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Engagement of individuals aged 14–25 years with a digital mental health service during the COVID-19 pandemic in the UK: a cohort study of service usage data

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engagement patterns with these platforms changed during the pandemic.

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Abstract Background Public use of digital mental health technologies has informed several studies focusing on patterns of engagement within user-led digital support systems. General engagement with these services has increased since the start of the COVID-19 pandemic. However, to the best of our knowledge, this is the first study to explore how user

Methods In this cohort study, we included individuals aged 14-25 years who signed up to the online mental health platform Kooth in the UK before the pandemic (May 1, 2019 to March 10, 2020) and during the pandemic (March 11, 2020 to Oct 31, 2021). Routinely collected usage data were assessed for consenting users who returned to Kooth at least once after sign-up. We used logistic regression to compare service component usage and overall engagement across cohorts.

Findings 5048 individuals (mean sign-ups per day 9.0 [12.0]) were included in the pre-pandemic cohort and 13841 (mean sign-ups per day 11.5 [13.9]) in the pandemic cohort, representing a significant increase in sign-ups per day during the pandemic compared with the pre-pandemic period (Welch's t-test p=0.0001). Compared with users prepandemic, users during the pandemic were less likely to have a drop-in chat with a practitioner (odds ratio [OR] 0.50 [95% CI 0.47-0.54], p<0.0001) but were more likely to journal (1.92 [1.77-2.07], p<0.0001) and comment on existing content $(1 \cdot 10 [1 \cdot 03 - 1 \cdot 18], p=0 \cdot 008)$. Users who signed up to Kooth during the pandemic and requested a chat with a practitioner (7816 [56.5%] of 13 841 users) were also less likely to receive a chat than users who requested a chat pre-pandemic (3791 [75 · 1%] of 5048 users; OR 0 · 68 [0 · 63-0 · 74], p<0 · 0001).

Interpretation During the COVID-19 pandemic, people with the ability and resources to access digital mental health support were diverted from face-to-face services to digital mental health services. This change might have resulted in an unmet need for drop-in practitioner chats, with users probably resorting to asynchronous support through community interaction or journaling.

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Contributors

AB conducted the analysis with guidance from MdP-B. AB wrote the Abstract with review from MdP-B, LS, SdOG, and AJ.

Declaration of interests

AB, LS, and SdOG are employed by and receive honorarium from Kooth Digital Health. MdP-B and AJ are affiliated with Swansea University and were contracted by Kooth Digital Health to work on this study.