How an innovative single point of care digital application can assist health care professionals and patients successfully manage lower limb oedema.

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INTRODUCTION

In striving to maximise the efficiency of care within the National Health Service the modifications to patient care have prompted the development of program applications, such as point of care (POC) systems, providing actionable information at the site of care to allow rapid clinical decision-making. POC technology has the ability to support and educate patients with health care needs. The aim was to build an application that would support health care professionals (HCPs) to recognise lower limb complications and to improve their confidence in managing simple lower limb conditions and promote self-care to the patients.

METHOD

The app needed to be a free application readily downloaded from the Apple app store or Google play. Once downloaded, the information stream is directed towards either the health care professional or the patient. The app needed to provide logical, relevant and appropriate information to the HCP as well as the patient.
All aspects of lower limb oedema care are covered with more information guiding HCPs considerations during the assessment. It needed to be a safe but straightforward application, providing self-education both for the HCP or the patient.

RESULT

The app can improve the management of chronic oedema and lymphoedema, and it shows how mobile technology can be installed at the POC.
The part of the app for HCP, enables understanding of simple clinical situations regarding lower-limb chronic oedema management and recommendations, for appropriate garment compression for the lower limbs. It can be utilised for increased efficiency of management in lower limbs without compromising the concept of personal care, so necessary to patient and HCP alike. It provides instant access for patients to understand and manage their condition in an easy format. Fig 1,2,3, & 4.

Fig 1- Home screen for Healthcare professional

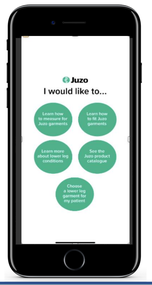
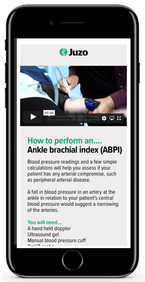


Fig 2-How to do an ABPI feature



Pathway/hosiery selection | **Education** | **Training** | **Best practice**

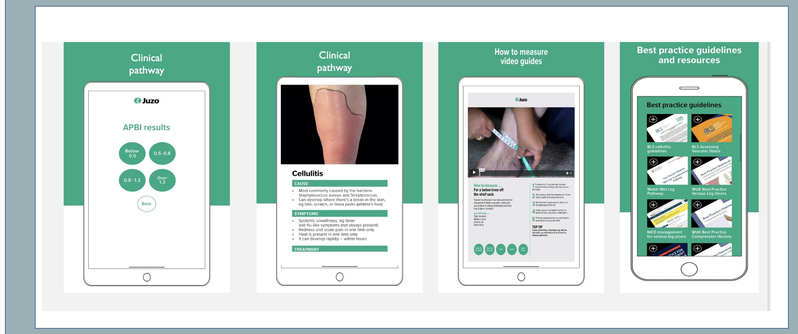


Fig 3- Screenshots of Healthcare professional options

Education | **How to videos** | **Self care** | **Support**

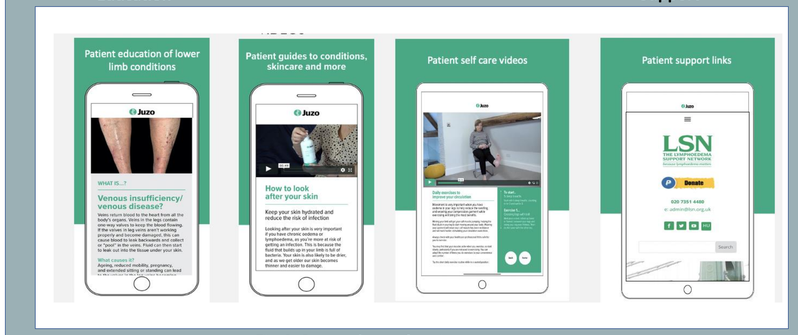


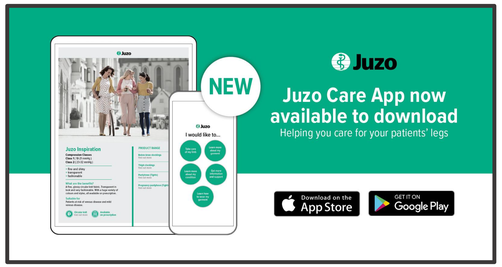
Fig 4- Screenshots of patient options

DISCUSSION

Reducing inconsistent management to lower limbs was the initial aim when the author developed the app. Over 50% of community nurses' caseload consists of lower limb care management (Moffatt et al, 2019) and with wound care costs escalating, there is a demand for nurses to be experts in this field. With a choice of over 40,000 compression garments, there are too many choices for the HCP to comprehend. Incorrect ordering contributes enormously to costly wastage owing to insufficient knowledge relating to lower limb conditions, fitting and inappropriate sizing.

CONCLUSION

The app for HCPs provides understanding to complex clinical situations regarding lower limb oedema management and recommendations, if indicated, for appropriate garment compression for the lower limbs. This is a significant improvement upon the findings of Bjork et al. (2018) who suggested that there were insufficient guidelines to support HCPs in their choice of patient garments.
Utilising successful innovative, mobile solutions to provide professional education the app also contributes to patients and their carers better managing aspects of their health and self-managing their conditions offering the possibility of a better quality of care empowering them to take more responsibility.
Mobile devices are ever-present in our society and ideal for the provision of portable communication tools for patients and HCP's, offering individuals to maintain health and enhance self- care.



REFERENCES: Moffatt CJ, Gaskin R, Sykorova M, et al. Prevalence and risk factors of chronic edema in the UK community nursing services. Lymphatic Research & Biology 2019; 17 (2):147-154
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Bjork R, Ehmann S. STRIDE professional guide to compression garment selection for the lower extremity. J Wound Care. 2019: 28:(6 suppl 1):1–44.
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