

# Personal Wireless Device Use for Wound Care Consultation: A Review

## Context

Wireless technologies such as smart phones and tablets are being used increasingly by clinicians for a variety of purposes. In dermatology, the use of wireless devices has revolutionized the process of documenting wounds, making consultations with specialists easier and less time-consuming. Physicians providing wound care use the technology to record patients' medical images and other data and then transmit them to specialists over mobile phone networks.

## Technology

Personal wireless devices such as mobile phones have built-in cameras and data transfer capabilities, which make them useful as telemedicine technology. However, slow data upload speeds in remote areas may result in unacceptably long image upload times. As well, the images of wounds taken with mobile phone cameras may be of variable quality and therefore may impact the assessment and subsequent management plan for wound care. There are also legal implications, security challenges, and confidentiality issues to consider.

## Issue

Personal wireless devices can enhance wound care management; however, there are potential risks that should be considered. A review of the evidence on the clinical benefits and safety of personal wireless devices for wound care consultation, and of the relevant guidelines, will help inform decisions about their use.

## Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

## Key Messages

- Wound care diagnoses and management plans resulting from remote consultation using personal wireless devices appear to be similar to those resulting from face-to-face consultation (based on small studies).
- Insufficient evidence was found on which to make conclusions on clinical efficacy or harms.
- No guidelines on the use of personal wireless devices for wound care consultation were found.

## Results

The literature search identified 575 citations, 30 of which were deemed potentially relevant, with no additional articles identified from other sources. After full-text screening, 24 articles were excluded, and 6 met the criteria for inclusion in this review — 1 randomized controlled study and 5 non-randomized studies.

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