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WHY CONNECTIVITY IS AN ENABLER FOR BETTER CLIENT CENTRED CARE

COMMSCOPE®

CONTENTS

SENIORS IN THE

1 | DIGITAL AGE

Whilst digital literacy spans all generations, seniors don't always have the means to exploit it. The senior population is growing and being supported to become more tech savvy. And with baby boomers, who are quite digitally literate, now moving into the aged care demographic, there are higher expectations for entertainment and communication services.

It is well documented that seniors want access to personal streaming or video chat with their grandchildren, whether they are at home or in a residential care setting. Digital technology provides useful ways—mainly through social networking sites—for older people to easily communicate with their family, friends and communities, and to stay socially connected. Plus, digital technology enables seniors to access up-to-date health and local community news and information, helping them feel more comfortable and adjusted to independent living.

Additionally, in our always-connected world, we expect technology to just work. Device and application developers are starting to respond by creating user experiences tailored to seniors. Yet, many organisations are still unable to make connectivity possible.

A recent report by technology educator YourLink and PwC,[1] recognises that there is a discrepancy to the commonly held belief that seniors lack interest in technology. In reality, seniors want to embrace learning and be active participants in the digital world.

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> *There is a paradox emerging between care providers, seniors and their digital aspirations. In fact, their desire to be active participants in the digital world is out pacing the response of providers.*

Recent studies show that seniors in care accommodations hugely benefit from using the Internet. There are numerous findings that highlight the positive advantages, such as enhanced socialisation and positive well-being; particularly in lowering rates of depression and feelings of loneliness.[2]

Whether it's legacy connectivity, changes in end-user needs, or just making the jump to digital care models, the opportunity is great for care providers to meet the challenges of the next generation of the aged.[3]

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1   YourLink, *Digital Paradox for Seniors Report (YourLink & PwC, 2019)*, 8
2   Hsiu-Hsin Tsai et al.,*Effects of a Smartphone-Based Videoconferencing Program for Older Nursing Home Residents on Depression, Loneliness, and Quality of Life: A Quasi-Experimental Study (BMC Geriatrics, 2020)*
3   Wendy Wrapson, *Older people are more digitally savvy, but aged care providers need to keep up (*The Conversation, 2019)

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TRENDS IN RESIDENTIAL

2 | # AGED CARE

Seniors (age 65+) are a growing demographic in Australia,[4] with increasing numbers living in residential aged care facilities.

These facilities provide accommodation and personal care to senior citizens whose living arrangements are no longer completely independently. The main goal for providers in this industry is to help their residents maintain health and well-being, whether it is through personal care, knowledgeable and empathetic staff, social support or living in a community. Moreover, as senior's physical health is of utmost importance, their mental health and well-being should be an ever-present priority.

With person-centred care coming to the forefront of best practice, the challenge for most providers is knowing and providing what their residents need. There are many similarities between the necessities of a FIFO worker on a mine site and someone in residential care who are in provided accommodation and facilities. Like FIFO workers, seniors can get lonely and want to connect with loved ones to enhance their emotional well-being. In fact, according to YourLink, "loneliness and isolation are now considered among the biggest health challenges our ageing population is facing." [1]

Seniors are eager to reduce social isolation and connect with their families and friends. They want to be included in the digital world, to keep up those relationships most important to them and to pursue their interests. Although residents are voicing their needs and providers are open to change—conventional approaches to connectivity are failing to meet the needs of the operator and the resident. These are needs that continue to grow both in variety and the demands that each imposes.

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1   YourLink, *Digital Paradox for Seniors Report* (YourLink & PwC, 2019), 8
4   AIHW, *Older Australia at a Glance (AIHW, 2018)*

BEYOND

3

LEGACY INFRASTRUCTURE

Many aged care providers utilise traditional infrastructure that is not geared to meet the demands of their residents. Legacy communications and entertainment keep TV, internet and telephones separate. As a result, we see duplicated infrastructure and limited opportunity to add new services and features.

Additionally, wireless internet access is often not provided to residents. Instead, they are burdened with costly private services which become another connectivity barrier in terms of both cost and reluctance to engage with the complications of having to order and support the service. Pay TV subscriptions add another fixed cost for the provider, reducing resident viewing choices and potentially also remove the chance for the resident to share in the chance to share in viewing and recommendations around streamed content that has become a commonplace conversation.

The ability for residents to exercise choice is limited by these traditional infrastructure models. What's more, many aged care providers juggle with the necessary bandwidth for the operational demands of the facility and the high-quality content and internet-based communications experience that residents want.

Adding to the shared bandwidth conundrum is the fact that many suburban, or even regional sites, are limited to NBN services. To address this, providers need a solution that delivers built-in capabilities, utilising smart monitoring capabilities to optimise bandwidth by application and device, mapped to the content being consumed.
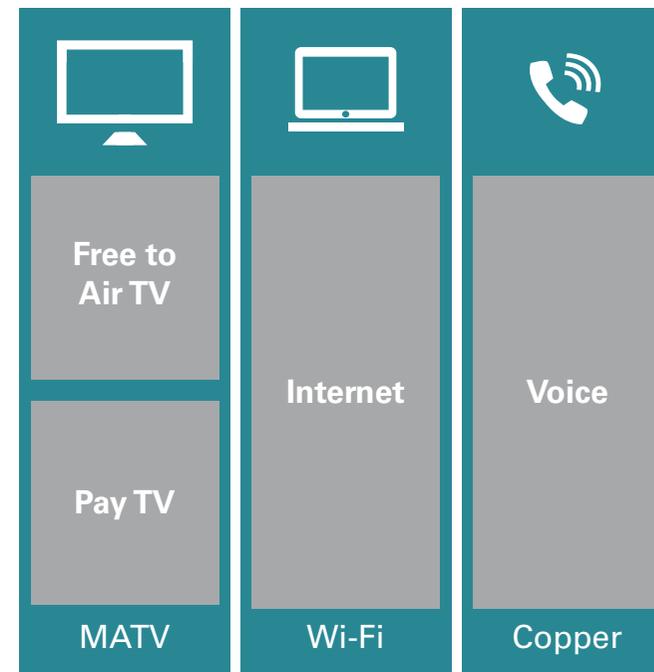
Traditional siloed approach to residential care systems

WHAT'S IN STORE FOR THE

4 | # AGED CARE SECTOR?

It is critical that aged care facilities invest in the latest technology to fulfil operational demands and support resident well-being. The more connected seniors are to family and friends, the better their overall well-being. And with younger family members becoming more involved in the choice of aged care facility, it is not enough to just provide basic accommodation, but also technology that lives up to their expectations.

Providing accommodation services for the aged is a highly demanding business, yet one that is critically necessary. We know that connectivity is now, more than ever, a core part of ensuring efficient operations.

This was emphasized by the Australian Medical Association (AMA) in their response to the Federal Government Royal Commission into Aged Care Quality and Safety. According to AMA President, Dr. Tony Bartone, enhanced technology must be at the core of reforms to improve care, compassion, and coordination in Australia's aged care sector.

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> *Innovation is urgently needed in aged care resourcing, electronic records, medication management, assistive technologies, communication technologies, data collection and research, privacy, and security.*[5]
>
> *-Tony Bartone, AMA President*

While assistive technologies are already available in the sector, providers must access these benefits through reliable, pervasive wireless connectivity networks. These networks can unlock the inherent benefits that new applications and digital tools offer.

Additionally, there is an opportunity to modernise traditional infrastructure to offer better in-room entertainment and improved connectivity to the outside world. Bring Your Own (BYO) devices, such as mobiles, tablets and smart TVs, are the norm in aged care facilities. They empower residents with the control to access streaming services such as TV on demand, Netflix or to connect with loved ones via Whatsapp™ , FaceTime™ and Skype™.

Given the explosion in popularity of smart speakers like Amazon Alexa and Google Home, it won't be long until providers start to see these becoming the norm in residents' rooms as the "Age of Ask" gathers momentum.

As the range and number of devices continues to grow the need for infrastructure that accommodates them easily and securely becomes all the greater.

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[5]   AMA, *Technological Innovations Needed for Aged Care (Australian Medicine, 2019)*
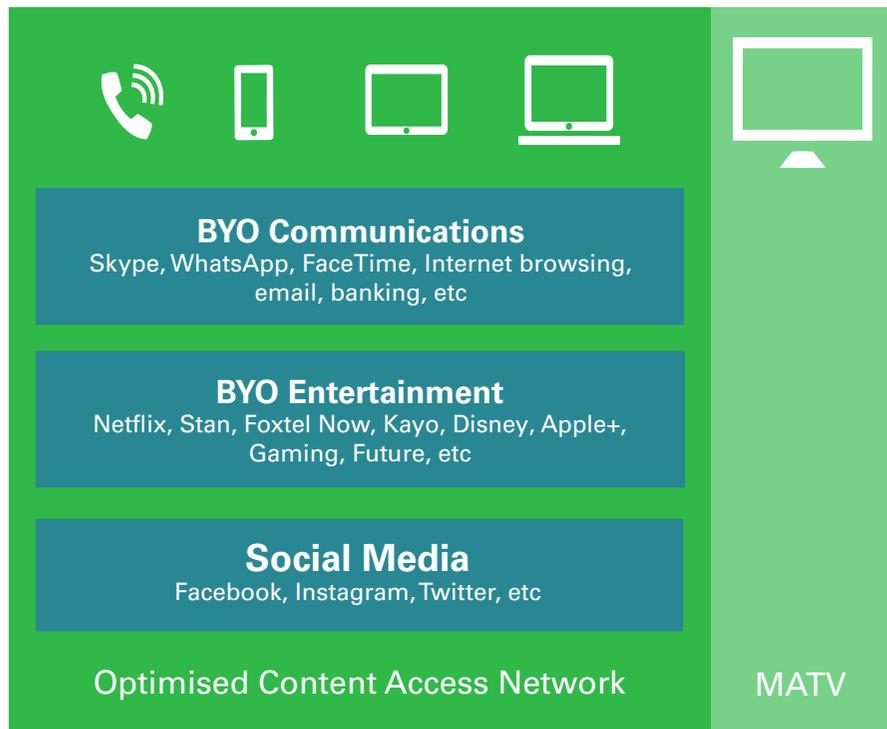
Aqura's integrated content approach

THE AQURA

5 | ## APPROACH

We have taken a proactive approach to help aged care providers increase personal connectedness and community engagement. We call the solution the Content Access Network, or CAN for short.

Alan Seery, Chief Operations Officer of Aqura Technologies, outlined why our CAN Solution is the right solution to deliver a better entertainment solutions to enhance well-being.

> *We place great importance on how we use technology to better facilitate connections. Our Content Access Network (CAN) solution focusses on digital inclusion, with a major emphasis on the well-being and experience of the end user.*
> *- Alan Seery, COO of Aqura Technologies*

We believe that a smart network enables aged care services to undergo digital transformation and deliver superior user experiences.

We acknowledge that the users who should benefit from this solution are not just operations and care staff, but the residents who have their own unique connectivity needs.

HOW DOES IT
6 | ## WORK?

The Aqura CAN solution offers aged care providers a cost-effective way to enhance the health and well-being of their residents, and improve the operational support of staff—enabling them to utilise more digital health applications. One of our CAN solutions' greatest strengths is its ability to balance the needs of operational users and private users by dynamically adjusting on the fly as their demands change.

What do we mean by this? At the heart of CAN is a central control layer that manages users, balances bandwidth, and supports traffic distribution.

This is key to optimising finite internet backhaul and dynamic variations in end-user demand, whether it is operations, care staff or residents. The control works to make the network 'smarter' and responsive to end users, versus the typical and fixed "best-efforts" model that is usually associated with Wi-Fi networks today.

BENEFITS TO

7 | THE OPERATOR

The nature of aged care is about balancing the needs of residents, the capacity of staff, and the available resources.

For operations, a highly available network not only increases performance, but also improves team happiness and facilitates an increased digital application adoption rate.

Murray Dickson, CommScope Director of Enterprise highlighted that operators should expect more from a modern, high-performance wireless network.

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> *Care providers can now expect the performance and business value that high-performance wireless should deliver, whether it's for a digitally-enabled workforce or connected residents, the deployment of latest-generation wireless connectivity can deliver the superior performance that's needed in today's competitive market.*
>
> *- Murray Dickson, CommScope Director of Enterprise*

A high-performing wireless network frees the operator from constraints. There is less frustration for staff in not having to wait for apps to respond. They work in more locations across a site and that is even before we start to add in the benefits of advanced digitisation of operations, which reduces the administration overhead in the organisation.

The Aqura CAN environment also applies a stronger, multi-layered security framework. The core orchestrates security by:

- Authorising access by device or by named user profile
- Separating operations, residents and other networks
- Easily managing content filtering and blocklists via automated cloud security updates or ad-hoc manual updates
- Acting as a stateful firewall for all traffic traversing the wireless network, whether generated by application or via browser

Abuse of network access by a user or a device can be instantly dealt with given the insight and granularity of control of the CAN platform. This is a far better approach than shutting down generic VLANs, which can be indiscriminate and impact the majority of users.

BENEFITS TO

7 | # THE OPERATOR

Businesses that have implemented CAN have also reported that they have received many efficiencies in internet bandwidth usage. One such example is an organisation that saved 30 percent immediately with no degradation of the quality of service to its staff.

Additionally, a high-performance wireless network that provides residents with optimised access to internet streaming and entertainment service can also deliver significant cost savings to residential care providers. This is achieved by retiring costly, per-user Pay-TV services, which do not offer the quality of choice that residents desire and replacing them with streaming services that the residents desire and provide themselves. Additional savings can be made by not relying on proprietary set-top-boxes to deliver TV and Wi-Fi. This legacy approach is problematic as it adds overhead in technology support, which can increase infrastructure costs.

Furthermore, the Aqura CAN solution integrates connectivity into a smart platform that performs the task of user management, security, optimisation, distribution, and delivery to end-users. The versatility of our CAN solution enables new applications to operate seamlessly without having to make changes to the customer's physical infrastructure.

The results

30%

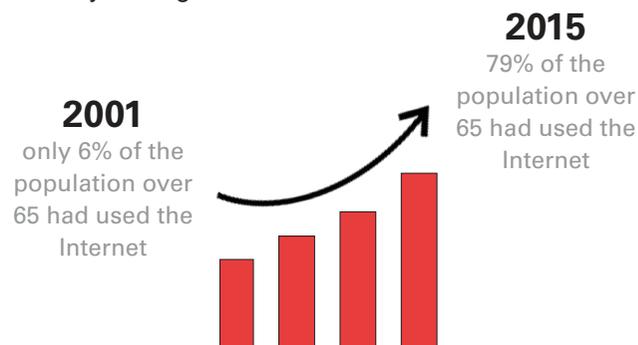*of Internet bandwidth usage saved with no degradation of service*

BENEFITS TO
RESIDENTS

8

We live in a time where the impact of technology can be life-changing for seniors.[6] Simple activities such as video calling creates an instant and personal connection with friends and family, anywhere in the world, enabling residents to maintain meaningful social connections.

The senior population's desire to continue learning via the internet is also increasing. In 2001, only 6% of the 65 and older population had used the internet. In 2015, this had massively increased to over 79%, and the demographic now features a large part of the residential aged care population. Many providers, like Amana Living, have trialled learning programs in their facilities with great results and as learning continues to increase in the richness of content used, the infrastructure needs to support this growing demand for ease and quality of access.[7]

From a resident's perspective, the ability to easily connect and have a great experience is a benefit that cannot be understated. Seniors crave connections, and these systems give them the power to watch their content of choice on YouTube or the numerous paid subscription services, or to simply connect with loved ones and a wider friend network.

The CAN platform optimises user experience to create a highly reliable entertainment and communications network via Wi-Fi geared to BYO Devices and BYO Streaming. It helps create a comfortable and easy-to-use environment, which goes a long way to reduce feelings of isolation and anxiety among seniors.

2001
only 6% of the population over 65 had used the Internet

2015
79% of the population over 65 had used the Internet

6   Alan R. Teo et al., *Using Skype to Beat the Blues: Longitudinal Data from a National Representative Sample (*The American Journal of Geriatric Psychiatry, *2019)*
7   Sue Malta et al., *The Digital Divide: Small, Social Programs can help get Seniors Online (*The Conversation, 2018)

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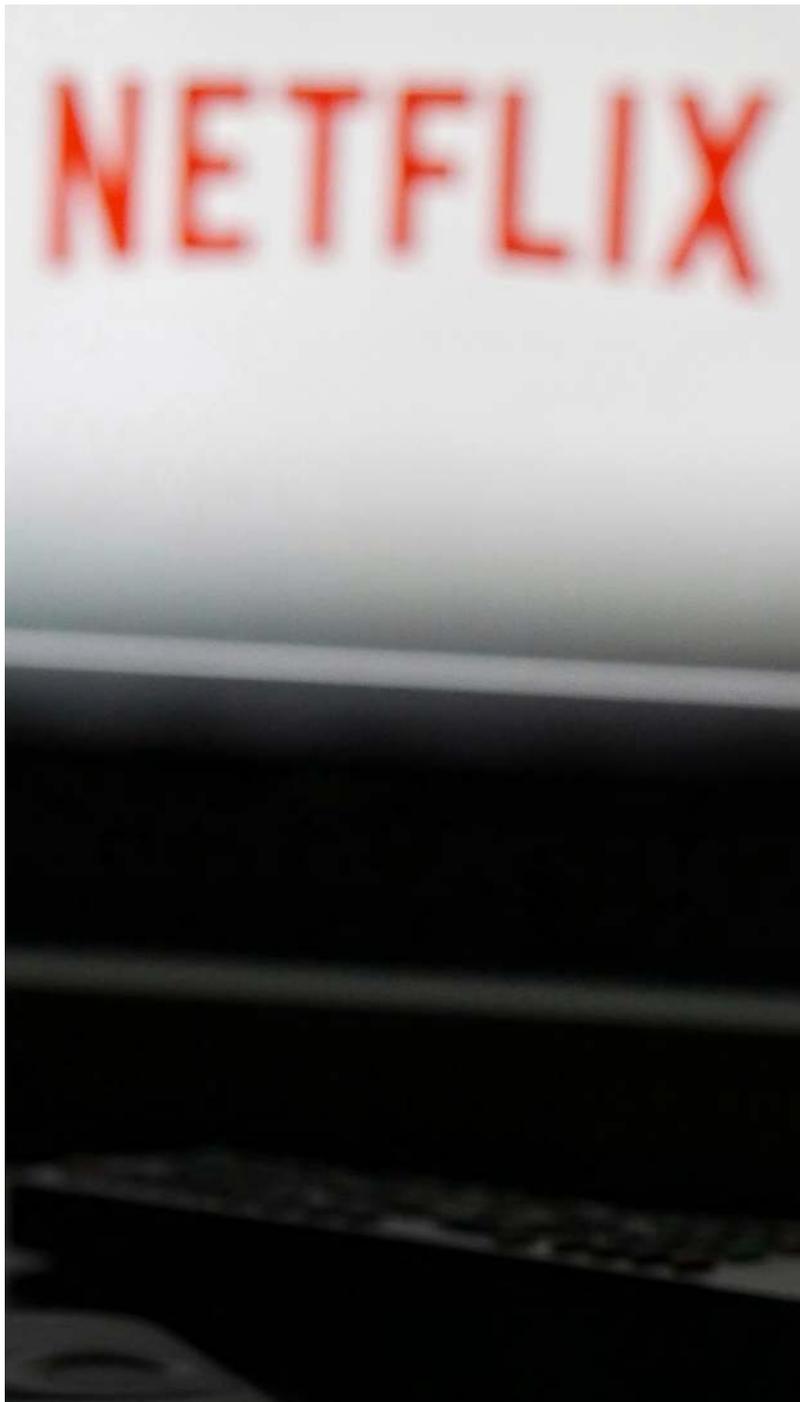
9 | MAKING THE MOVE

We understand that the health and well-being of senior residents is a primary concern for aged care providers. The best providers can improve the quality of life for residents by investing in a system that enables residents to not only participate, but to contribute as active members of their community.

Demands for advancement in the quality and choice of services will continue to be voiced by the senior demographic and their families from when they start to choose accommodation through to the days that come once they move in. Providers of care to the aged must continue to evolve and invest in high quality technology access for their staff and their residents.

The flexibility and reliability of high-quality content platforms can offer an excellent experience and greater choice of services, which in turn helps to improve overall well-being for residents.

Yet, it is not all one way. Providers can dramatically enhance the performance of their teams. Giving them access to technology across their workplace and to better digital productivity tools can reduce administration overhead and re-balance their time to their purpose, enabling them to deliver the best care possible.

Those who make the move to invest in the latest generation of smart connectivity will enjoy a competitive advantage, as it will appeal to those who make and influence decisions on who they entrust for care. Seniors and their families will not only be looking for the basics, but at how they can continue to grow—just in a different place.

Making the move can be a simple phone call away. Get in contact with us and we can help you determine the best way forward.

10

HOW A HIGH-PERFORMANCE WI-FI NETWORK CAN
ENABLE PRODUCTIVITY AND WELL-BEING

Video Chat Applications

Streaming Video

Wearables

CCTV over Wi-Fi

Data Access

Corporate Collaboration

Voice over Wi-Fi

Door Access Control

Smart Devices

Asset & Personnel Tracking