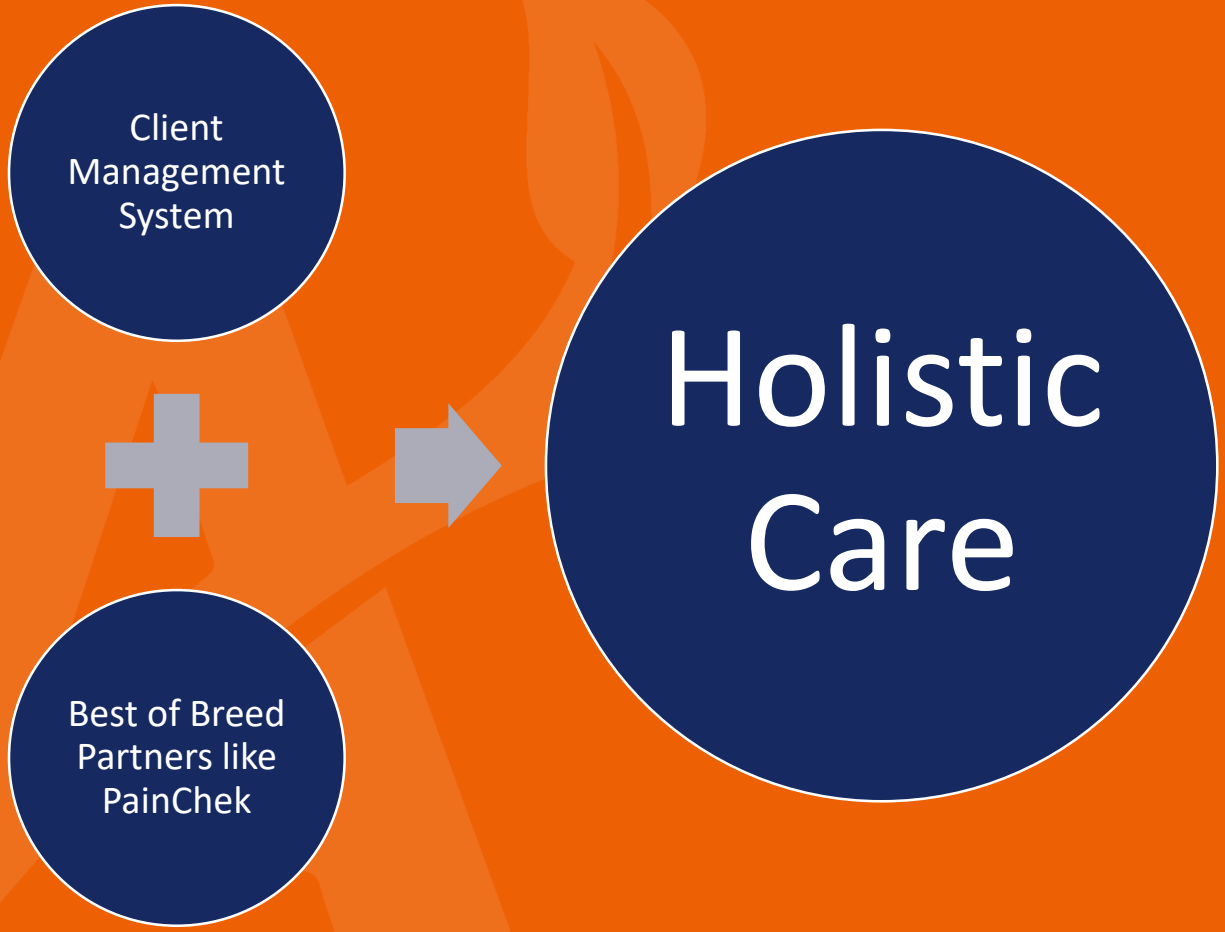
AlayaCare

Power of Integrations

PainChek
Intelligent Pain Assessment

AlayaCare


Client Management System
Best of Breed Partners like PainChek
Holistic Care

PainChek®

Giving a voice to people that cannot verbalise pain

PainChek
Intelligent Pain Assessment

THE CHALLENGE OF MANAGING PAIN FOR PEOPLE WITH DEMENTIA

Pain is common

- Up to 80% of people in aged care experience chronic pain[1]
- More than 50% of people in Australian aged care have dementia[2]
- 47 Million globally living with Dementia[3] growing at 3% p.a.

But pain often goes undetected and untreated[1]

- Pain is difficult to assess
- Tools to assess pain are often not used or use subjective rating scales
- Adverse impact on quality of care, operational efficiency and compliance

1 Aged Care Awareness
2 Australian Govt. Dept. of Health data at 30 June 2015
3 World Alzheimer's report 2016

PainChek
Intelligent Pain Assessment

AlayaCare

Evolution of Pain Assessments in Dementia

Table 1 Common pain behaviors in cognitively impaired elderly persons according to the AGS Panel on persistent pain in older persons[10]

1. Facial expressions	Slight frown; sad, frightened face Grimacing, wrinkled forehead Closed or tightened eyes Any distorted expression Rapid blinking
2. Verbalizations, vocalizations	Sighing, moaning, groaning Grunting, chanting, calling out Noisy breathing Asking for help Verbally abusive
3. Body movements	Rigid, tense body posture, guarding Fidgeting Increased pacing, rocking Restricted movement Gait or mobility changes
4. Changes in interpersonal interactions	Aggressive, combative, resisting care Decreased social interactions Socially inappropriate, disruptive Withdrawn
5. Changes in activity patterns or routines	Refusing food, appetite change Increase in rest periods Sleep, rest pattern changes Sudden cessation of common routines Increased wandering
6. Mental status changes	Crying or tears Increased confusion Irritability or distress

2002

AGS

2003

Pain Assessment IN Advanced Dementia
PAINAD

	0	1	2	Score
Breathing Independent of vocalization	Normal	Occasional labored breathing. Short period of hyperventilation	Noisy labored breathing. Long period of hyperventilation. Cheyne-stokes respirations	
Negative Vocalization	None	Occasional moan or groan. Low level speech with a negative or disapproving quality	Repeated troubled calling out. Loud moaning or groaning. Crying	
Facial expression	Smiling, or inexpressive	Sad. Frightened. Frown	Facial grimacing	
Body Language	Relaxed	Tense. Distressed pacing. Fidgeting	Rigid. Fists clenched, Knees pulled up. Pulling or pushing away. Striking out	
Consolability	No need to console	Distracted or reassured by voice or touch	Unable to console, distract or reassure	
				TOTAL

Abbey Pain Scale

For measurement of pain in people with dementia who cannot verbalise

Q1. **Vocalisation** (eg whimpering, groaning, crying)
Absent 0 Mild 1 Moderate 2 Severe 3

Q2. **Facial expression** (eg looking tense, frowning, grimacing, looking frightened)
Absent 0 Mild 1 Moderate 2 Severe 3

Q3. **Change in body language** (eg fidgeting, rocking, guarding part of body, withdrawal)
Absent 0 Mild 1 Moderate 2 Severe 3

Q4. **Behavioural change** (eg confusion, refusing to eat, alteration in usual pattern)
Absent 0 Mild 1 Moderate 2 Severe 3

Q5. **Physiological change** (eg temp, pulse/BP outside normal limits, perspiring, flushing, pallor)
Absent 0 Mild 1 Moderate 2 Severe 3

Q6. **Physical change** (eg skin tears, pressure areas, arthritis, contractures)
Absent 0 Mild 1 Moderate 2 Severe 3

Total pain score

Tick the box that matches the total pain score

0–2	3–7	7–13	14+
No pain	Mild	Moderate	Severe

Tick the box that matches the type of pain

Chronic	Acute	Acute on chronic

2004

PainChek®

2017

PainChek

PainChek
Intelligent Pain Assessment

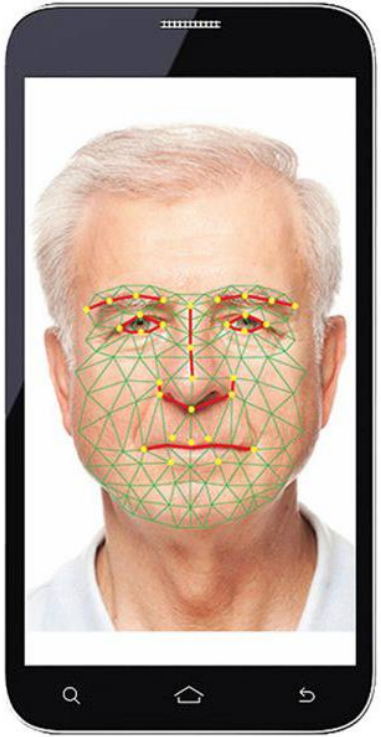
AlayaCare

The PainChek® solution

A secure, validated, **medical device** in the form of a mobile app

Uses existing smartphone and tablet hardware[1]

Artificial Intelligence (AI) technology to analyze facial expressions indicative of pain in real time

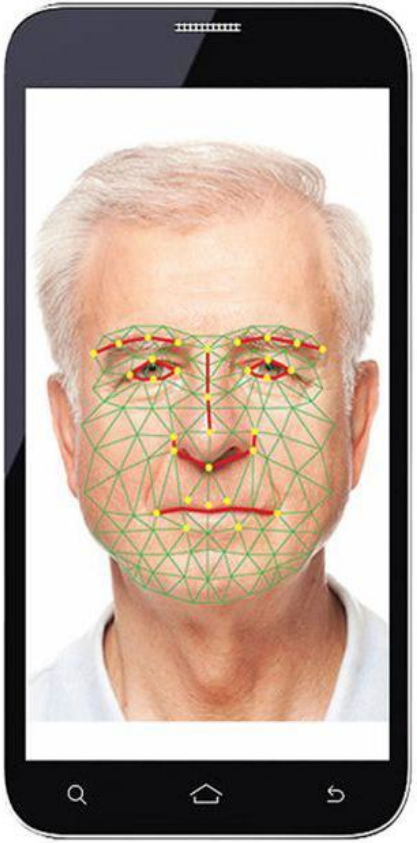


[1] Edge devices (smartphones and tablets) are being adopted extensively within Aged Care and Primary Care health services to capture patient medical records and resident data

PainChek
Intelligent Pain Assessment

AlayaCare

Helping carers **identify the presence of pain** when it isn’t obvious…

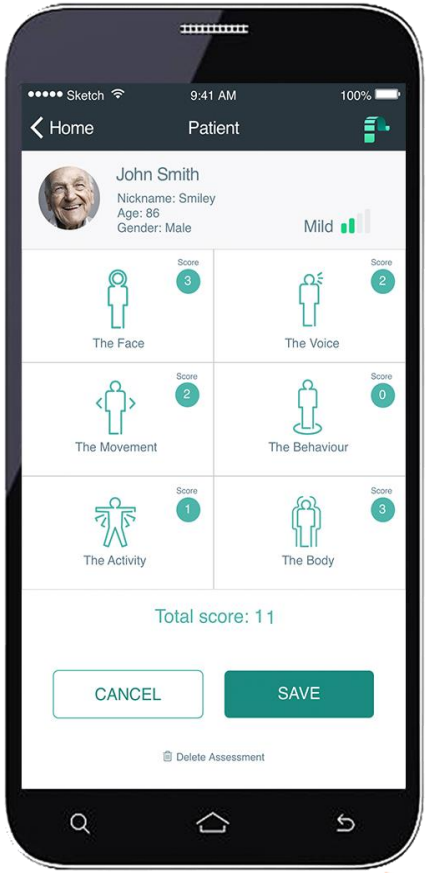


PainChek
Intelligent Pain Assessment

AlayaCare

Helping carers **identify the presence of pain** when it isn't obvious…

…quantifying the severity of pain when it is……



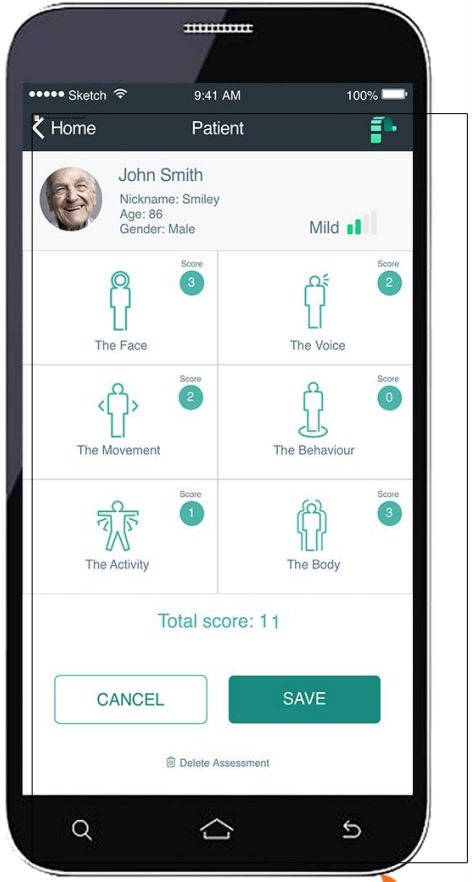
PainChek
Intelligent Pain Assessment

AlayaCare

Helping carers **identify the presence of pain** when it isn't obvious…

…**quantifying the severity** of pain when it is……

and **monitoring** the **effectiveness of interventions**



PainChek
Intelligent Pain Assessment

AlayaCare

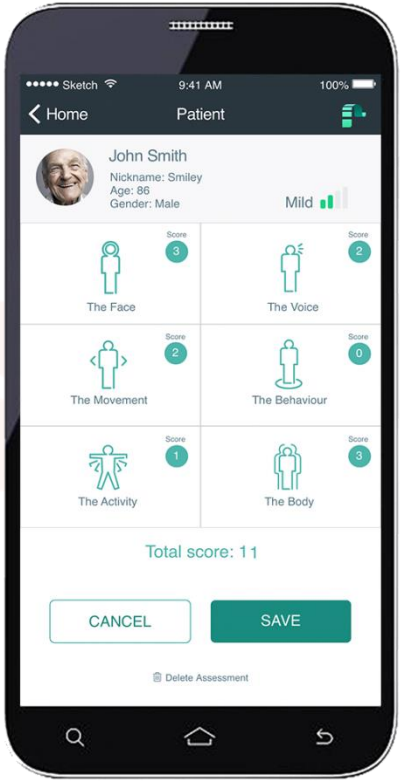
PainChek® App

- **Automated facial pain analysis:**
  - 3 second video of patient face
  - recognises 9 micro-facial expressions that indicate pain

- **Digital questionnaire checklist:**
  - guide the carer in other pain assessment factors e.g. movement, vocalization
  - leading questions with Yes/No decisions

- **Automated pain assessment score:**
  - based on 42 test points

- **Documented electronically via cloud backend:**
  - pain trend line and monitoring of treatment
  - capability to integrate into resident medical records



PainChek
Intelligent Pain Assessment

AlayaCare

Federal Government announcement of $5M for PainChek implementation in Residential Aged Care

Channel 10 Perth Evening News – 29 April
Sky News – 30 April
100,000 beds in residential aged care

PainChek
Intelligent Pain Assessment

PainChek

Intelligent Pain Assessment

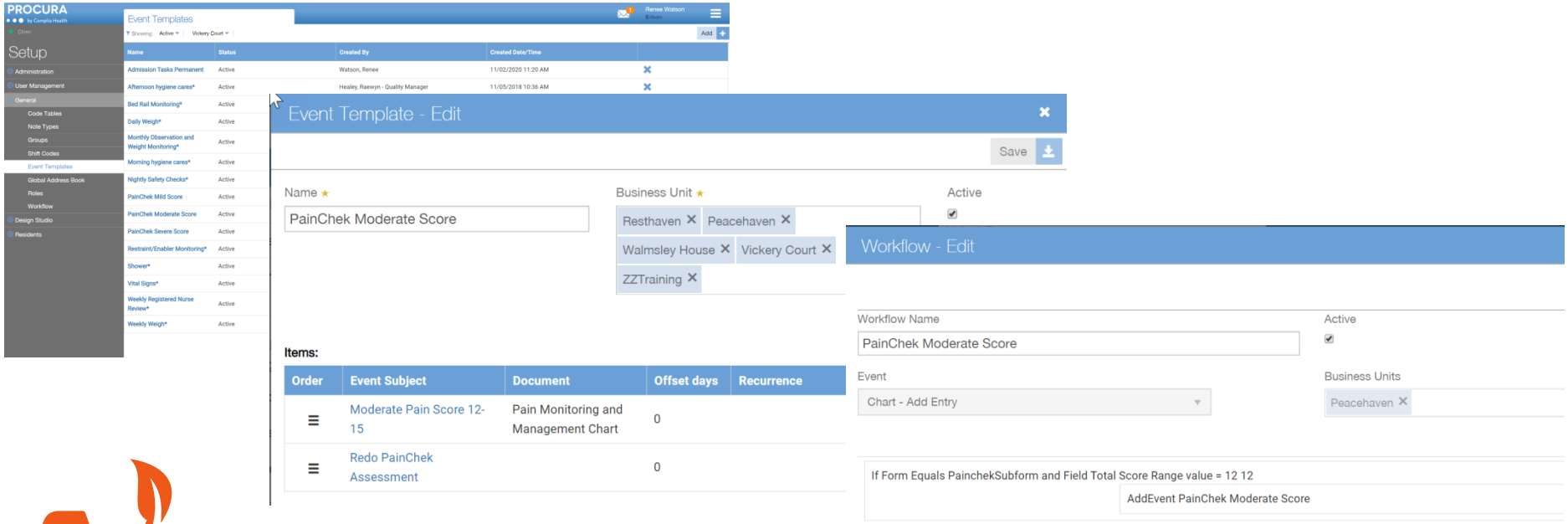
AlayaCare

How do we get more out of our Integrations?

PainChek
Intelligent Pain Assessment

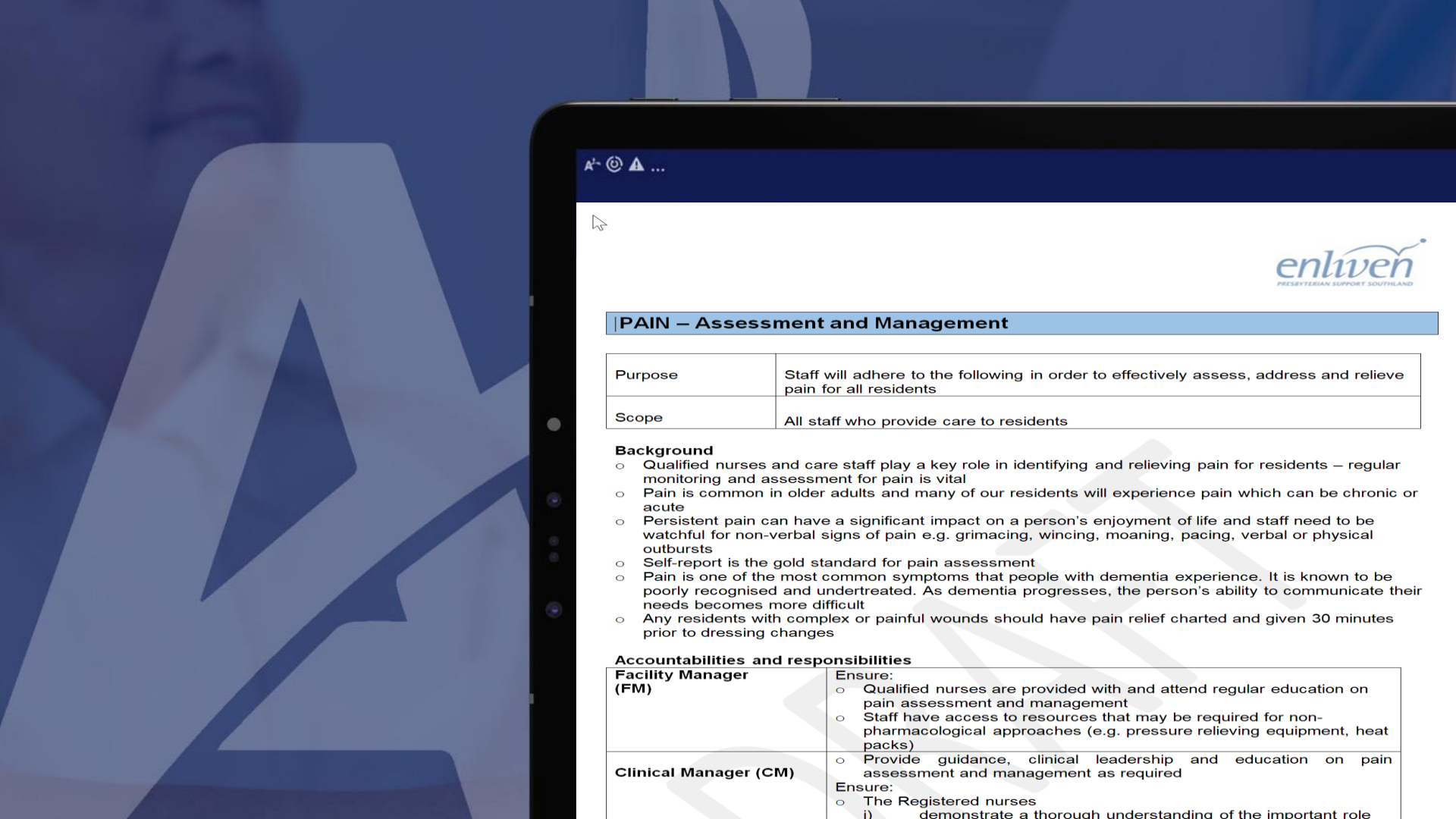
AlayaCare

Workflows that support Policy



PainChek
Intelligent Pain Assessment

AlayaCare



PAIN – Assessment and Management

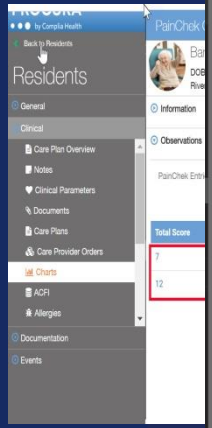
Purpose	Staff will adhere to the following in order to effectively assess, address and relieve pain for all residents
Scope	All staff who provide care to residents

Background

- Qualified nurses and care staff play a key role in identifying and relieving pain for residents – regular monitoring and assessment for pain is vital
- Pain is common in older adults and many of our residents will experience pain which can be chronic or acute
- Persistent pain can have a significant impact on a person's enjoyment of life and staff need to be watchful for non-verbal signs of pain e.g. grimacing, wincing, moaning, pacing, verbal or physical outbursts
- Self-report is the gold standard for pain assessment
- Pain is one of the most common symptoms that people with dementia experience. It is known to be poorly recognised and undertreated. As dementia progresses, the person's ability to communicate their needs becomes more difficult
- Any residents with complex or painful wounds should have pain relief charted and given 30 minutes prior to dressing changes

Accountabilities and responsibilities

Facility Manager (FM)	Ensure: ○ Qualified nurses are provided with and attend regular education on pain assessment and management ○ Staff have access to resources that may be required for non-pharmacological approaches (e.g. pressure relieving equipment, heat packs)
Clinical Manager (CM)	○ Provide guidance, clinical leadership and education on pain assessment and management as required Ensure: ○ The Registered nurses i) demonstrate a thorough understanding of the important role



PainChek Chart v5.0 - Edit > PainChek Assessment v3.0 - Edit

Search

- Overview
- The Face
- The Voice
- The Movement
- The Behaviour
- The Activity
- The Body

Barnes, Jenny
DOB: 15/03/1916 (103 years)
River Wing > Rooms > Room 6 > Bed > Actual_ Bed D

Delete | Mark In Error | Save & Close

Information

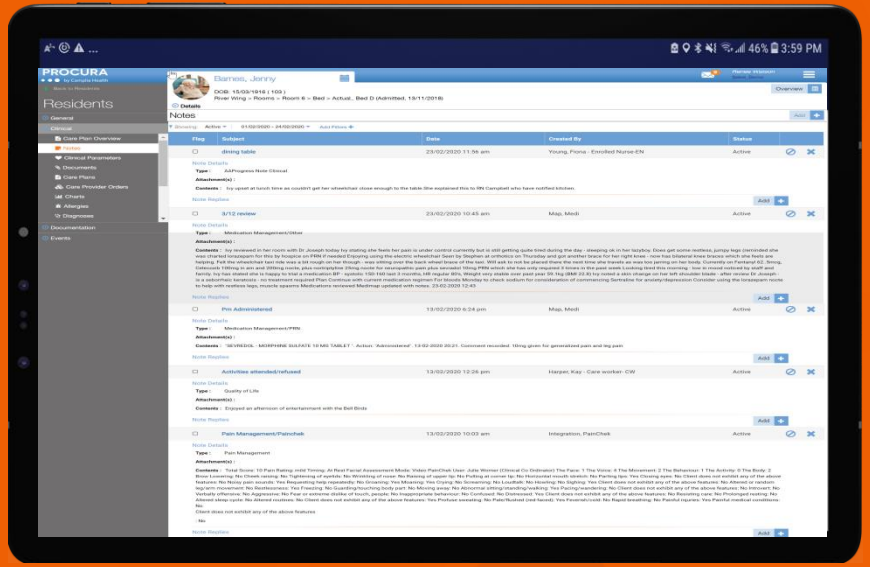
Overview

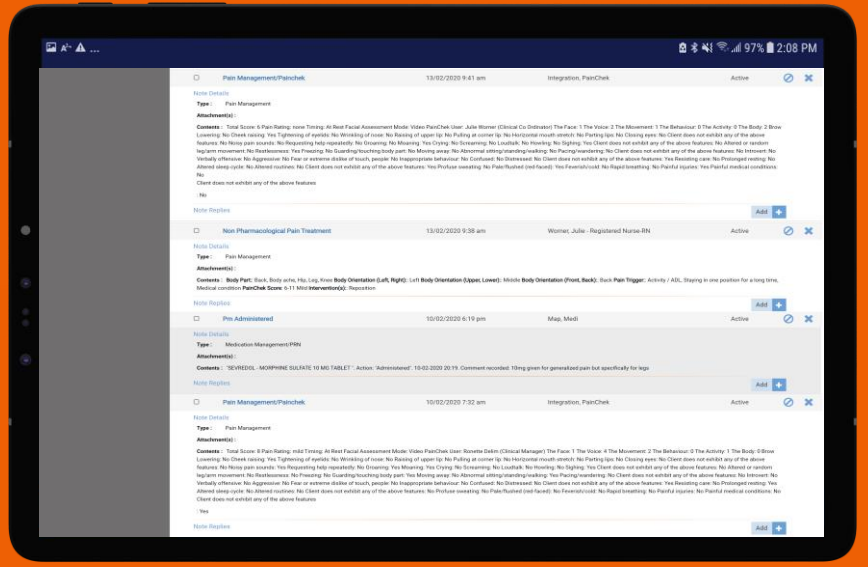
Total Score: 12	Pain Rating: moderate
Timing: At Rest	Facial Assessment Mode: Video
PainChek User: Renee Watson	
The Face: 4	The Voice: 2
The Movement: 2	The Behaviour: 2

PainChek Intelligent Pain Assessment

AlayaCare

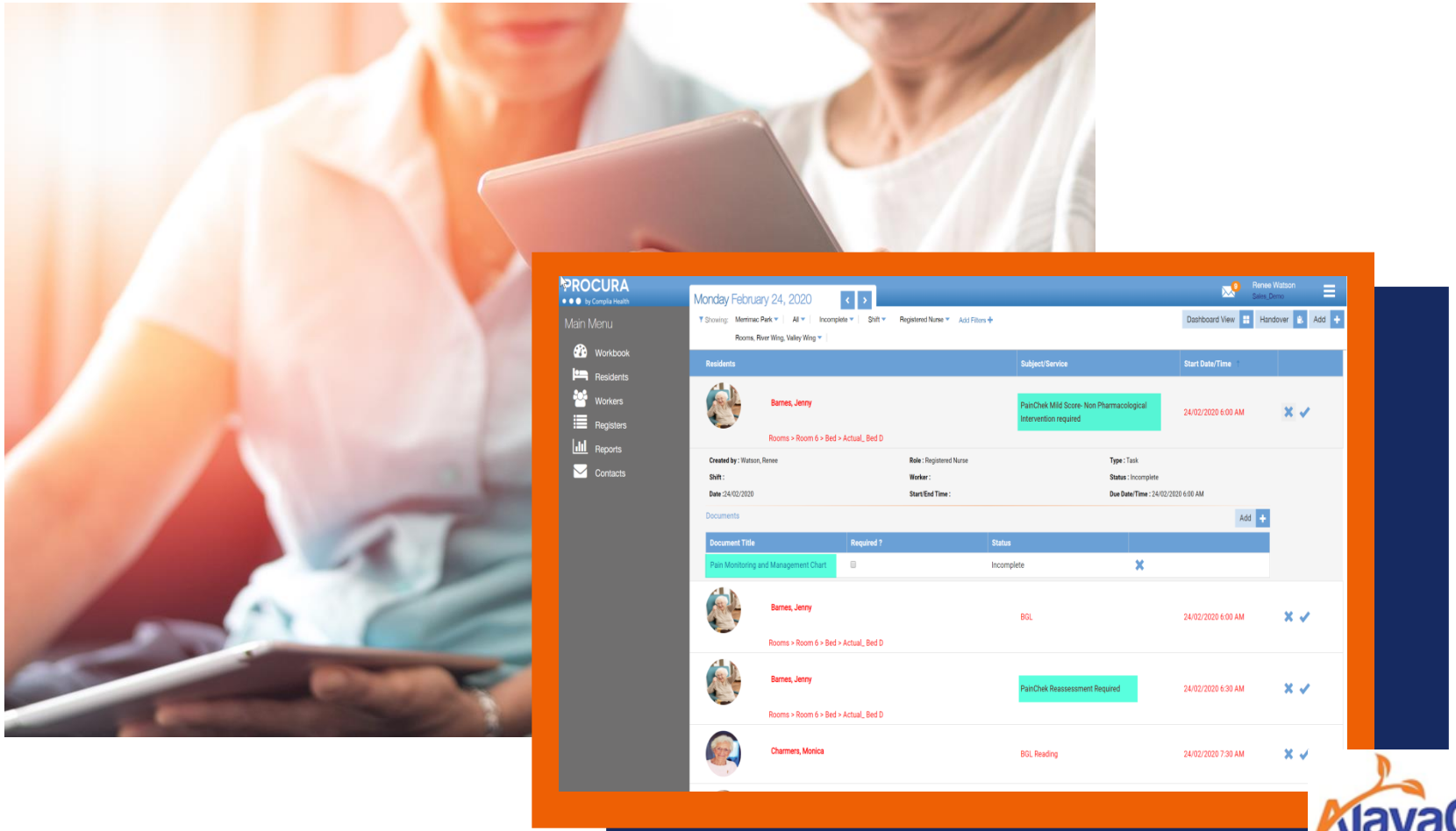
Progress Notes





PainChek
Intelligent Pain Assessment

AlayaCare


PROCURA
by Complia Health
Main Menu
Workbook
Residents
Workers
Registers
Reports
Contacts
Monday February 24, 2020
Renee Watson
Sales_Demo
Showing: Merrimac Park | All | Incomplete | Shift | Registered Nurse | Add Filters
Rooms, River Wing, Valley Wing
Dashboard View
Handover
Add
Residents
Subject/Service
Start Date/Time
Barnes, Jenny
Rooms > Room 6 > Bed > Actual_ Bed D
PainChek Mild Score- Non Pharmacological Intervention required
24/02/2020 6:00 AM
Created by : Watson, Renee
Shift :
Date :24/02/2020
Role : Registered Nurse
Worker :
Start/End Time :
Type : Task
Status : Incomplete
Due Date/Time : 24/02/2020 6:00 AM
Documents
Add
Document Title
Required ?
Status
Pain Monitoring and Management Chart
Incomplete
Barnes, Jenny
Rooms > Room 6 > Bed > Actual_ Bed D
BGL
24/02/2020 6:00 AM
Barnes, Jenny
Rooms > Room 6 > Bed > Actual_ Bed D
PainChek Reassessment Required
24/02/2020 6:30 AM
Charmers, Monica
BGL Reading
24/02/2020 7:30 AM

PainChek
Intelligent Pain Assessment

AlayaCare

Questions?