![PainChek - Intelligent Pain Assessment]

29 January 2018

New Peer reviewed published study confirms
PainChek™ App validity and reliability

- Peer reviewed article published in the Journal of Dementia and Geriatric Cognitive Disorders
- New study confirms high validity and reliability values
- Clinical study confirms PainChek™ App strong validity and reliability in people with dementia

A research article titled "Psychometric Evaluation of the Electronic Pain Assessment Tool: An Innovative Instrument for Individuals with Moderate-to-Severe Dementia" has now been published in the prestigious peer reviewed journal of Dementia and Geriatric Cognitive Disorders. Using a newer version of the App, the published article demonstrated that the PainChek™ App had even higher validity and reliability than originally reported in the Journal of Alzheimer's Dementia in July 2017.

When combined with the previous published study, we now report on a total of 753 paired pain assessments using the PainChek™ App in comparison to the Abbey Pain Scale (gold standard in Australia). These assessments were completed on a total sample of 74 residents with various types of pain conditions and dementias, recruited from five aged care facilities in Western Australia.

"This new published study provides further confirmation that the PainChek™ App can be used to accurately and reliably assessment pain for this vulnerable population. It also provides further important clinical data for healthcare professionals and further supports our global commercialization strategy" commented Philip Daffas CEO and Managing Director of PainChek Ltd.

Access to the abstract is available on the PainChek website and the full paper publication is available on request through the publishers. Below is a summary table of the published results.

PainChek™ is a registered trademark of PainChek Limited
www.painchek.com
Suite 401, 35 Lime Street, Sydney, NSW,2000, Australia

1

PainChek
Intelligent Pain Assessment

Psychometric property	Data*	Comment†
Concurrent validity	Pearson's Correlation (r) = 0.911	Excellent
Interrater reliability	Weighed Kappa (κ_w) = 0.857	Excellent
Internal consistency	Cronbach's Alpha (α) = 0.950	Excellent
Test-retest reliability	Intraclass Correlation Coefficient (ICC) = 0.904	Excellent

*All data values are significant; †Excellent based on values > 0.8

For further information contact:

Ian Hobson
Company Secretary
Tel: +61 8 9388 8290

Philip Daffas
Managing Director
Tel: +61 406-537-235

PainChek™ is a registered trademark of PainChek Limited
www.painchek.com
Suite 401, 35 Lime Street, Sydney, NSW,2000, Australia

2

The PainChek™ Technology:

PainChek™ uses cameras in smartphones and tablets to capture a brief video of the person, which is analysed in real time using facial recognition software to detect the presence of facial micro- expressions that are indicative of the presence of pain.
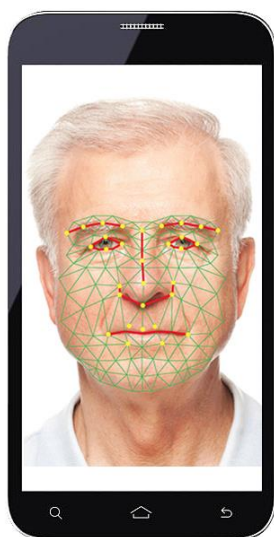
PainChek™ artificial intelligence assesses facial micro-expressions that are indicative of the presence of pain
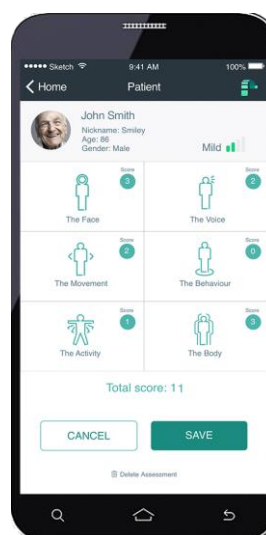
PainChek™ six domains of pain assessment that calculates pain severity score

This data is then combined with other indicators of pain, such as vocalisations, behaviours and movements captured to calculate a pain severity score. Due to its speed, ease of use and it's reproducibility, PainChek™ will be able to be used to detect and measure a person's pain, and then further measurements can be used to monitor the effectiveness of pain management.

PainChek™ will be rolled out globally in two phases: first, PainChek™ which is designed for adults who are unable to effectively verbalise their pain such as people with dementia, and second, PainChek™ for Children who have not yet learnt to speak.

PainChek™ is a registered trademark of PainChek Limited
www.painchek.com
Suite 401, 35 Lime Street, Sydney, NSW,2000, Australia