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Dr Tan Jit Seng is trained as a medical doctor and still is a fulltime eldercare clinician doing primary health care work and running long-term home-based services. He has been involved in public, charity, military, and private systems for the past 20 years. He is currently Founder and Director of Lotus Eldercare Pte Ltd (www.lotuseldercare.com.sg) based in Singapore.

Here he looks at how emerging technologies is transforming the healthcare sector in some surprising ways.
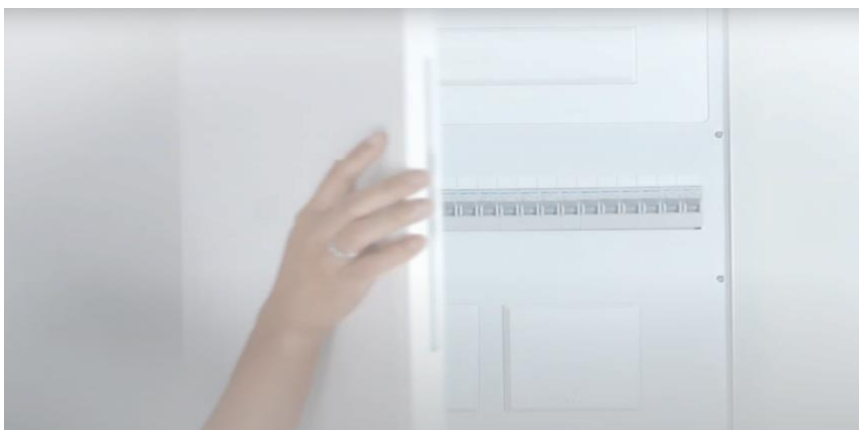
AGE IN PLACE

The Role of the Smart Switchboard in Ambient Assisted Living

As our senior citizens increase in age, it is generally the case that their need for support and care increases, but the transition period from independence to full support is somewhat of a moving target.

It becomes challenging for families to monitor their aging parents or relatives while managing their own professional and personal lives. In such scenarios, Ambient Assisted Living (AAL) systems can be helpful in providing a better quality of life for the elderly.

Healthcare Hub

AAL Systems provide aid and support to the elderly in their daily activities while maintaining their privacy and independence. Traditionally, these systems use different sensors and devices such as motion sensors, fall detectors, and health monitors to collect data and detect anomalies; but they are intrusive and are dependent upon the cooperation of the occupant, which isn't always reliable.

AVA - The Smart Switchboard

The non-intrusive Smart Switchboard, which employs AI and Machine Learning (ML) is fast becoming the 'Base Model' of care in the home; allowing us to understand how a person spends their day.

"*Since everything runs on electricity, the Smart Switchboard could be considered a Healthcare Hub where services and features can be added, uploaded, or collated.*"

Just knowing that someone is still active at home is usually enough to keep a caregiver's mind at ease.; the Smart Switchboard, which ensures that data continues to flow even during a power failure can integrate other sensors allowing an increased picture of the occupant's well-being.

Other nice considerations of having a Smart Switchboard include:

- An early warning feature for detecting electrical arcing which is the cause of most fires.
- Detects unexpected behaviour that could be a sign of unauthorised entry.
- Can be set to ensure that the cleaning company vacuumed the floors as scheduled.
- Will tell you where your energy is costing you the most.

Soft Entry Services

Some aged care companies are extending their value beyond the limits of their own physical building assets by offering remote monitoring services which is a way of introducing patients into the system at lower cost and via an easier transition.

The Value of Aging at Home:

Longer at Home
Provides familiarity and comfort, reducing vulnerability to depression and anxiety.

Independence
Maintains self-sufficiency which is crucial for self-esteem and mental health.

Shares the Load
Reduces the burden on family and healthcare professionals while staying connected 24 / 7.