A bioengineering approach to the early detection and prevention of pressure ulcers

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Summary
Pressure ulcer prevention and detection has been an allied research field for both clinicians and bioengineers. The presentation will provide a summary of the latest approaches to detect and prevent pressure ulcers and provide a perspective on emerging technologies in the field.

Aims & Objectives
- Review current practice for pressure ulcer prevention and early detection
- Provide an overview of technologies being used to monitor patients and evaluate their relative strengths and weaknesses
- Highlight the new technologies and their potential translation into clinical practice

Background
Individuals with impaired mobility can spend prolonged periods on support surfaces, which increases pressure ulcer risk (Coleman et al., 2013). Examples include seating surfaces during wheelchair propulsion, prolonged lying in an operating theatre, and the application of medical devices which are attached to the skin (Mak et al., 2010). Technologies are being developed to improve our understanding of pressure ulcer aetiology, and to monitor parameters which are indicative of tissue viability/patient status.

References