

RESEARCH INSIGHTS

Impact of COVID-19 on oral surgery care in England

Review of 1.75 million referrals over 34 months identifies the disruptive impact of the SARS-CoV-2 pandemic on oral surgery care in England: a service evaluation. *Br Dent J* 2023; <https://doi.org/10.1038/s41415-023-5526-1>

The declaration of the COVID-19 pandemic by the World Health Organisation was followed by the legal implementation of lockdown measures in England. In light of concerns regarding the airborne transmission of the disease through aerosols generated in dental settings, routine and elective face-to-face dental procedures were discontinued from 25 March 2020. Many oral surgery (OS) units were shelved to divert the dental personnel to medical care specialities and critical care, thereby disrupting the OS care services. Although dental practices resumed in-person appointments from early June 2020, the capacity remained reduced due to the ongoing pandemic which had a detrimental impact on OS care in England.

This study evaluated the OS service over a 34-month period in specific regions of England, including Central Midlands; Cheshire and Merseyside; East Anglia and Essex; Greater Manchester; Lancashire; Thames Valley; and Yorkshire and the Humber. OS referral data were obtained for the period March 2019 to December 2021 covering 12 months of pre-pandemic data and the first 22 months of the pandemic, using the electronic referral management system (eRMS). The data were evaluated in relation to pre- and post-pandemic referral rates in OS to identify any disparities in access to OS referrals and to gauge the effect of the pandemic on OS services in England with the help of the Index of Multiple Deprivation (IMD).

The analysis of 1.75 million referrals revealed a disrupted pattern of referrals that was categorised into three phases. The first phase saw an immediate drop from March to April 2020, which could be attributed to the sudden cessation of face-to-face services and shift to telephone triage. The second phase, from May 2020 to January 2021, saw a gradual increase in referrals as dental practices reopened and mitigatory measures were introduced to reduce the risks associated with aerosol generating procedures. The third phase, from February to November 2021, witnessed a dramatic and accelerated increase in referrals, possibly due to increased



confidence among individuals following the initiation of the vaccination programme. Furthermore, the average referral rejection rate per month increased from 1.5% to 2.7% in the post-pandemic period, indicating the immense burden on OS services in England during the investigated period. According to the IMD data, patients from more deprived backgrounds were found to have used OS services disproportionately, suggesting that pre-existing inequalities had an impact on their healthcare experience during the initial phase of the pandemic.

The study was conducted to highlight the disruptive impact of the COVID-19 pandemic on OS referrals to secondary care. The findings of the study emphasised the importance of carefully planning workforce development to prevent the negative long-term effects of disrupted referral patterns on patients, the NHS, and the workforce. There is a need to leverage healthcare data more efficiently to facilitate the strategic planning of healthcare services for potential future pandemics.

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Why did you decide to undertake this study?

My PhD focuses on the referral behaviours of general dental practitioners towards patients requiring oral surgery care. Prior to the SARS-CoV-2 pandemic, I completed quantitative research on referrals in West Yorkshire through one system to oral surgery, oral and maxillofacial surgery, and oral medicine.¹ For this study, I went on to collect oral surgery referral data from a much larger geographical footprint in England to investigate the impact of the pandemic, which captured how disruptive this was.

Did any of the results surprise you?

The magnitude of the increase in referrals post-lockdown was surprising as the average number of referrals before lockdown were around 22,000 per month. However, in November 2021, these peaked at 217,646 per month.

What do you think the next steps should be considering your findings?

Given the high levels of referrals in November 2021, it would be interesting to review referral volumes for all of 2022 to see if referrals have reduced and plateaued back to pre-pandemic levels. There is a need to better understand factors that inform the decision to refer. The data need to underpin the future planning of dental education and professional development as well as improve patient pathways across the system. ■

References

1. Moore R J, Pretty I, Douglas G, Mighell A. An evaluation of referrer factors for 98,671 referrals made to the West Yorkshire oral surgery managed clinical network over a three-year period. *Br Dent J* 2022; DOI: 10.1038/s41415-022-4034-z.