

23 December 2019

December 2019: Update on PainChek® business performance

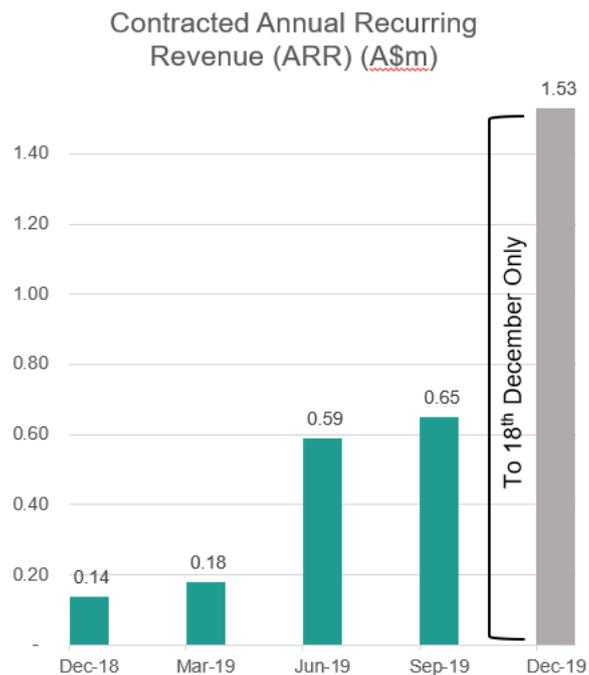
1. Financial and Business Measures:

PainChek has delivered exponential growth in all financial and business progress measures between December 2018 through to December 2019.

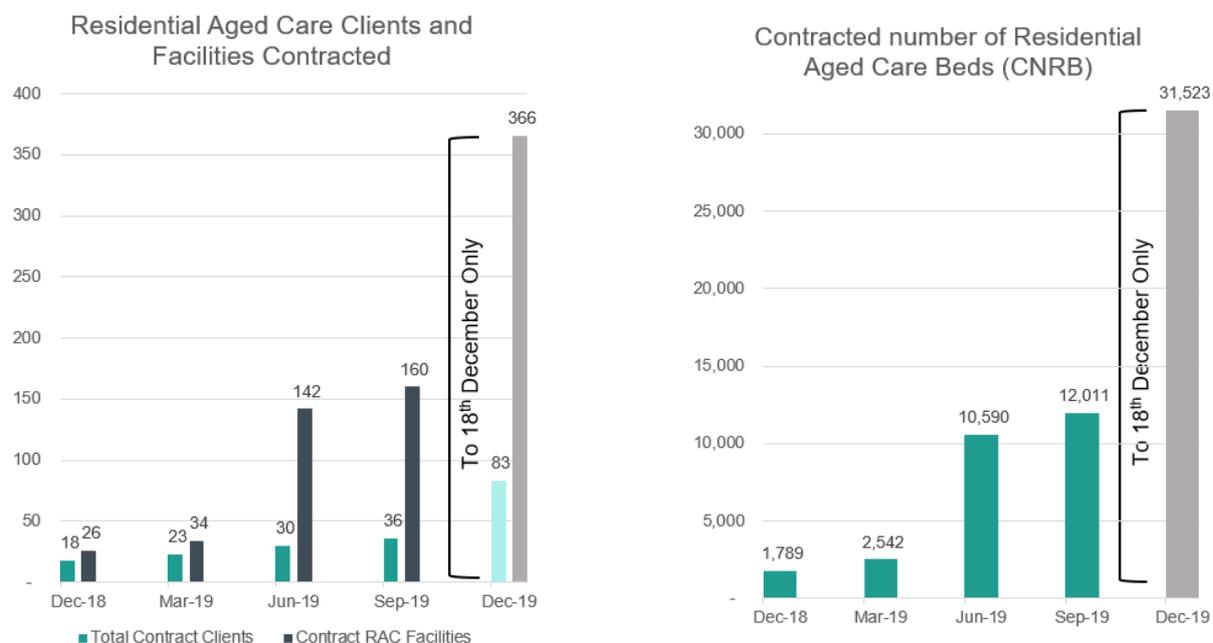
- Contracted aged care beds have increased from 1,789 to 31,523 (+1,662%)
- Contracted aged care facilities have increased from 26 to 366 (+1,308%)
- Annualised contracted recurring revenue has increased from ~\$140,000 to ~\$1,530,000 (+993%)
- Over 72,000 PainChek assessments have been conducted, increasing from 11,280 (538%)
- Approximately 9% of Federal Government Trial targets achieved within 18 days

PainChek is pleased to announce that as of 19th December 2019, PainChek® has contracted **83** customers covering **366** Residential Aged Care Facilities, totalling **31,523** aged care beds across Australia, New Zealand, UK and Singapore. This brings the contracted annualised recurring revenue, to **\$1.53M AUD¹**.

The majority of these beds are in the Australian market (**30,169**) which is 14% of the total Australian market. Approximately **18,000** of these beds have been contracted on the basis of the Australian Federal Government Grant for one year and standard commercial terms in subsequent years.



¹ Represents annualised contracted value in the 2nd year of signed contracts of 2 or 3 year terms with the benefit of Fed Govt Grant funding in 1st year, assuming contracts are fully implemented and not terminated.



New major clients since September 2019 include:

- Aegis Aged Care Group Pty Ltd – 29 facilities, 3000 aged care beds
- Juniper (Uniting WA) – 25 facilities, 1500 aged care beds
- Ozcare – 12 facilities, 1476 aged care beds

In the past 12-months our clients have achieved many beneficial outcomes through the use of PainChek, as detailed in several case studies available on the PainChek website.

Clinical benefits highlighted by clients include:

- PainChek® provided evidence to GPs about the underlying pain triggering behaviours in residents, which resulted in the reduction of psychotropic medications.
- PainChek® reduced residents’ pain levels through a more accurate treatment plan.
- PainChek® implementation resulted in a 72% increase in the number of pain assessments for cognitively impaired residents.
- Aged Care Quality Agency Accreditation reports indicating support of quality standards through the use of PainChek®.

2. Australian Federal Government Trial Update

In December 2019, The Australian Federal Government Trial was signed to deploy 100,000 PainChek® licenses to support the care of all residents with dementia or cognitive impairment. This project has commenced, with \$500,000 in funding already received as of December 2019.

The project is being supported through partnerships with Ward Medication Management to work alongside their National team of Pharmacists to support the delivery of the implementation training. Care Management System Providers and Aged Care Industry Peak body partners are also supporting a communication campaign to raise industry awareness of the Government trial.

3. Hospital Market Opportunity:

The size of the problem



400M

pre-verbal
children

50M

people with dementia

25-42%

of hospital beds



1. Ecology Communications Group. www.ecology.com/birth-death-rates
2. World Alzheimer Report 2016
3. Gernssoa et al. *BMC Nursing* (2019) 18:40
4. Tsai, L. P., Jeong, S. Y. S., & Hunter, S. (2018). Pain assessment and management for older patients with dementia in hospitals: an integrative literature review. *Pain Management Nursing*, 19(1), 54-71.

PainChek™ Commercial in Confidence

 **PainChek**
Intelligent Pain Assessment

During 2019 we have been assessing the hospital market opportunity.

There are more than 50 Million people living with dementia and around the world more than 1/3 of hospital beds are now occupied by dementia and cognitively impaired patients. These patients typically stay in hospital 18 days longer than the non-dementia patients, they have a 3 times greater risk of an in-hospital delirium and more than half receive anti-psychotic drugs.

 **PainChek**
Intelligent Pain Assessment

Consequences of poorly managed pain for dementia patients

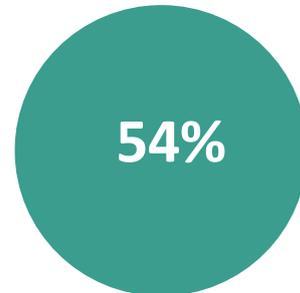
Longer hospital stay



Increased delirium risk



High use of Antipsychotics



1. Gerrossa et al. BMC Nursing (2019) 18:40
2. Tsai, I. P., Jeong, S. Y. S., & Hunter, S. (2018). Pain assessment and management for older patients with dementia in hospitals: an integrative literature review. *Pain Management Nursing*, 19(1), 54-71.
3. Herr, K. (2011). Pain assessment strategies in older patients. *Journal of Pain*, 12(3 Suppl 3), S9-S13.
4. Feast AH et al. (2018) Pain and delirium in people with dementia in the acute general hospital setting. *Age and Ageing* 47, 841-846E-8



The issue is that without effective pain assessment, a dementia patients' behaviour can be confused as being caused by the disease when at times it can based be an underlying cause such as pain.

Our experience in aged care confirms better pain assessment can reduce the use of anti-psychotics which can lead to reduced incidence of delirium and therefore a reduced hospital stay.

- **Philips HealthWorks:**

During the past 12 weeks, PainChek has been part of Philips Healthcare, global collaboration program with early-stage companies, having been selected from more than 2,000 start-ups. The HealthWorks programme was designed to identify best in class new healthcare technologies that fit with the Philips' business and strategy.

For PainChek, the programme was highly constructive. We worked through a carefully developed process involving Philips' senior team and their hospital-based clients in Europe and the US. The programme culminated in a Breakthrough day in Eindhoven, the Netherlands on 11th December 2019, and we are now investigating potential next steps with Philips Healthcare.

4. PainChek Children's Update

PainChek® is pleased to continue its collaboration with Murdoch Children's Research Institute (MCRI), to clinically validate the infant version of the PainChek® app. Led by Professor Franz Babl (MCRI) and Associate Professor Di Crellin (MCRI) in the Emergency Department (ED) of the Royal Children's Hospital, Melbourne, the PainChek® Infant PainFaces study focusses on validating the PainChek® Infant app, for children aged between 0-12 months.

The PainChek® Infant app is the first of a series of 3 applications in development, covering infants, toddlers and pre-verbal children over the age of 3. These developments will ensure that no matter the

age of a pre-verbal child, a tool will be available to accurately assess their pain and allow their carers to confidently manage it.

Through development some challenges have been identified and managed, including variability in facial morphology and dynamic between infants, toddlers and adults; changes in facial expression which are age dependant; and excessive head movements which may prevent pre-processing of facial images. This latter challenge has been addressed through the development of an adaptive video mode which ensures that automated facial analysis can be completed, particularly in cases of extreme infant distress in which the child may be crying or screaming.

The newly developed **adaptive video technology** has the capacity to be translated across all **applications in the PainChek suite**, continuing to improve utility and usability for all age ranges.

PainChek eagerly awaits the completion of the PainChek® Infant PainFaces study, currently scheduled for Q2 2020.

Ends

This release is authorised by Philip Daffas, Managing Director & CEO.

For further information please contact:

Ian Hobson
Company Secretary
Tel: +61 8 9388 8290

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

www.painchek.com

About PainChek®

PainChek® Ltd is an Australian based company that develops pain assessment technologies.

PainChek® is a smart-phone based medical device using artificial intelligence to assess and score pain levels in real time and update medical records in the cloud. PainChek® records a short video of the person's face and analyses the images that indicate pain and records them.

Next, the caregiver uses PainChek® to record their observations of other pain related behaviours that complete the assessment. Finally, PainChek® calculates an overall pain score and stores the result allowing the caregiver to monitor the effect of medication and treatment over time.

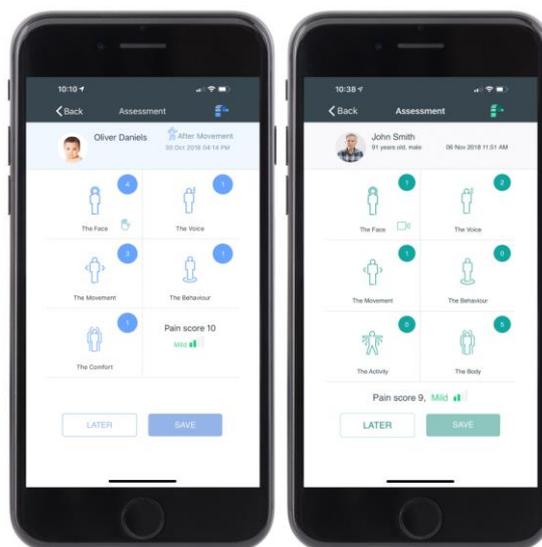
PainChek® is being rolled out globally in two phases: first, PainChek® for adults who are unable to effectively verbalise their pain such as people with dementia, and second, PainChek® for Children who have not yet learnt to speak.

The PainChek® Shared Care Program is a PainChek® licensing model which enables a professional carer to share their resident or patient data securely with other healthcare professionals or designated homebased family carers for ongoing pain assessments or clinical data review.

To find out more, visit www.painchek.com



PainChek® artificial intelligence assesses facial micro-expressions that are indicative of the presence of pain.



PainChek® domains of pain assessment that calculates pain severity score.