Title: Developing The 'Kids Sleep Doctor' App

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300 word max

Introduction

It is estimated that 20% of smartphone users have one or more health tracking applications on their device. This year 500 million smartphone users worldwide will be using a health app.

Our aim was to empower carers to self-monitor and start to implement strategies that can improve their child's (birth to 16 years)sleep. Many sleep behavioural problems are best solved by parent's when they have the confidence and background knowledge to understand what is happening and how best to help. This free app had to provide an efficient sleep and wake monitoring system, as well as age-specific evidence based advice.

Method

i) captures a *'sleep profile'* by asking a few questions about bedtime routines, symptoms (eg snoring) and age-then generates age-appropriate advice

ii) employs a novel, engaging style of *'sleep diary'* data entry that allows carer to record settling, sleeping and different type of wakings (real time or retrospectively.)

iii) *'summary view'* that gives graphical feedback. This includes sleep/wake parameters and also compares the child's total sleep time with normative UK data.

iv) child specific *'sleep tips'* for those wakings events or symptoms that cross a clinically significant threshold for that particular age child.

v) *data* resides only on the users smartphone with export options

vi) app deliberately uses *'sleep aware'* red and orange colours on a dark background that avoids the stimulating blue-enriched light emissions that would otherwise disrupt the carer's sleep.

Results

The app was downloaded by over 20,000 iPhone users globally in its first month. Feedback ratings on the app store have provided a range of critical evaluation with scores from 5 (excellent) to 2.5 (needs additions/modifications)

Discussion

Producing an app is only half the battle. The challenges of responding to requests for modifications, specification for CE marking and MHRA registration, are considerable.