Abstract

Inpatient Teledermatology Referrals During the COVID-19 Pandemic in a UK Trust: A Comparative Review and Doctor Survey

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Abstract

Background: The COVID-19 pandemic has broadened the scope of teledermatology services in the United Kingdom from a primarily outpatient-based triage tool to the management of inpatient referrals. In order to reduce the risk of transmission in hospital, a number of changes were implemented within our department. As part of this, our on-call referrals were transferred to a telemedicine app, which incorporates the secure transfer of user-generated patient images onto a web-based image management system providing remote access for the dermatology team.

Objective: This study aimed to compare how the introduction of this referral method impacted the nature and number of referrals received, the efficiency of the on-call service, and user preferences.

Methods: A retrospective cohort study was conducted to compare the number of referrals, time taken to review, and referral diagnoses between previous referral methods to the dermatology department (bleep, fax, email) (July and September 2019) and the new teledermatology app (July and September 2020). We also performed a survey of junior doctors, seeking their feedback and preferences pertaining to the new referral system.

Results: The number of referrals increased by 80%, with a 6-fold increase in lesion referrals. There is a possibility that not all referrals from 2019 were accounted for as paper documents are easily lost or discarded, highlighting another advantage of teledermatology in providing a reliable record of referrals. Dermatology referrals may have increased as the telemedicine app is more accessible to staff across sites. The telemedicine app also led to a reduction in time to review by 0.53 days, resulting in a significantly higher number of patients being given dermatology input on the day of the referral (78% vs 58%). This will have led to earlier treatment, improved patient outcomes, and shorter inpatient stays, resulting in potential cost reductions for the hospital. The survey of junior doctors showed that 81% preferred teledermatology to the previous referral methods.

Conclusions: The introduction of teledermatology has provided an effective and acceptable method of managing on-call dermatology referrals. Easier access to dermatology advice via teledermatology may result in higher numbers of referrals, which may warrant strict referral criteria to prevent oversubscription of the on-call service. Teledermatology ensures an accurate log of referrals, including the nature of referrals, allowing for better auditing and service improvement. Teledermatology referrals allow for advice to be provided within shorter time frames compared to previous methods. This should improve patient outcomes and reduce hospital admission stays, potentially resulting in cost savings for the hospital.

Conflict of Interest: None declared.

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KEYWORDS teledermatology; acute dermatology; COVID-19; referrals

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