

Bite Force Measurement Meter

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NON-CONFIDENTIAL SUMMARY

1. Project Aims:

The overarching aim of this Fellowship project was to establish a viable branded portable bite force measurement meter (BFMM) which would enable clinicians and academics in dentistry to accurately measure and monitor bite force values.

2. The Closest Known Prior Art in this Area?

Whilst there are a number of instruments that have been used in bite force measurement studies these are predominantly custom made often with dimensions and design characteristics that limit their clinical usefulness.

3. The technology and its origins:

A novel bite force measurement instrument was designed by the researcher for the measurement of single tooth bite forces in young children. Proof of concept development has been carried out involving substantial and robust research. The instrument proved to be capable of accurately recording swift, reliable information and addressed many of the technical problems presented with previous custom built instruments. The design concept and modelling proved to have the potential to be adapted and modified further in order to produce a commercially viable branded portable bite force measurement meter available within the UK which would be even more acceptable to both operator and end user.

4. Commercialisation Progress

a) The Potential Market:

An initial assessment of the potential market for such a new device has been undertaken with a number of clear areas of clinical application identified not only relevant to the specialist clinician but also the general dental practitioner.

Strong and constant industrial growth in dental technologies and equipment mean not only is there ready access to a global network of market participants, but also offers good market prospects in the UK, other developed countries as well as China and India.

b) Early commercialisation assessment of intellectual capital

Intellectual Property (IP) has been generated and remains owned solely by the University of Leeds. Patent enquiries have been completed with results indicating no risk to intellectual capital and the device meets the criterion of novelty with respect to other devices.

6. The design of the next stage prototype device:

Following the scientific work undertaken, market surveys and meetings have been undertaken with potential end users (including Consultant and Professorial clinicians and general dental practitioners), which have helped determine their preferences on various aspects of any future design and product. These have been translated into a number of key objectives that the product design must meet and a design company has been commissioned to take the proof of concept to appearance prototype.