How to build integrated systems in aged care

You don't need to be a software developer to understand the impact of poorly integrated systems in aged care. They waste time and drive high risks to patient safety.

One study[1] found 72.6 errors in care team records per 100 medications, with 48% able to cause moderate harm and 9.8% severe harm. Another study[2] showed staff were spending hours transferring data between systems.

Practical steps are needed for improved systems integration in aged care.

WHAT DO WE MEAN BY INTEGRATION?

A well-integrated system passes several tests. Firstly, it should enable data to be entered once and then passed securely to other systems. Secondly, when an event occurs in one system, the data should be automatically placed in all other systems where relevant. Finally, the integration should connect externally with pharmacists and doctors to have one up-to-date source of truth.

WHY'S IT BEEN SO HARD?

Historically, there have been three barriers to integration: technical, cost and mindset. Trying to get aged care systems to speak together is like communicating with someone in a different language. You need a way to translate the language and technically link the systems. The second barrier is cost: building bespoke integrations can outweigh the benefits for the developer. Thirdly, some software developers have a closed integration policy that restricts the customer from integrating with external systems in favour of retaining revenue.

WHAT'S CHANGED

Over the last five years, the technical barrier has been reduced as consensus has formed around a new integration standard called Fast Healthcare Interoperability Resources (FHIR). This enables different software to integrate efficiently. However, the mindset barrier remains. Executives need to ask the right questions to avoid being trapped.

HOW TO BUILD INTEGRATION

As the customer, you have a voice. Look for open systems that connect to partners across the aged care network. Ask if they enable two-way data sharing and if they are using FHIR standards. Will they integrate with systems that compete with their own modules? If not, it pays to look around and review alternatives. **S**

Phil Offer, is Chief Executive Officer at BESTMED.

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1 The General Practice and Residential Aged Care Facility Concordance of Medication (GRACEMED) study.
2 Examining the role of information exchange in residential aged care work practices – a survey of residential aged care facilities.

BESTMED uses the FHIR standard and integrates with all the major resident management systems willing to do so. With a $2.5m development budget for medication management, we're always looking for new ways to improve integrations and are happy to offer advice.