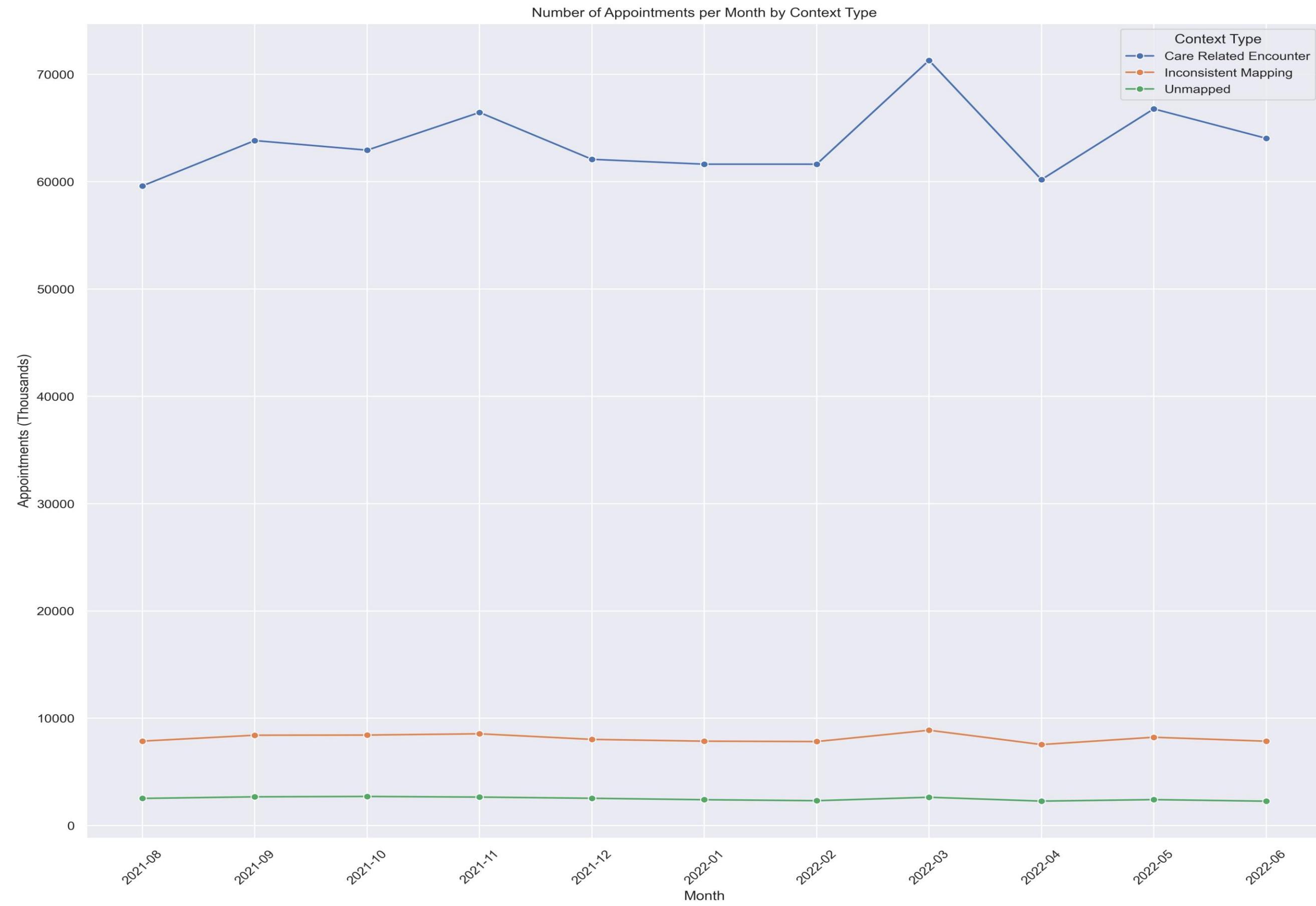


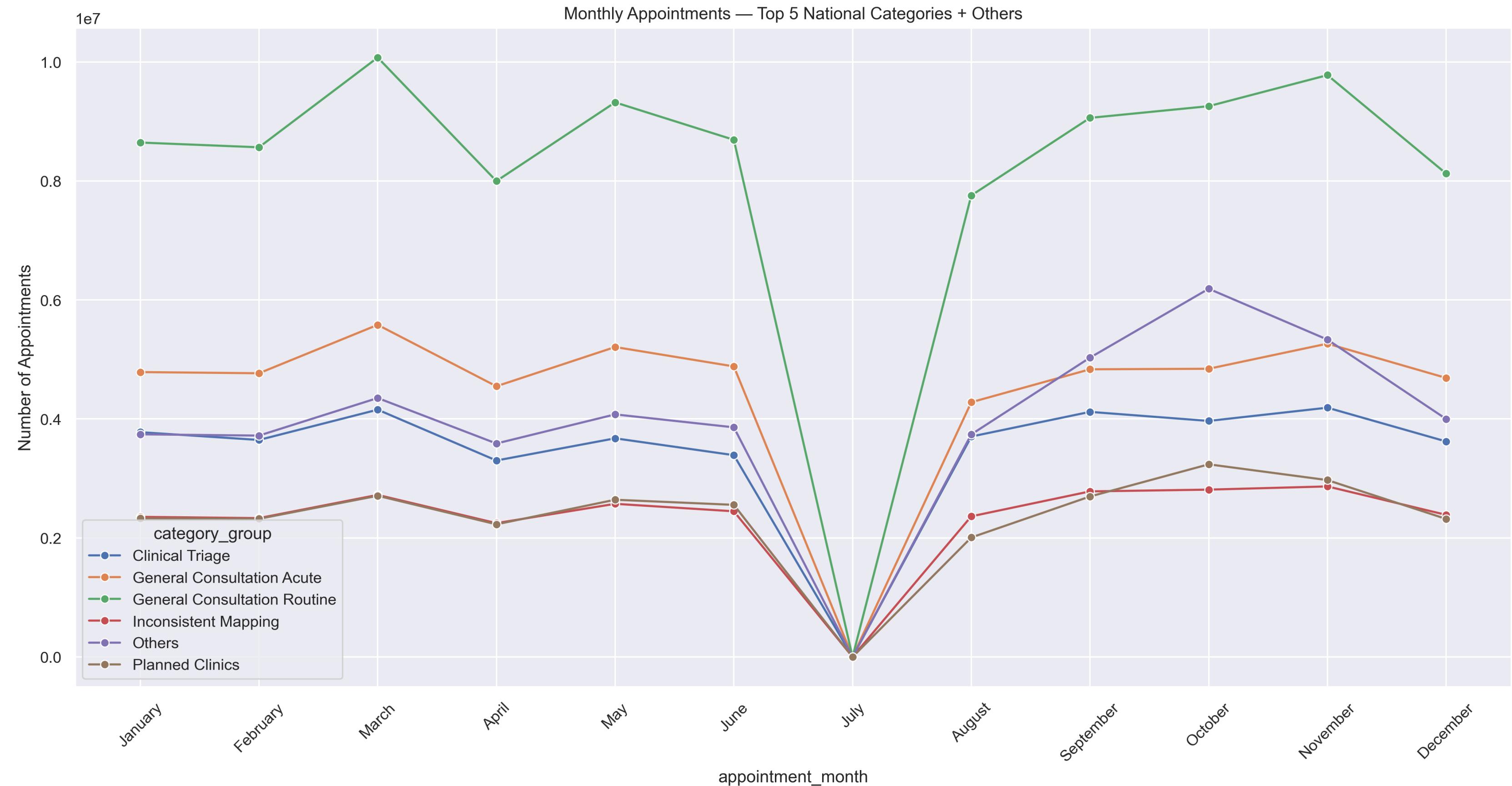


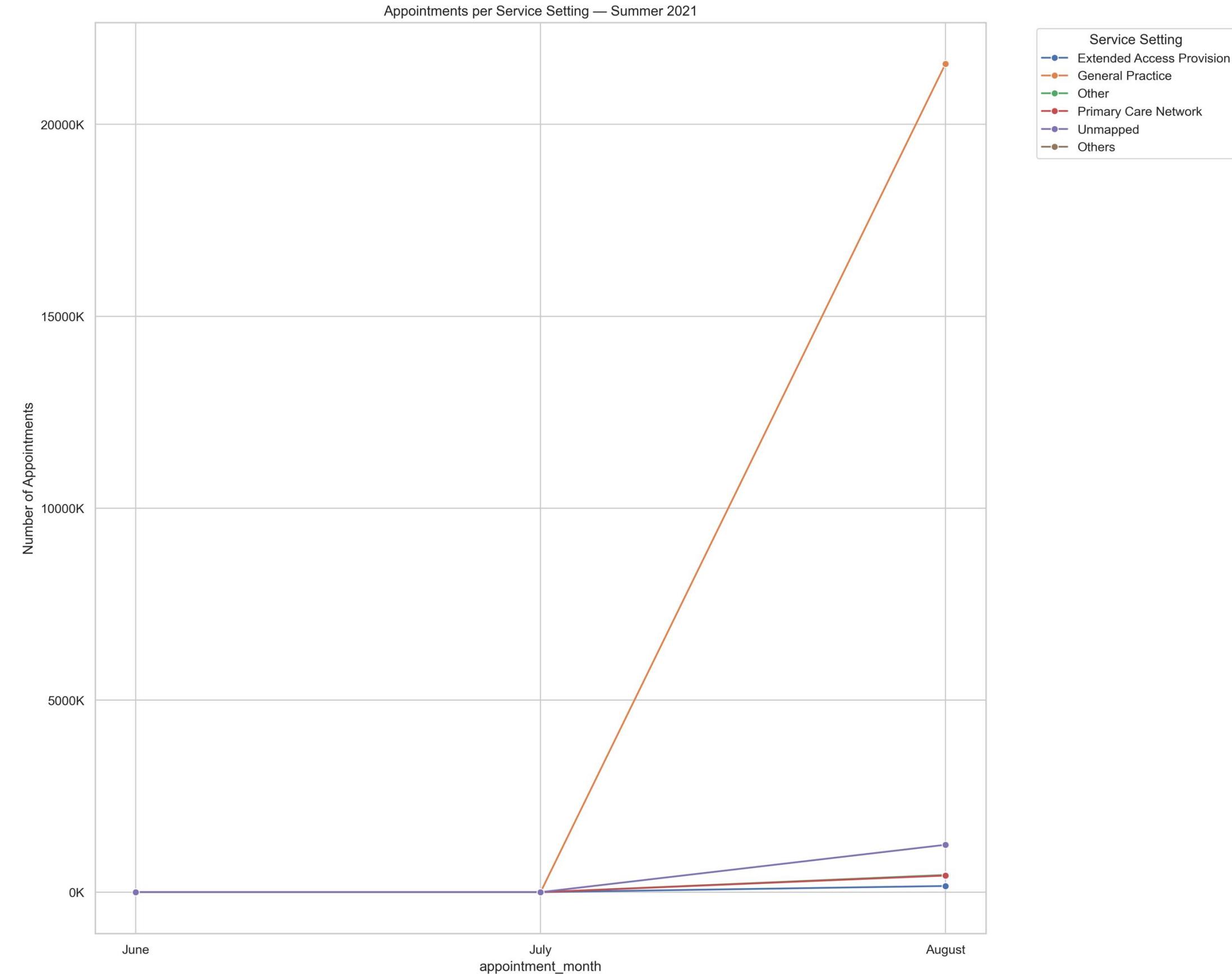
Missed Appointments by Booking Lead Time



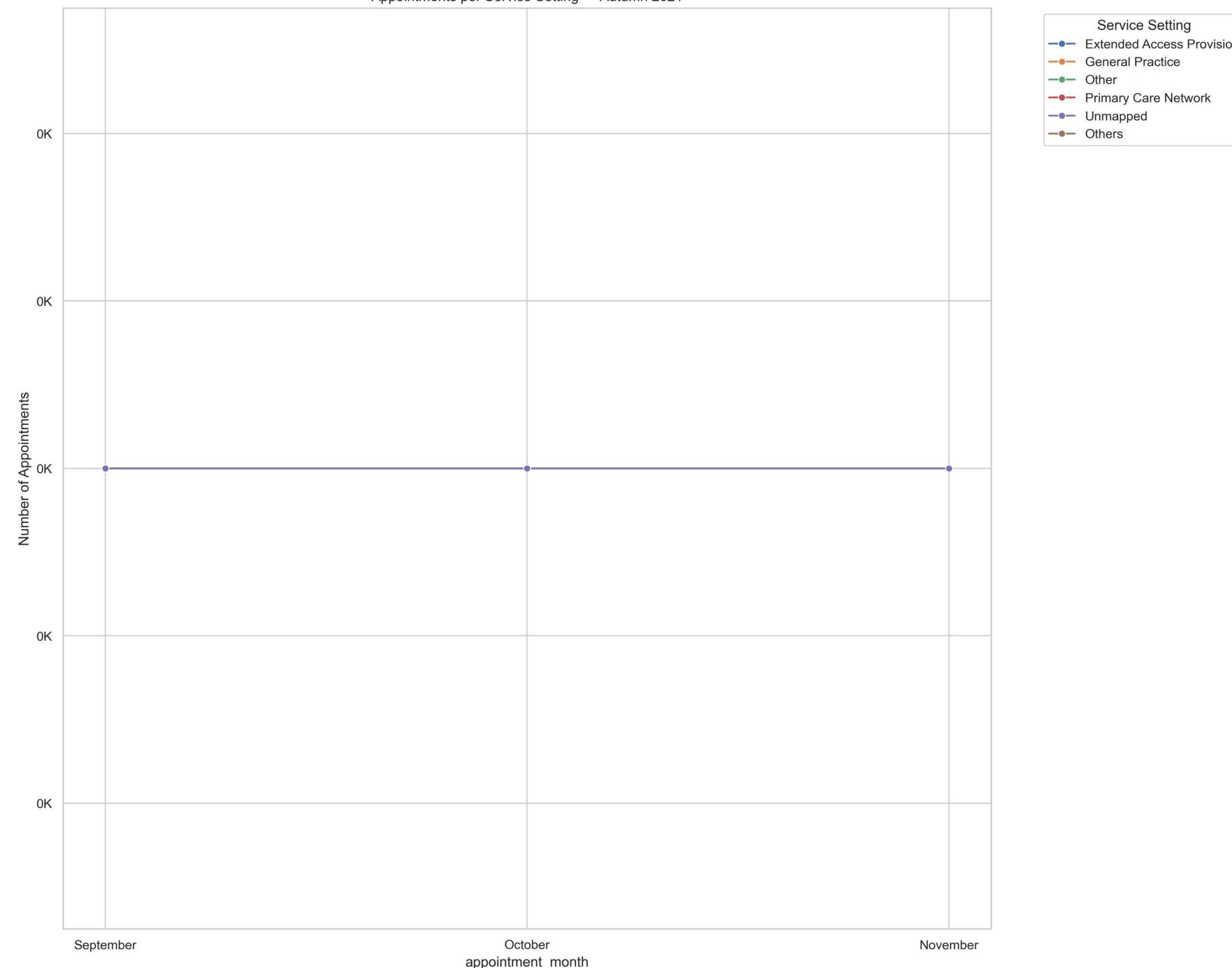


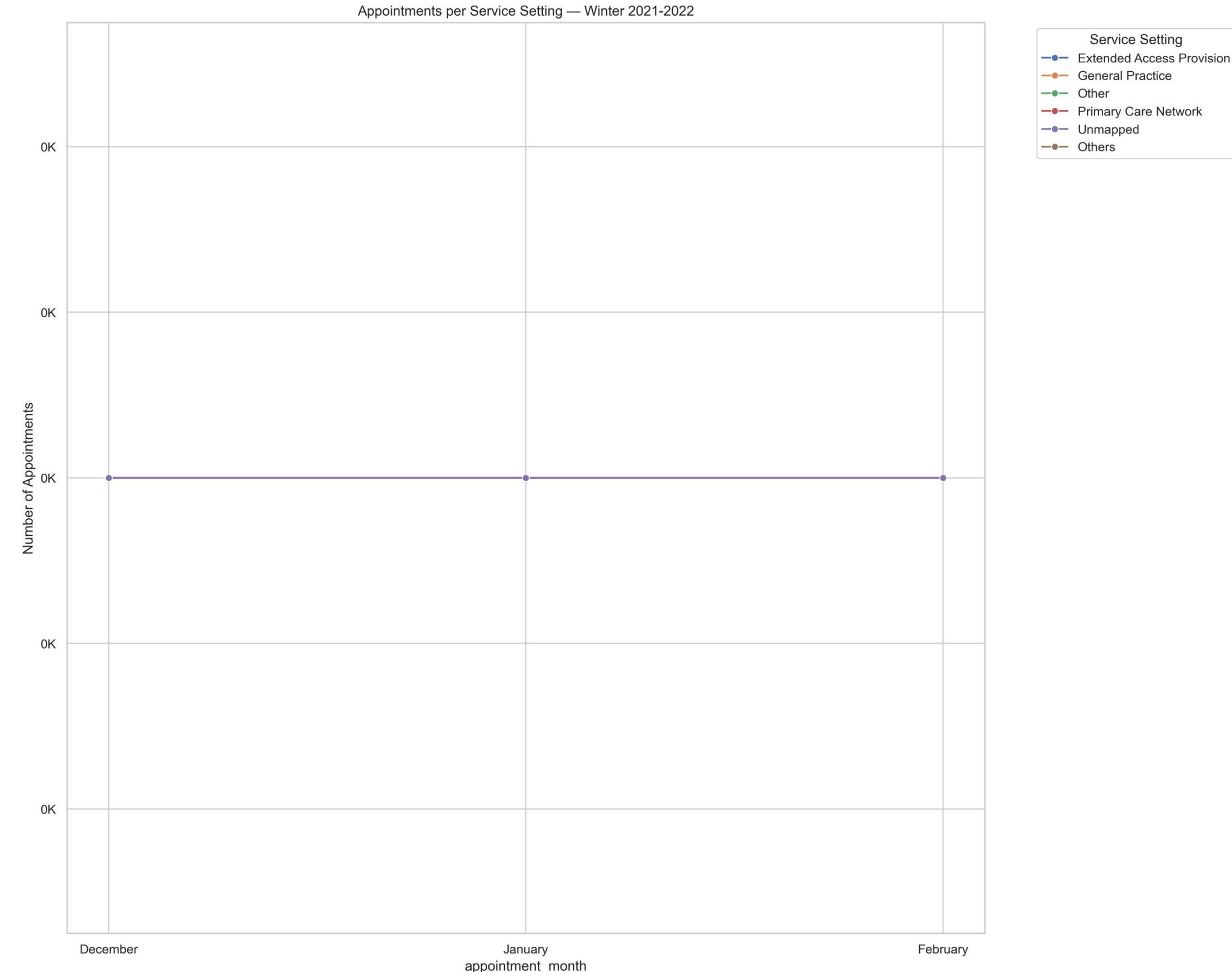


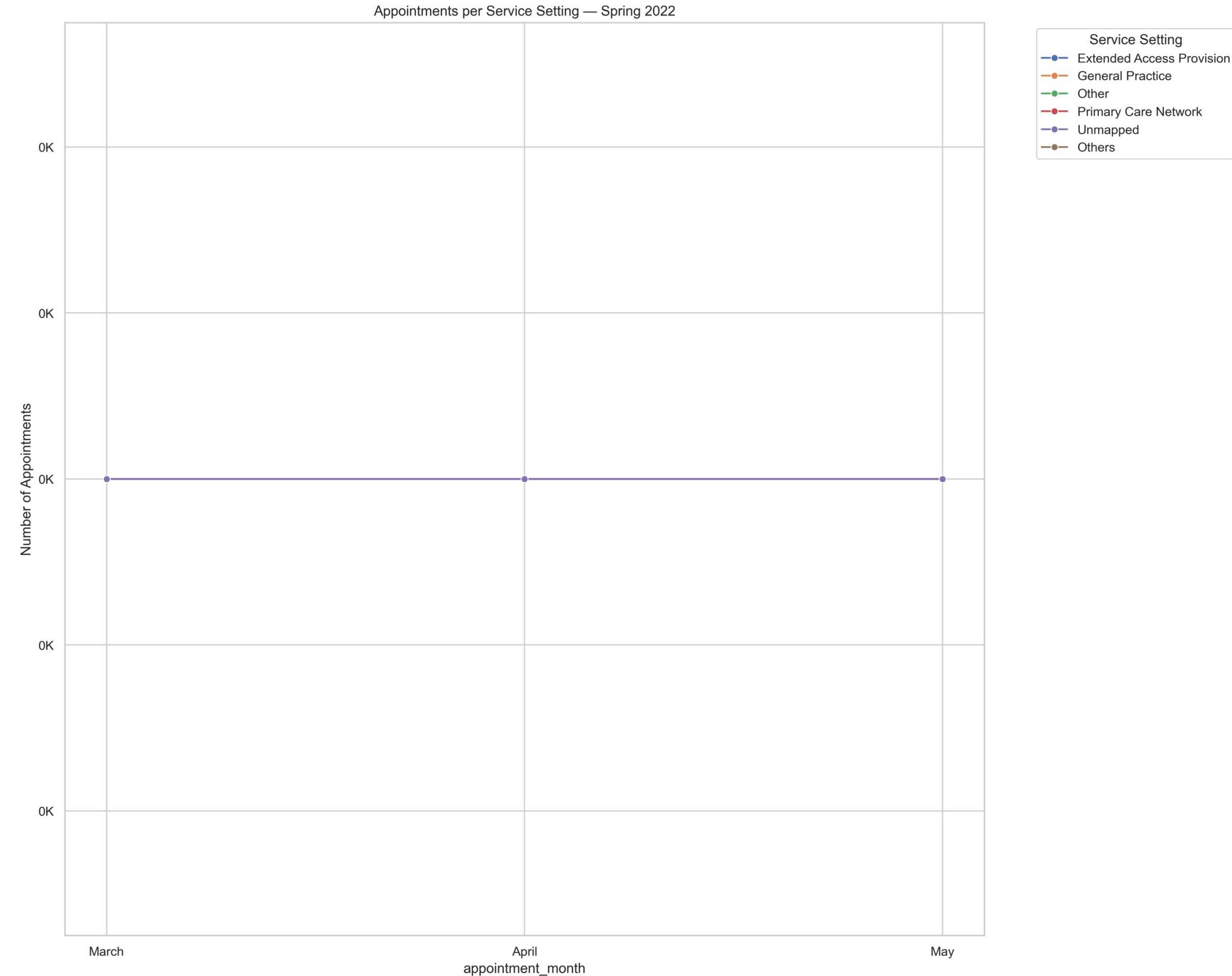


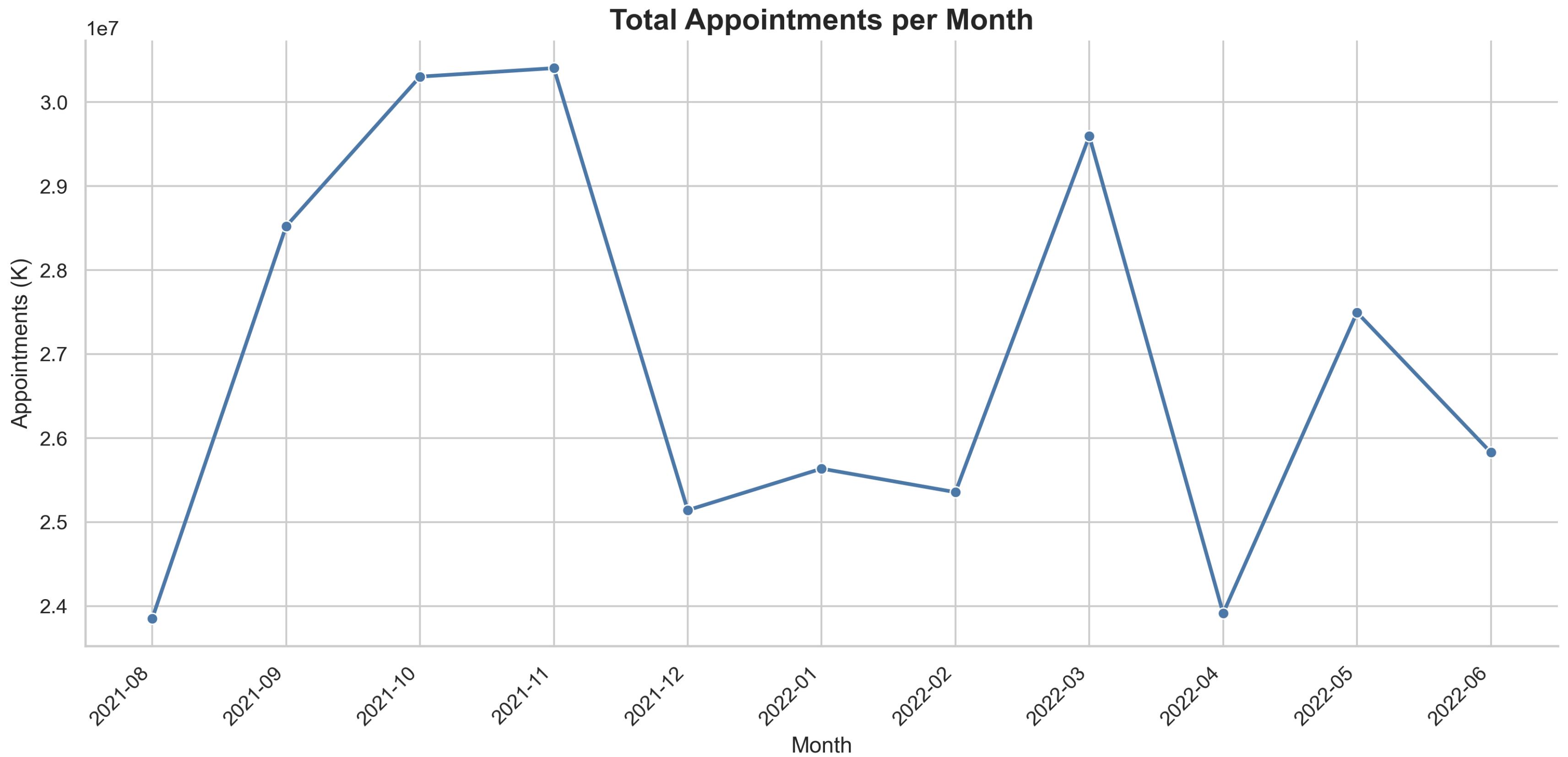


Appointments per Service Setting — Autumn 2021

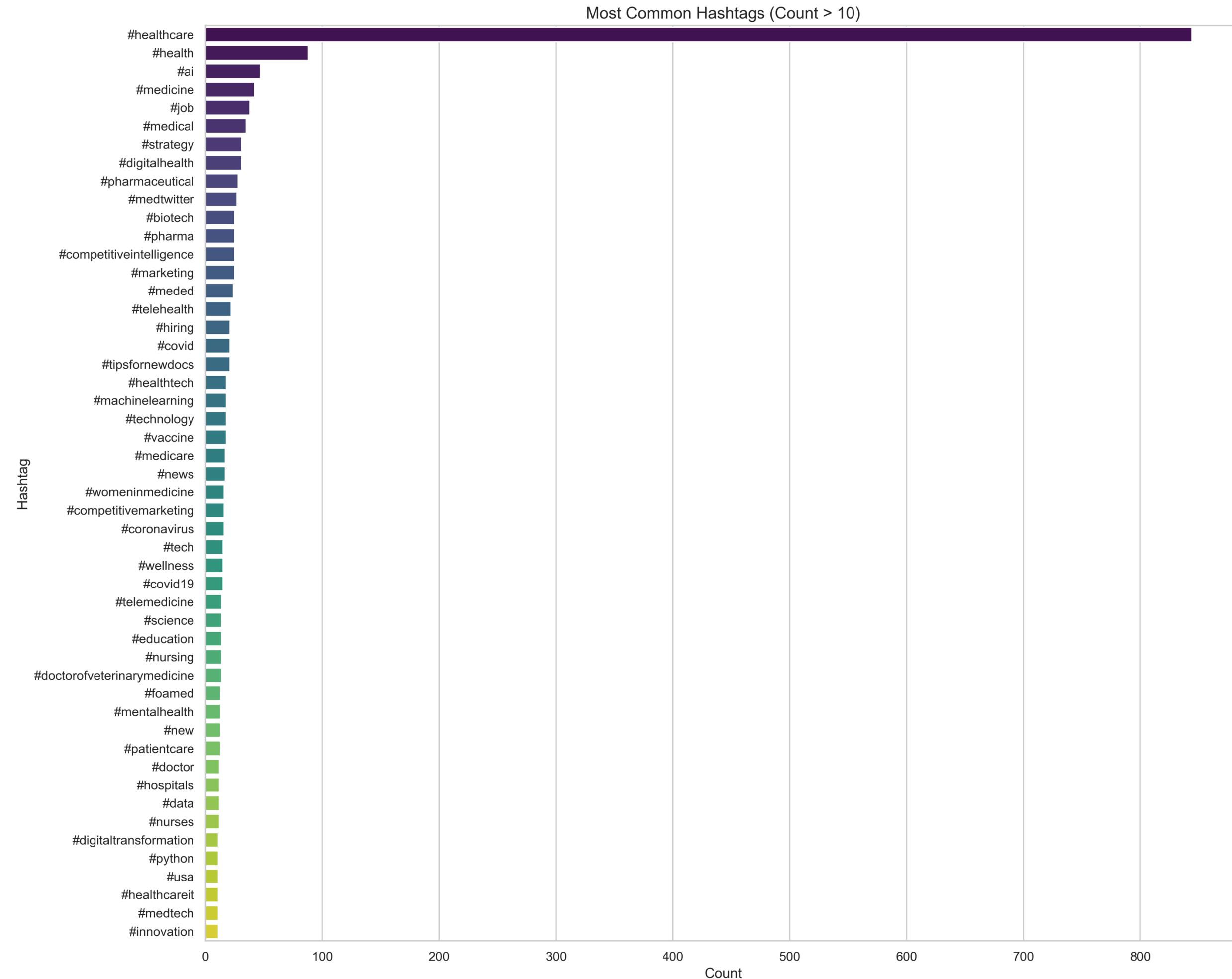








X (Twitter) Analysis



RECOMMENDATIONS

Optimize Appointment Durations – Adjust and standardize appointment lengths to maximize output without compromising the quality of care.

Enhance Seasonal Capacity Planning & Data Quality – Use improved data mapping and reporting to anticipate seasonal demand shifts and allocate resources proactively.

Rebalance Staffing Across Regions – Align workforce distribution to match local demand patterns and address regional capacity gaps.

Strengthen System Resilience – Develop contingency frameworks and surge protocols to maintain service continuity during future public health crises.

Accelerate Patient Access – Implement measures to shorten waiting times, from referral to appointment, improving patient outcomes and satisfaction.

Review and Adjust Capacity Limits – Assess current maximum capacity thresholds and explore strategies to relieve sustained strain on services.

Leverage Public Sentiment and Digital Health Trends - Use NHS social channels to promote digital-first services and educate patients on alternative care routes.

FURTHER ANALYSIS

Implement Predictive Modelling for Demand Forecasting

Investigate Root Causes of Service Overutilization

Assess the Influence of Seasonal and External Factors

Conduct Localized Performance Benchmarking

Identify Key Drivers of Missed Appointments

THANK YOU