Mobile Phone Apps in Burn Care – A Review

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INTRODUCTION
Smartphone applications (apps) are widely used amongst doctors, and are increasingly aimed at the lay population for health education. The widespread availability of Smartphones and their capacity to transmit information instantaneously may lead to apps assisting secure communication, including imaging and video. Education delivered through apps may target first aid administration in burns, and assist assessment and management amongst healthcare professionals.

METHODS
The iTunes store (UK) was searched using the term “burn” in December 2012. Inclusion criteria were any content relating to burn care and availability for iPhone. All relevant results were included.

RESULTS
32 relevant burn apps were identified, with 15 (47%) having primarily burns content, and 17 (53%) were generalist including first aid apps. Eight (53%) of the primary burn apps calculated burn area and fluid requirements (Figure 1), and four (27%) targeted the lay population, of which two (14%) described prevention of sunburn. The content of the remaining two were prevention of fire in the home and first aid management. Nine (60%) of the burns apps declared affiliation with a medical body, with the remainder unknown (Figure 2).

DISCUSSION
A third of all mobile phone users look for health information online,1 however the quantity and quality of current burn care apps is limited. Smartphone apps are regularly used by doctors for reference and calculations,2 and such apps exist in burn care and are effective reference tools. More apps educating on early burn management may be effective for both the public and healthcare professionals, with telehealth being particularly well adopted for continuing medical education.3

Widespread use of telehealth in burn care is limited by start-up costs, however the widespread availability of Smartphones means remote burn care could become more accessible to all.

CONCLUSION
Only a small number of apps relevant to burn care are available, and they are predominantly aimed at healthcare professionals calculating percentage area of burns and fluid requirements. Sources of content may not be verifiable and currently available apps do not provide consistent advice on burn first aid.

Smartphone apps which store patient images and data may risk patient confidentiality, however improved security may permit monitoring of burns and referrals to burns units including images and video. Improved quality and quantity of apps is an opportunity to educate both healthcare professionals and the public, and may be an effective strategy to prevent burns and improve first aid.

REFERENCES