

ePAT Technologies Limited

Investor Presentation Update March 2017



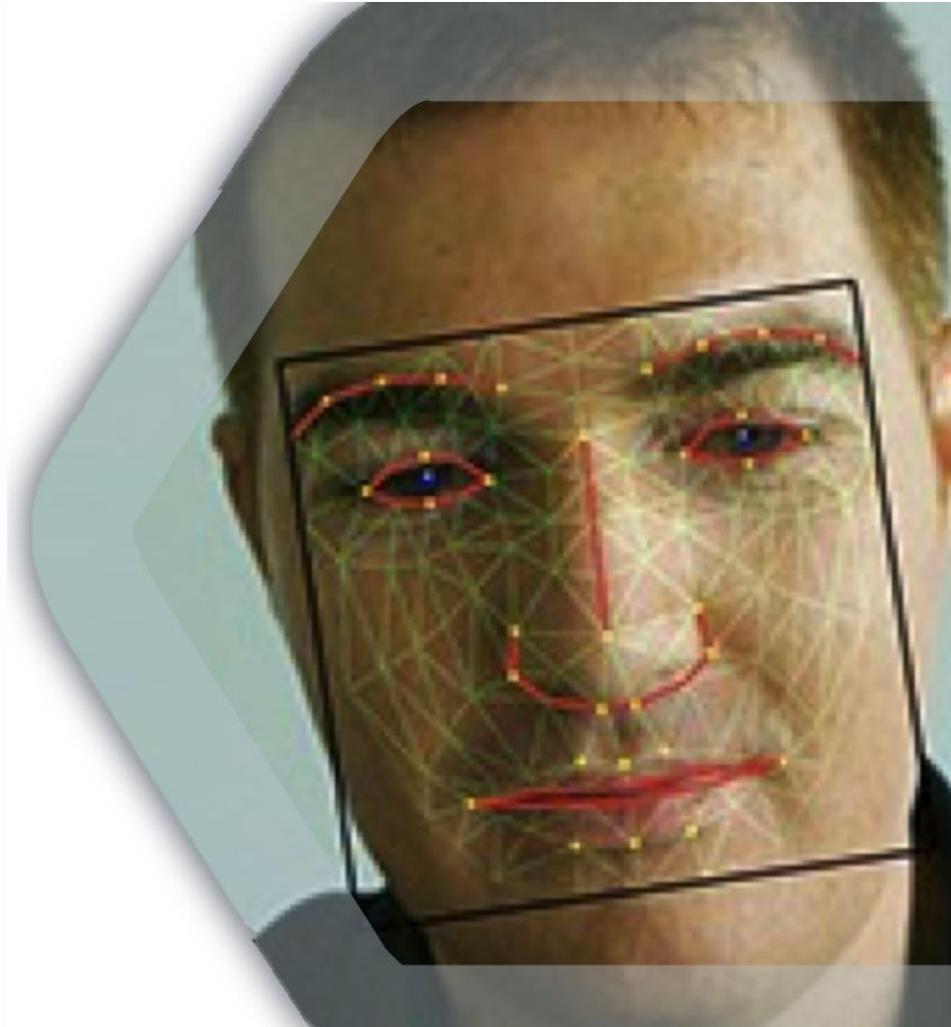
Pain is the most common reason people seek medical advice.

ePAT technologies want to augment caregivers' ability to manage pain with a simpler, more objective assessment method.



Investment Highlights

- ePAT addresses a critical medical problem
- Targeting large global markets - high volume business model with low operating cost base
- Short time frame to market
- Clear commercialization strategy
- Plans for multiple products and revenue channels
- Experienced and capable Board and Management teams



The Problem

- Pain is often poorly managed particularly in those who are unable to communicate
- Tools used to assess pain are highly subjective and often not used
- As a result, pain often goes undetected and untreated



Pain Assessment monitoring currently lacks objectivity and requires specialist intervention.

Abbey Pain Scale - For measurement of pain in patients who cannot verbalise

Addressograph

Name and designation of person completing the scale:

Date: Time:

Q1. Vocalisation

eg. Whimpering, groaning, crying

Absent 0 Mild 1 Moderate 2 Severe 3

Q1

Q2. Facial Expression

eg. Looking tense, frowning, grimacing, looking frightened

Absent 0 Mild 1 Moderate 2 Severe 3

Q2

Q3. Change in body language

eg. Fidgeting, rocking, guarding part of body, withdrawn

Absent 0 Mild 1 Moderate 2 Severe 3

Q3

Q4. Behavioural Change

eg. Increased confusion, refusing to eat, alteration in usual patterns

Absent 0 Mild 1 Moderate 2 Severe 3

Q4

Q5. Physiological change

eg. Temperature, pulse or blood pressure outside normal limits, perspiring, flushing or pallor

Absent 0 Mild 1 Moderate 2 Severe 3

Q5

Q6. Physical changes

eg. Skin tears, pressure areas, arthritis, contractures, previous injuries

Absent 0 Mild 1 Moderate 2 Severe 3

Q6

Add scores for 1-6 and record here



Total Pain Score

Now tick the box that matches the Total Pain Score



0-2 No Pain	3-7 Mild	8-13 Moderate	14+ Severe
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Finally, tick the box which matches the type of pain



Chronic	Acute	Acute on Chronic
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Facial expression analysis on the Abby Pain Scale requires the user to both detect and quantify facial expression indicative of pain: this is subjective and vulnerable to user bias.



Our Proposed Solution

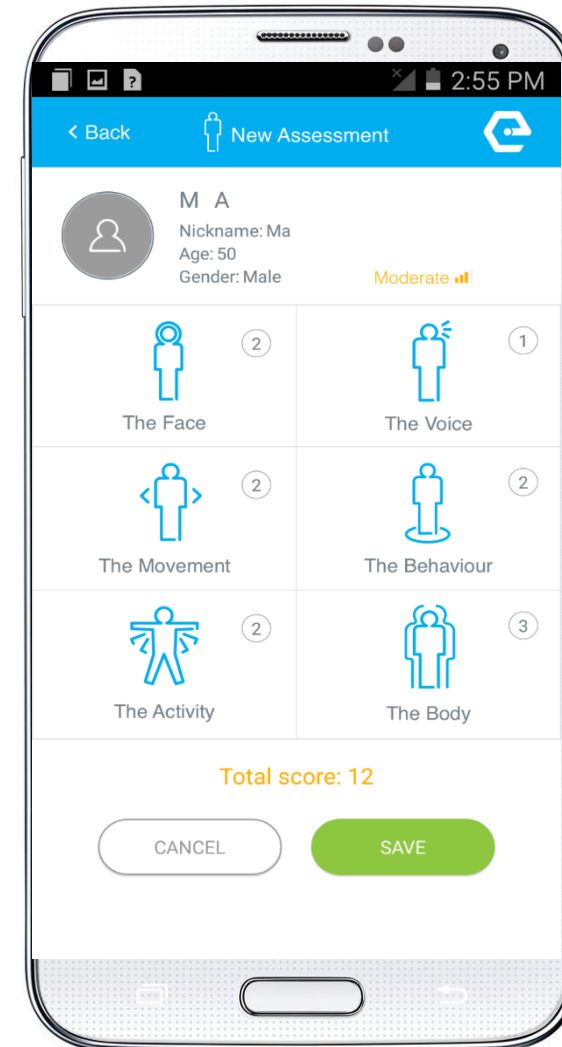
ePAT are developing a **secure medical device** that will use a smartphone to **visually analyze facial expressions**, assess and score pain levels in real time, and update medical records in the cloud



ePAT solution



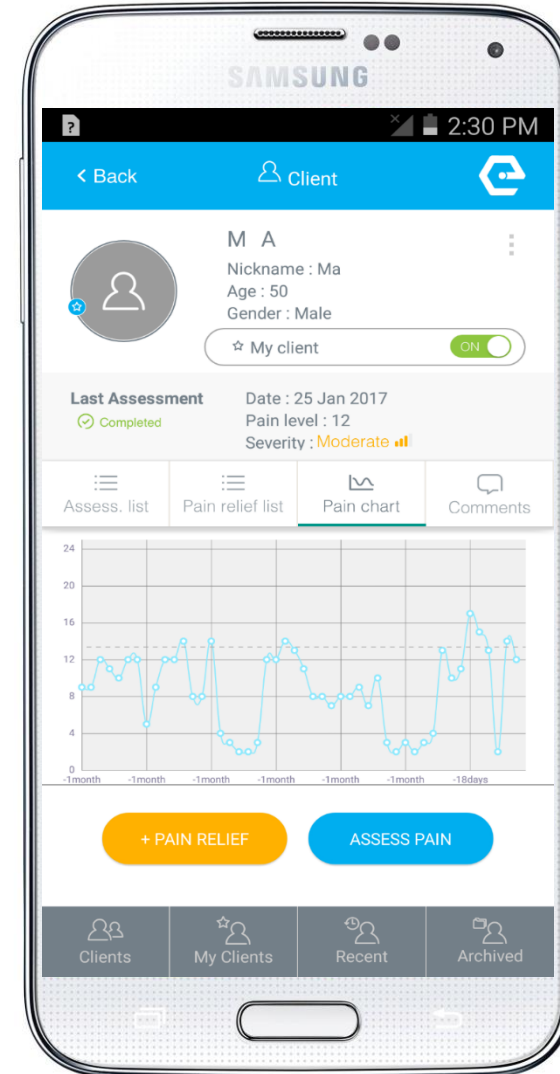
- **Automated Facial Pain Analysis:**
a **10 second video** of patient face
recognizing 9 subtle types of micro-facial expressions that indicate pain
- **Questionnaire checklist:**
to guide the carer to accurately assess **body movement, vocalization and other pain factors** by simple Yes/No decisions
- **Automated pain assessment score:**
based on **42 test points** – synchronized to the cloud and stored for ongoing pain assessment monitoring by patient's carer



ePAT has been designed to deliver the following benefits



- ✓ **Automate** key assessment processes, saving time and reducing the risk of error
- ✓ **Empower** caregivers to monitor and manage pain accurately without expert support
- ✓ **Reduce** patients' need to seek medical advice for pain, enabling better in-home care
- ✓ **Improve** health outcomes for people in pain and **reduce** cost for healthcare providers



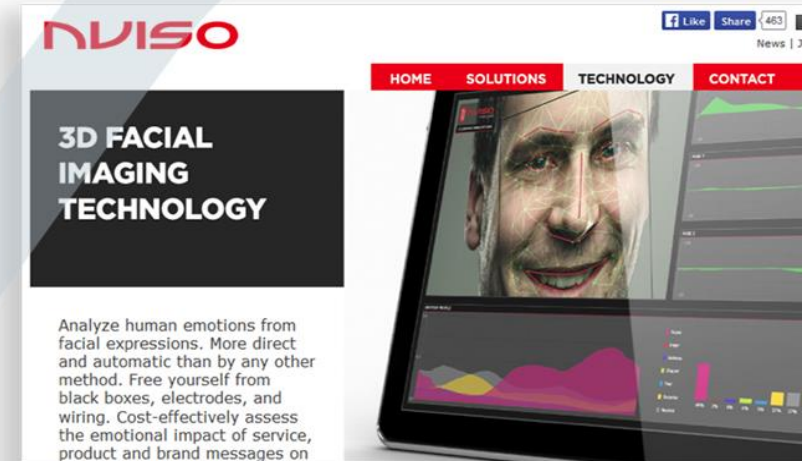
Our Partners



nViso, recognised internationally for their expertise in **micro-expression analysis**, to assist the prototype App development

and

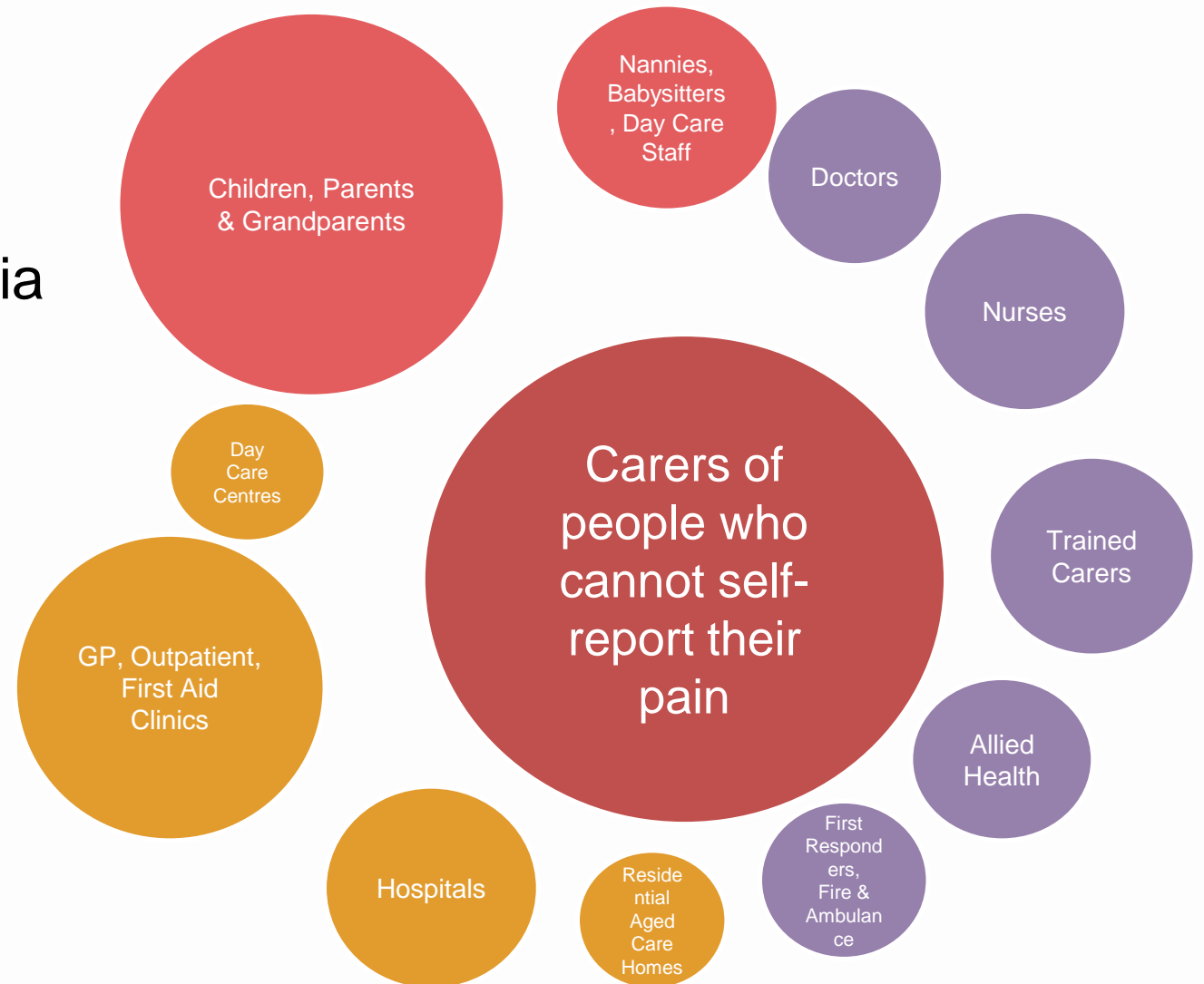
Darwin Digital to develop the commercial version of the **ePAT App for Dementia** and to do the backend system development.



Our Target Markets

Our initial focus will be to commercialise ePat Apps for:

- Carers for people with Dementia
- Carers of Pre-verbal Children



Target Market

Dementia

Syndrome in which there is deterioration in memory, thinking, behaviour and ability to perform everyday activities

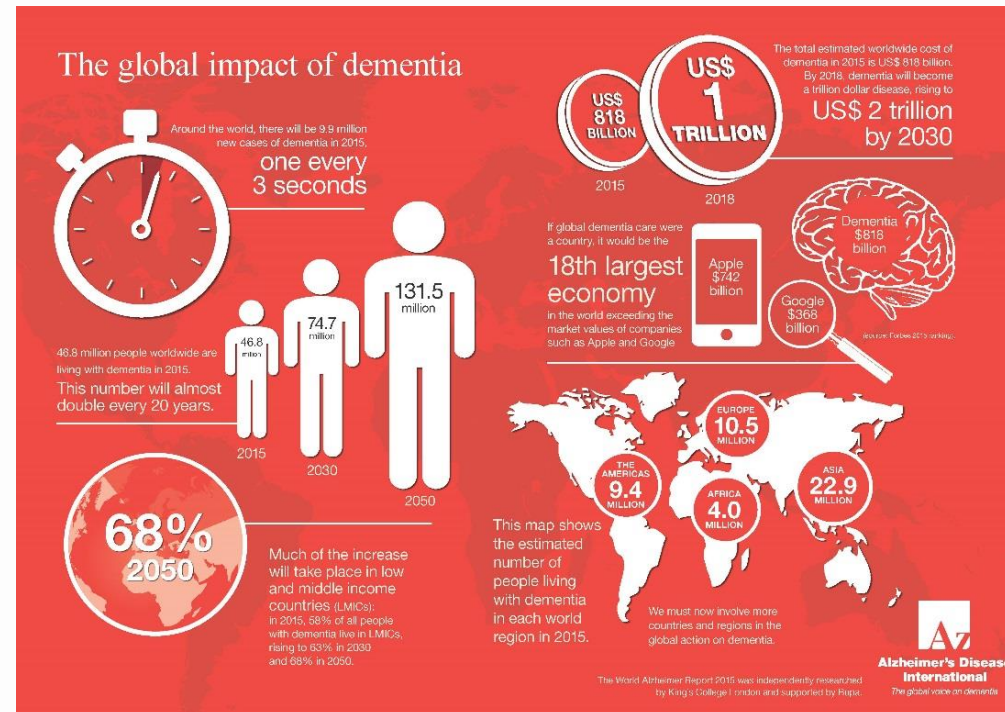
Advanced Dementia is associated with an inability to communicate pain

Healthcare shift to provide home care facilities through outreach programmes and home carers



Carers of people with dementia

- Healthcare Professionals
- Trained Carers
- Allied Health
- Family Members



Target Market

Pre-Verbal Children

- Neonates (0-1 month), infants and toddlers (1 month – 3 years)
- Sources of pain include: rashes, teething, middle ear infections, headaches, gastro-intestinal.
- Current pain assessments are often subjective and based on intuitions, assumptions and personal beliefs

Carers of pre-verbal children

Mums & Dads
Grandparents
Health care professionals
Nannies
Babysitters
Day care workers

4 Babies Born
Every second

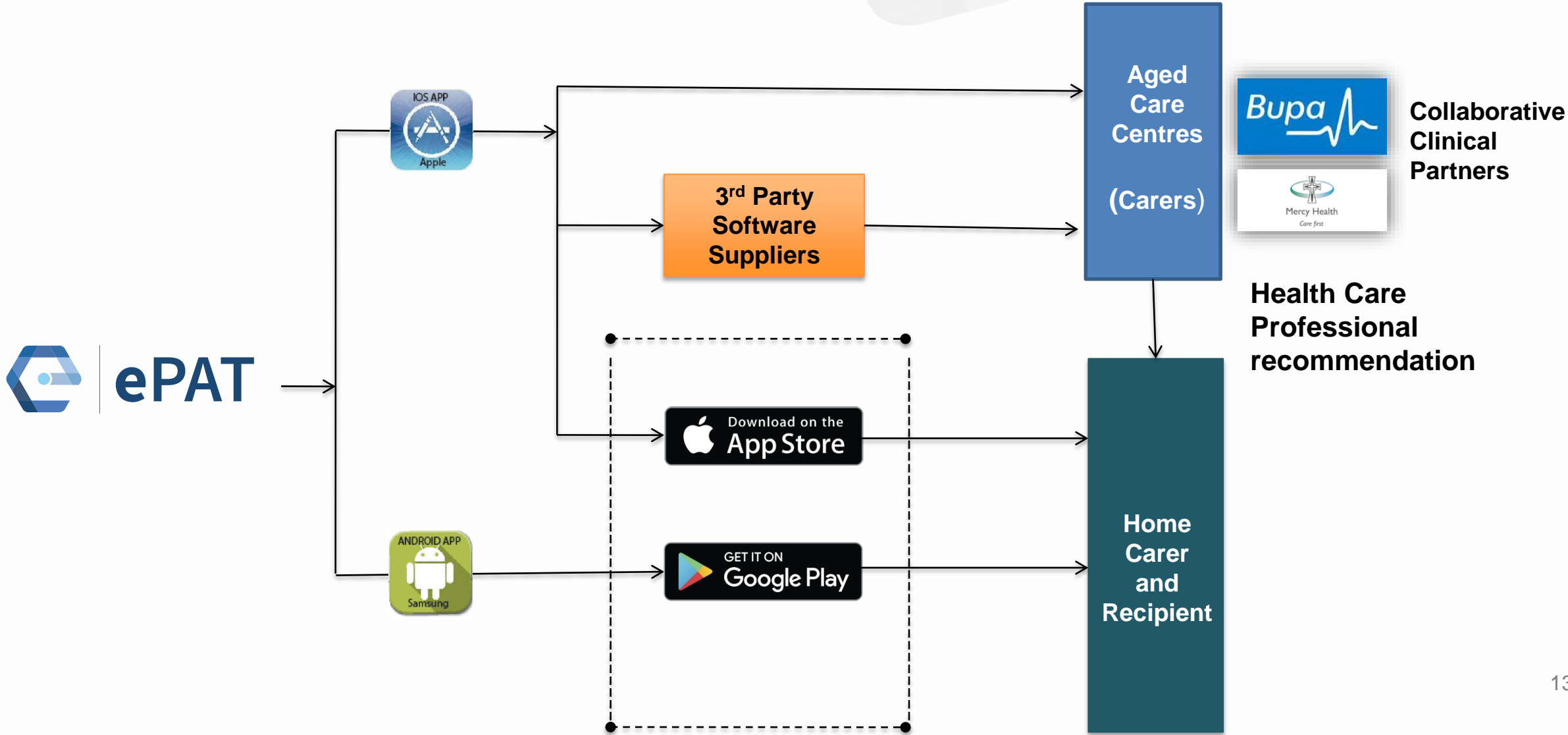
~ 130 million
Births per year

~ 260 million
New parents



ePAT Market entry strategy

Initial market entry will be to Aged Care Centers with IOS App to gain healthcare professional recommendation - prior to direct to home carer launch with IOS and Android App



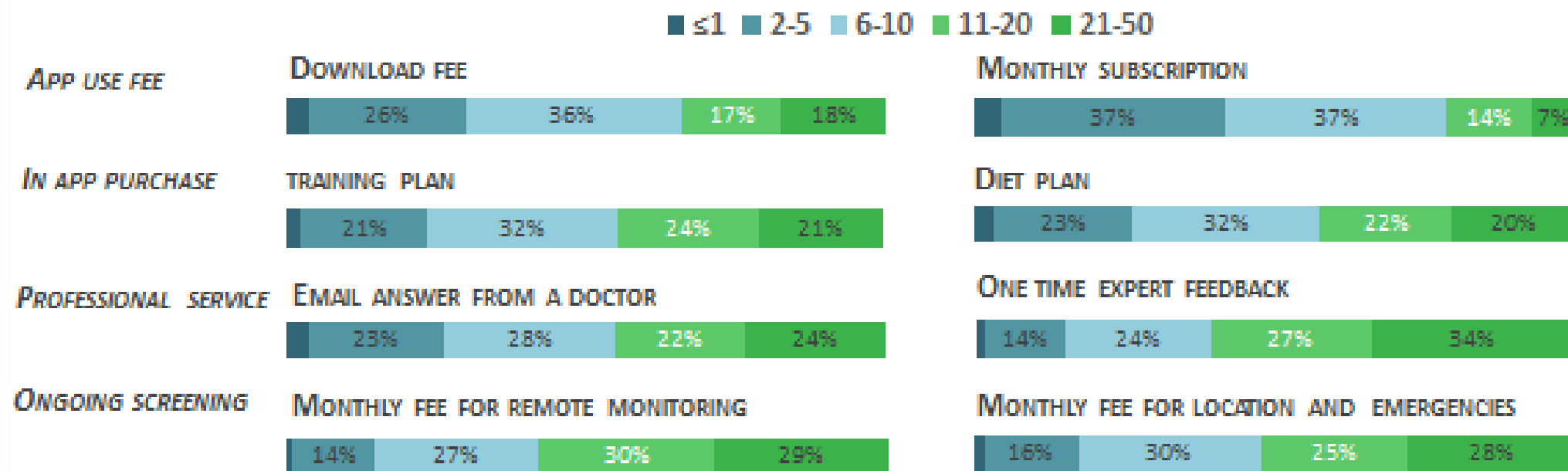
mHealth App Developer Survey



mHealth App Developer Economics 2015 survey confirms chronic illnesses - such as dementia - as the most promising market for mobile health Apps

US\$10 IS THE MOST COMMON THRESHOLD FOR USERS OF MHEALTH APP SERVICES

What do you think the maximum price (in USD) a private user would be willing to pay for the following mHealth services?



Timeline to Commercialisation and Revenue

Dementia App

1. Q4 2016 - Validation studies completed
2. Q3 2017 - Implementation studies completed
3. Q2 2017 - TGA and CE mark application submitted
4. Q3 2017 - Target for TGA approval in Australia and approval in the EU
5. Q3 2017 - Target for commercialisation in Australia and initial European markets
6. Q1 2018 - Target for FDA approval in the USA
7. Q2 2018 - Target for commercialisation in the USA

Pre-Verbal Children Apps

1. Q4 2016 – Next phase of development expected to commence
2. Q2 2017 – Prototypes for initial validation testing
3. Q4 2017 - Commence clinical studies
4. Q2 2018 – Finalise App and build regulatory file for approvals
5. Q3 2018 – Target for Regulatory approval in Australia and Europe and commercialisation ready

Progress Update on Key Milestones

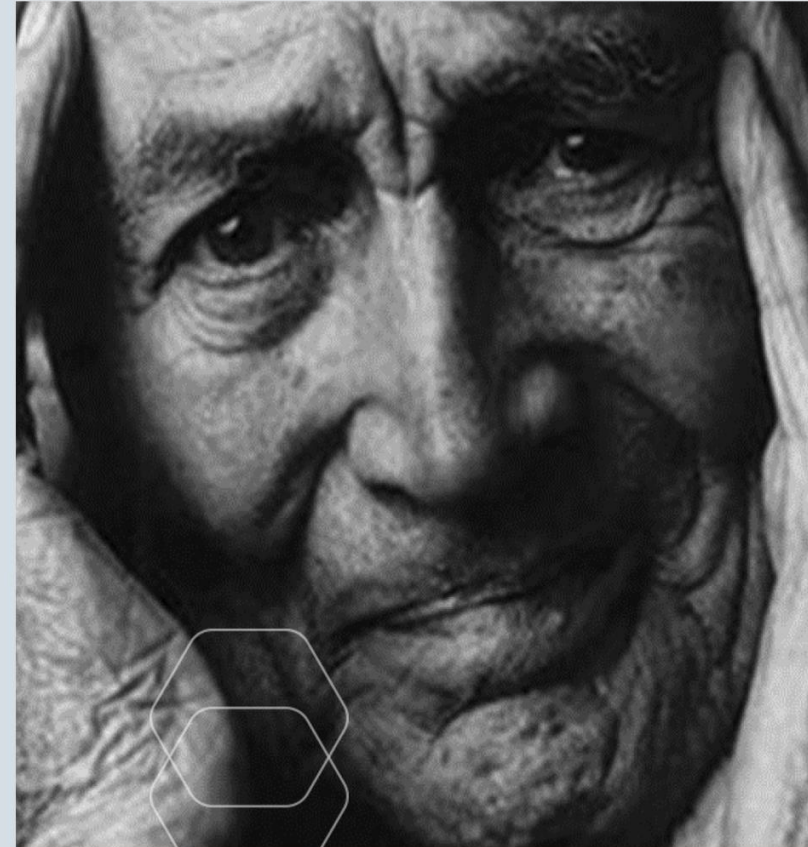
Dementia App: Validation Study

Timing:

- Commencement Mar 15
- Completion May 16

Objectives:

- To provide data needed for regulatory approval filings
- To determine the relationship between ePAT and Abbey Pain Scale (APS) pain scores
- To investigate psychometric properties of the ePAT when compared to the APS



Dementia App: Validation Study Results



Activity	Correlation Coefficient (95% Confidence Intervals)
Overall (ePAT Score vs. Abbey Score)	0.88 (0.86 - 0.90)
Rest	0.88 (0.84 – 0.91)
Movement	0.89 (0.86 – 0.92)

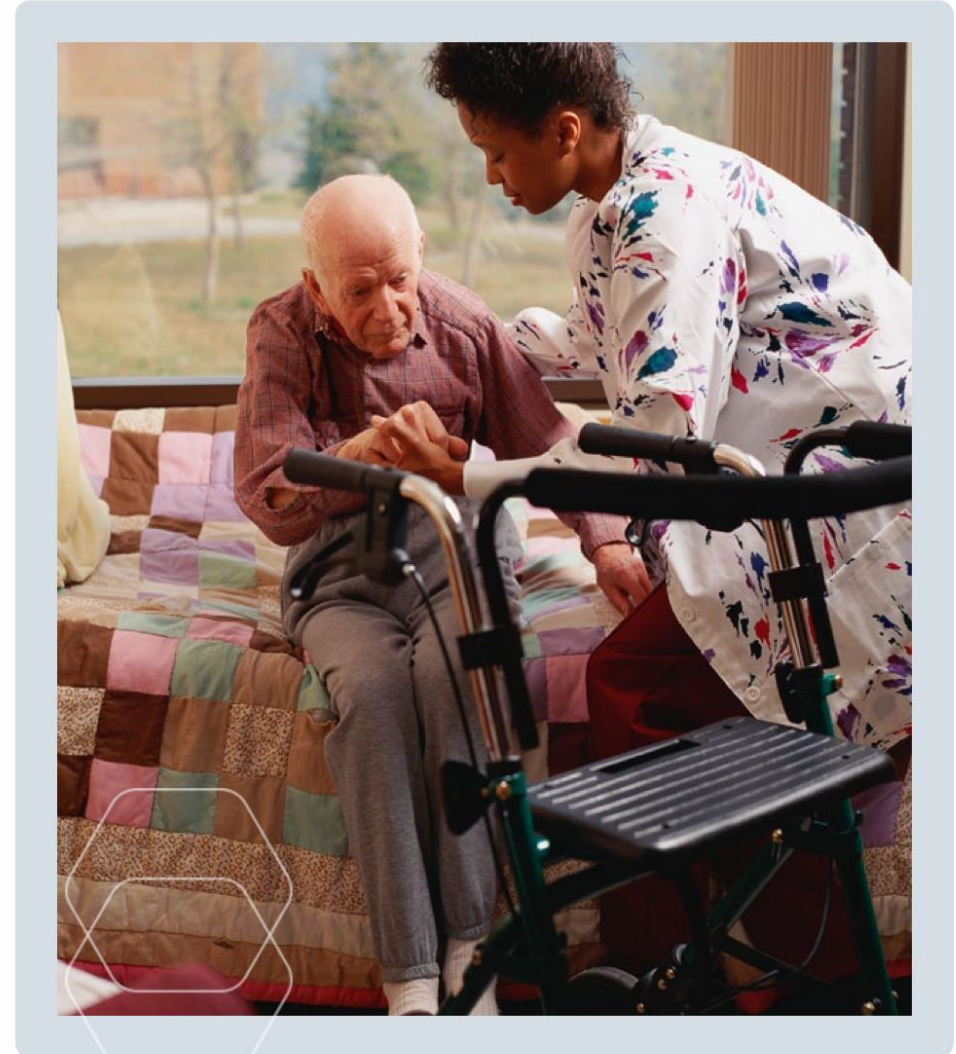
Guide to Correlation Coefficient: $\pm 0.70 - 1.00$ Strong ; $\pm 0.30 - 0.69$ Moderate; $\pm 0 - 0.29$ None (0) to weak

Dementia App Validation Study:

Conclusions:

The ePAT has demonstrated excellent performance against the Abbey Pain Scale regardless of activity when assessing clinical pain in patients with moderate to severe dementia.

This study provided most of the support data for Regulatory Approval filings.



Dementia App: Pilot Implementation Study



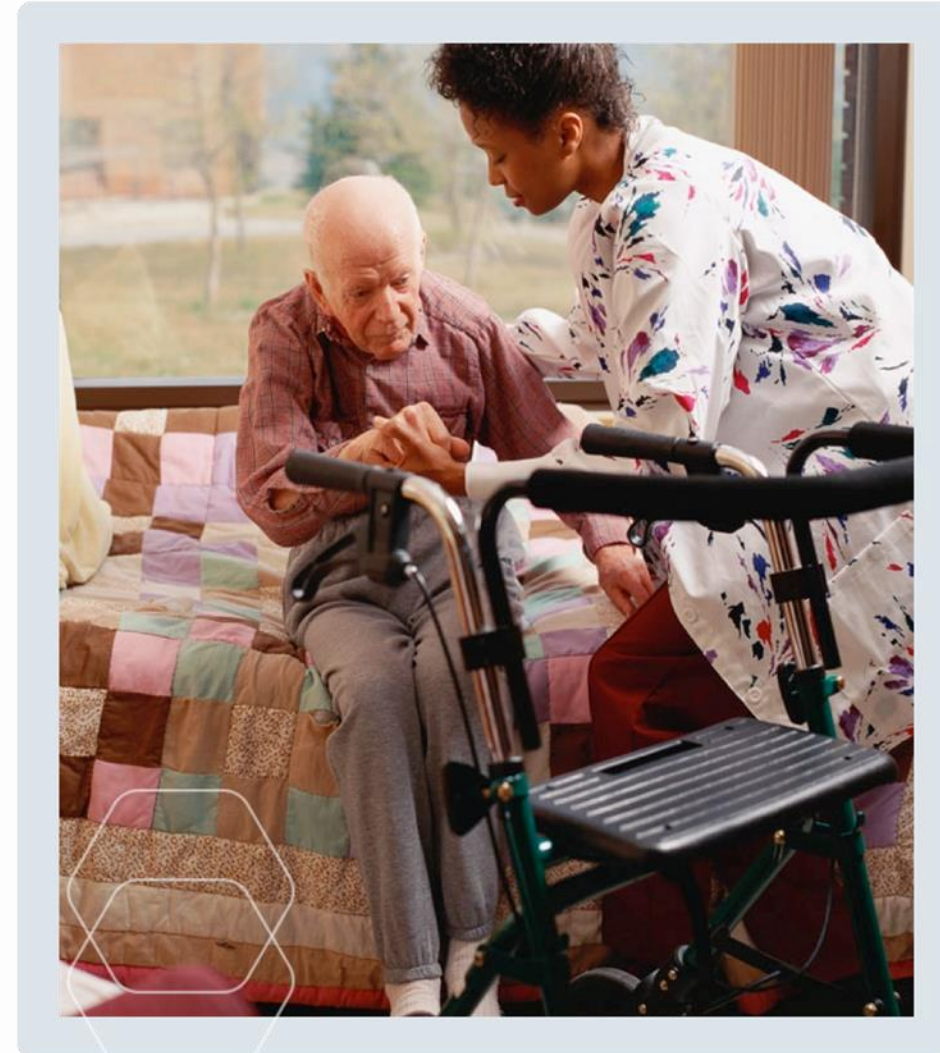
Location: Brightwater W.A.

Timelines:

- Commencement: Oct 16
- Completion: Dec 16

Objectives:

- To evaluate the feasibility and clinical effectiveness of the ePAT in assessing pain among residents with moderate-to-severe dementia.
- To determine the clinical impact of the use of ePAT pain in residents with moderate-to-severe dementia and their management.
- Obtain final data for CE/TGA Regulatory filings



Dementia App: Pilot Implementation Study Results

Activity	Weighted Kappa (κ)	95% CI
Rest n=38	0.72	0.58-0.86
Movement n= 38	0.66	0.48-0.84

Conclusions: Good inter-rater reliability data – indicating ePAT can be used by different people with different skill sets and will achieve same results.

Dementia App Multi-centre Implementation Study



Objective:

- to assess the operation of the ePAT system when embedded in a clinical use environment – so as to refine final product prior to launch.

Multi-centre study with BUPA

- Up to 10 aged care sites across Victoria
- Potential for 200+ subjects
- Planned to start in Q2 2017
- Ethics approval in place



Dementia App: TGA and CE Mark submissions



- ePAT is a Class 1 medical device
- Completed Validation & Implementation studies provide the core data set for regulatory submission
- Kea Dent & Associates appointed to complete Technical File
- ePAT on target for:
 - CE Mark and TGA Submissions before end of Q2 17
 - CE Mark and TGA Approvals before end Q3 17

“As ePAT is considered a Class 1 medical device, on meeting the Essential Requirements, we will then provide a written self-declaration statement of compliance with the regulatory requirements to obtain the CE Mark and TGA approvals”

ePAT Patent Status



- Patent Clearance for PCT filing received in August 2016
- National Filings commenced Feb 2017 in all key global markets;
 - Europe
 - US
 - Australia
 - China
 - Japan

PATENT COOPERATION TREATY		
From the: INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY		
To:		PCT NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty) (PCT Rule 71.1)
Dr Andreas Hartmann GRIFFITH HACK Level 19, 109 St Georges Terrace Perth, Western Australia 6000 Australia		Date of mailing (day/month/year) 08 August 2016
Applicant's or agent's file reference P96779.PCT		IMPORTANT NOTIFICATION
International application No. PCT/AU2015/000501	International filing date (day/month/year) 18 August 2015	Priority date (day/month/year) 18 August 2014
Applicant ELECTRONIC PAIN ASSESSMENT TECHNOLOGIES (EPAT) PTY LTD		
<ol style="list-style-type: none">1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translations to those Offices.		

Pre-verbal Children's App Progress

- Algorithm written for facial microanalysis
- Children's video library being developed in Europe
- Prototype App developments to commence in Q2 2017



Why Invest In ePAT?



ePAT is on target with Milestones that lead to **Dementia App market launch in Q4 2017**

- **Validation study** results confirm **accuracy compared to Abbey Pain Scale** - a core requirement for healthcare professional use.
- **Pilot Implementation study** indicates **consistency of results with different users with different skill sets** - which is critical for widespread aged care adoption, including home use.
- ePAT Apps has **International patent clearance** – now commenced **national country filings stage**.
- **Class 1** medical device **regulatory approval** processes for Australia and Europe **well advanced**.

ePAT Strategic Advantages:

- ePAT addresses a critical medical problem
- Targeting large global markets - high volume business model with low operating cost base
- Short time frame to market
- Clear commercialization strategy
- Plans for multiple products and revenue channels.
- Experienced and capable Board and Management teams



Appendix 1: Our Team



Strong track record in clinical practice, R&D, innovation and commercialisation

Managing Director EPAT Technologies Ltd



Philip Daffas

Philip is a highly accomplished global business leader and people manager with a 25 year international career. He has worked for blue-chip healthcare corporates and novel technology start-up companies including Cochlear and Roche Diagnostics. Philip has held senior global business leadership positions in Europe, US and Australia. He has been instrumental in building businesses, growing market share and developing extensive high-level customer relationships in each sector.

Scientific Team: Inventors and Founders from School of Pharmacy, Curtin University

All three inventors are pharmacists with a strong track record in clinical practice



Prof. Jeff Hughes

Jeff is a professor in the School of Pharmacy, Curtin University in Western Australia. Jeff served as the Head of the School of Pharmacy of Curtin University, from March 2009 to May 2014. Jeff is one of the team who invented the ePAT App and is now Chief Scientific Officer of ePAT Technologies.



Dr Kreshnik Hoti

Kreshnik is a registered community and consultant pharmacist with a PhD in Pharmacy and an accreditation from the Australian Association of Consultant Pharmacy. Dr Hoti has extensive practice experience in reviewing the use and safety of medicines in community and aged care settings, especially in geriatric people with chronic conditions.



Mustafa Atee

Mustafa is a clinical, community and academic pharmacist. Throughout his 11-year career in pharmacy, he has managed a number of community pharmacies in Western Australia. Mustafa holds a postgraduate diploma and master degrees in clinical pharmacy..

Appendix 2: Our Board

Strong track record in building global businesses, corporate governance and successful commercialisation of novel healthcare technologies

**Non-Executive Chairman EPAT
Technologies Ltd**



John Murray

John has over 20 years' experience in private equity and venture capital, and was a co-founder and Managing Partner of Technology Venture Partners; one of the original and leading venture capital firms in Australia. John is a past chairman of the Australian Venture Capital Association. John has considerable experience as a director of high growth, technology-based companies.

**Managing Director
EPAT Technologies Ltd**



Philip Daffas

Philip is a highly accomplished global business leader and people manager with a 25 year international career. He has worked for blue-chip healthcare corporates and novel technology start-up companies including Cochlear and Roche Diagnostics. Philip has held senior global business leadership positions in Europe, US and Australia. He has been instrumental in building businesses, growing market share and developing extensive high-level customer relationships in each sector.

**Non-Executive
Director EPAT Technologies Ltd**



Ross Harricks

Ross' experience in the commercialisation of medical products spans over thirty years and over three continents.. He began in the medical industry in the UK, marketing CT scanners and then moving to Australia to set up his company's regional sales operation. In 1983, Ross joined the Nucleus Group as Group Marketing Executive and became President of Group subsidiaries in United States in marketing medical equipment and scientific computing products.

**Non-Executive
Director EPAT Technologies Ltd**



Adam Davey

Adam is the Director, Private Clients and Institutional at Patersons Securities. His expertise spans over 25 years and includes ASX Listings, Capital Raising (both private and public), Mergers and Acquisitions as well as Transaction Due Diligence. Adam has held various roles within different organizations including Chairman, Managing Director as well as Corporate Adviser to the board.

Appendix 3: Corporate and Financial Position



Cash at 31 December 2016: \$3.5m

Securities on issue:

Ordinary shares: 671.9m (215.8m escrowed 24 months)

Options: 238.2m

Market Capitalisation (@ 2.8cents per share): \$18.8m