Evaluating and Improving Medical Photography Quality in Burns and Plastic Surgery Referrals

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Abstract:

Aim: To evaluate the quality of medical photography within online referrals from external hospitals to the Burns and Plastic Surgery services at Wythenshawe Hospital and the Royal Manchester Children's Hospital.

Method: In November 2020, data was collected from the Medical Data Solutions and Services (MDSAS) online referral system for both children and adults referred for burns and plastic surgery services. The quality of the photos sent in the referrals was reviewed and compared with a defined set of standards from the national guidelines by the Institute of Medical Illustrators (IMI); Wound Management Photography. Referrals with no photos were excluded.

Results: The clinical study included photography of MDSAS online referrals to Burns and Plastic Surgery services at both RMCH and Adults. A sample of 100 patients taken November 2020 was taken with 25 patients from each referral service portal, and analyzed against 10 criteria from the guidelines. Medical photography is particularly important in Burns and Plastic Surgery. Having adequate photos is crucial to allow safe and accurate management of patients, which is particularly crucial amid a pandemic. The results demonstrate the importance of disseminating guidance in medical photography. By having defined guidelines, clinicians can easily ensure that photos provided give an accurate understanding of their referral. Most referrals met the criteria 54% of the time. Standards were particularly well followed for color control (84%), lighting (74%), and autofocus (73%). However, 43% of the criteria were still not met, particularly in the use of measurement scales (7%) and viewpoint and technique (37%).

Keywords:

Medical photography, burns, plastic surgery, referrals, clinical study, quality, guidelines, standards, patient safety, pandemic, improvement, education, training, dissemination.