



MICE Project: Introducing Digital Solutions for Clinical Management and Quality Improvement

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Introduction

Given the visual appearance of the wound is imperative to guiding clinical treatment, clinicians in an effort to expedite patient care are often enticed by the efficiency and ease of use of smartphone applications and social media to share images with one another. Whilst justification is provided in the belief of 'doing what is best for the patient', this behaviour is burdened with significant risk:



- Breaches of patient privacy
- No record of patient consent
- Incomplete patient record
- Misuse via social media
- Un-retrievable patient data
- Patient images synced on home devices and cloud services

Method

With the objective to provide a safe and efficient patient image sharing platform, we investigated how and why clinicians use their mobiles to share patient images and evaluated current commercial solutions:



Subsequent to our findings, we collaborated with the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and developed a custom built Mobile Image Communication Exchange (MICE). Working with our stakeholders we adopted an Agile approach to development, thereby enabling:



Results

During our proof of concept (3 months) MICE captured 126 images from 45 patients. MICE also captured consent and all related clinician communications for these patients. Adopting the Governance, Evidence, Knowledge, Outcomes (GEKO) system to monitor and our proof of concept, our evaluation found:

- All material was captured in the medical records and accessible to the appropriate staff
- No information was stored on personal devices, camera rolls or social media albums
- All images were rated by clinicians as 'adequate quality to inform a clinical decision'



Conclusion

By providing a secure platform where images can be safely captured/shared, MICE has shown that mobile technology can be safely used to expedite clinical care including the facilitation of transfers and ongoing management of wounds /scars.

In addition to the measurable outcomes we note that our work on this project has strengthened our relationship with key stakeholders, and together with our captured lessons learned, has carved a pathway for future projects to be similarly developed and implemented.