

Abstract citation ID: ljae090.402**BT04 Exploring sustainability: the shift to digital patient information leaflets in dermatology**

Yasmin Nikookam, Emma Amofo and Bernard Ho
St George's University Hospitals NHS Trust, London, UK

The advent of digital health technologies has transformed the landscape of healthcare delivery and sustainable practice, with dermatology being no exception. National Health Service (NHS) England reported carbon emissions of 27.1 million tonnes from the health and social care system in 2017, equating to 6.3% of England's emissions [NHS England. Delivering a 'net zero' National Health Service. Available at: <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf> (last accessed 19 March 2024)]. Subsequently, the initiation of the NHS campaign 'For a Greener NHS' was introduced to ensure stakeholders are mindful of their healthcare delivery. This project delves into the sustainability implications of transitioning from traditional paper-based patient information leaflets (PILs) to online platforms within the field of dermatology. Focusing on environmental, economic, patient and healthcare delivery perspectives, the project aims to elucidate the benefits and challenges associated with this digital shift. A quality improvement project was used to propose a new lean pathway for educating patients using digital PILs. Quantitative data assessed printing habits from the outpatient department printer over 2 weeks prior to any intervention. Printing habits were reassessed for a further 2 weeks after QR codes to PILs were left in the dermatology clinic rooms and clinicians were encouraged to avoid printing PILs where feasible. Carbon emissions and cost analyses were calculated to quantify the effect of digital PILs. Qualitative data through a survey disseminated to patients and clinicians assessed the impact of digital PILs

on healthcare delivery, patient engagement, and information accessibility. The results demonstrated that over the first 2-week period 1723 pages were printed, which equated to 8615g CO₂ equivalent. Implementation of the digital PILs resulted in 1596 pages printed, equating to 7980g CO₂ equivalent. This equates to 16 510g of CO₂ emissions and £317.50 in costs potentially saved annually when switching to digital PILs. This is equivalent to the CO₂ emitted by fully charging 2068 smartphones [US Environmental Protection Agency. Greenhouse Gas Equivalencies Calculator. 2024. Available at: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> (last accessed 19 March 2024)]. Preliminary qualitative results illustrated the reluctance of particular age groups to engage in digital PILs due to poor technology literacy. However, there was an awareness among patients and dermatologists to implement sustainable education. Our findings demonstrate that digital PILs foster a reduction in the carbon footprint and costs. The increasing prevalence of smartphones and internet connectivity gives digital platforms the potential to enhance patient education, engagement, and adherence to treatment plans. However, considerations related to digital literacy, accessibility and data security need to be addressed to ensure equitable healthcare delivery. Through a synthesis of environmental, economic and healthcare delivery perspectives, our findings aim to guide healthcare providers in making informed decisions regarding the adoption of digital platforms for sustainable patient information dissemination.