

Jindalee Aged Care — Digital Transformation with Humanetix ACE Case Study

Jindalee Aged Care has achieved a radical digital transformation, leading to significant improvements in the quality of care for its residents and an improved work environment for staff.

A 2-year independent evaluation by the *University of Canberra* of the deployment of *Humanetix 'Aged Care Ecosystem (ACE)'* in *Jindalee* found that ACE improved the quality of care while increasing efficiency, including a 20% saving in nurse time. These results were despite the added stress and workload on staff resulting from the COVID outbreak.

The *Jindalee* team worked with *Humanetix Pty Ltd* to codify best practice aged care clinical processes into the ACE system, in a shared vision to free staff up from the tedious and time-consuming task of planning, recording and validating care delivery on paper.

The team increased the quantity and quality of data collected, while decreasing the time taken to collect it. The time saved has been redeployed into caring for the residents to help them enjoy healthy and fulfilling lives at *Jindalee*.

The Challenge

Like most aged care facilities, *Jindalee* was running an electronic system that was really an *ACFI* optimiser rather than about resident and their care.

It supported a high-level care plan but the day-to-day care records, on which clinical decision-making relied, were still communicated using paper.

The *Jindalee* team recognised that any system relying on paper to communicate was time-consuming and prone to errors.

They also recognised that their system often had incomplete or missing data, which could distort clinical decision-making.

Relying on human memory for care activity schedules could lead to missed care and missed opportunities for early diagnosis, intervention and poor clinical outcomes.

The risk for many aged care providers is “missed information” often causes poor Clinical Governance.

The result is that residents are not provided with the clinical care required at vital times.

ACE is a system that **limits the risk of missed information** in this area and **raises the clinical standards** so staff can provide best practice care.

Solving a National Problem

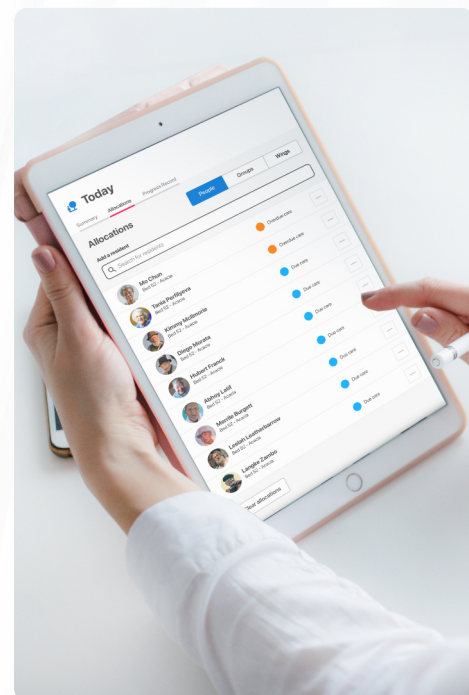
During 2017, the *Australian Government* and a number of international groups such as the *Global Patient Safety Movement* took a keen interest in *Humanetix* technology.

The then **Minister for Aged Care, Ken Wyatt**, (a former clinician) recognised that the technology could help address the chronic issues of care quality assurance and financial sustainability confronting the aged care sector.

The Government saw the need for a reference site for ACE in Aged Care and contributed to a 2-year development and deployment at the 180 bed *Jindalee* facility, beginning in June 2018.

ACE is a **point-of-care documentation, decision-support and clinical workflow IT system** to support staff care delivery for Residential Aged Care residents. ACE can run on any device – PCs, tablets or smartphones. Resident histories are in user-friendly charts with decision support data.

The Government commissioned the *University of Canberra* to evaluate the impact of the technology on care quality and on the efficiency of care delivery.





Outcomes

The University of Canberra found that ACE delivered improvements

Quality of Documentation

With improvements in the legibility, completeness and accessibility of care documentation, including:

- ✓ Clinical Assessments were easier to complete, involved the residents and families in a co-design process that ensured **standards 1 and 2** were met. The level of assessment increased due to the use of ACE **from 68% to 96% completion** as a partnership with the resident and their families.
- ✓ Documentation on residents increased from a score of **10 to 17 (out of a possible 18)** which ensured that **standards 3 and 4** were met to the satisfaction of the residents and their families
- ✓ Having a system which allows more time ensured residents goals could be met with this rising **from 56% to 88% completion**. This ensured the facility met **standard 1** on resident choice.
- ✓ Allowing more time for nurses increased their effectiveness **from 31% to 88%** which again allowed for **standards 3 and 4** to be met at the satisfaction of the resident and their families.

Efficiency

Staff spent less time on 'waste' activities, with nurses spending 6% less time searching for information and 25% less steps per shift. Nurses also spent less time on documentation, which fell from 20.4% of their time to 6.4%, bringing **total time saved by nurses to 20.0%**.

Quality of Resident Care

With staff reporting being able to spend more time with residents; more able to respond to resident needs; and better equipped able to manage the 'delicacies of dignity'.



The improvement in both **quality and completeness of documentation** achieved by using ACE is an important advance on earlier forms of electronic-based health records. The *University* research noted that other electronic systems do not offer the highly detailed electronic medical record found in ACE.

Jindalee was also a very well-run facility before the ACE deployment – it had higher staffing levels than recently recommended by the *Royal Commission* and the *University* observed that it had high resident satisfaction with the care provided. The gains in less well-run facilities would be even greater.



Feedback Collected by University of Canberra

from interviews with residents, their relatives and staff included

Resident focused — “the vision was to have it resident centered, and I really think that’s working” ... “I can know the residents properly, about their behaviour and why they are here”

Improves information quality — “very quick, very convenient, detailed... it helps, when you’ve got 30 things to think of, to know what it is you’ve got to do”.

Transformational — “amazing” and “absolutely time saving” with “more time spent with residents”

Reduced Clinical Risk — the system significantly reduced the risk of clinical requirements being missed by staff which led to better outcomes for the resident.

Efficient — time spent seeking paperwork was “halved” as staff don’t “have to run around”, nor “shout across the hallway to each other”

Safer — updates are instantly changed everywhere, which is safer for residents

Easy-to-use — “staff who didn’t even use smartphones were happy to experiment as they went, to figure out what they could use”.

Work Proud — proud to be part of the (ACE) development (with) the design responding to our suggestions and needs

More time with residents — “every few minutes improves the resident’s day”



The Value of a Responsive System

Humanetix ACE



Positive Outcomes Despite COVID-19 Pandemic

The many positive findings highlighted by this evaluation are particularly significant in the context of the outbreak of the COVID-19 pandemic.

COVID19 meant that staff had to take on additional workload infection control, including use of PPE, which could impede communication with residents.

The isolation of residents for extended periods during the pandemic created additional stress on both staff and residents.

The net result could have been expected to impede and potentially obscure the flow of benefits from ACE and makes the many positive outcomes more significant.

Staff Training

The intuitive design of ACE meant staff needed only a few hours training, including lower-skilled staff, many of whom speak English as a second language. **100% of staff trained in the system said they believed it is helping them to do the job and 100% found no difficulty in using the system.**

Transformation in Workflow

The transformation in workflow is especially **evident at shift handover**. Staff are now completing records as they go, which substantially increases accuracy, and the handover to the next shift is now a brief conversation between incoming and outgoing staff, focused on the deep needs of the resident. There is no requirement for records to be printed from the system for handover.

Highly Reliable

ACE has also proven to be highly reliable, with no significant unplanned downtime – most unusual for a new system deployment. To date, only **three calls to a 24/7 helpline** have been made – and these were for forgotten passwords.

Paper-free Home

ACE has replaced many paper forms previously used to document care with over **1,000 facts** about the resident and more than **360 activity specifications**, including many previously not recorded. **18 user roles** (nurse, allied health, doctor, etc) are recognised. *Jindalee* now operates genuinely *paper-free*.

Configurability

The ability to **easily configure ACE is really valued** – clinical staff had asked for changes to the system and then changed back as they came to fully understand workflow and care quality impacts. No other system has this rapid flexibility.

Humanetix ACE was a finalist in the 2018 international Patient Safety Awards – a first for an Australian company.

