Strong Room 2022-23 Pre-Budget Submission

Pilot Program Proposal for Aged Care Medication Management Platform

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The Aged Care Quality and Safety Royal Commission (Royal Commission) final report highlighted many of the major problems and limitations of the current technology infrastructure and architecture for the aged care sector. These include the sporadic use of digital record keeping for clinical and administrative information management, and the non-interoperability of information and communications systems across government, aged care services, hospitals and other health care providers.

Not only do these shortcomings cause high levels of inefficiency in the sector, reducing care workers' ability to focus on service provision, but they also increase the risk of errors, oversights, adverse drug events and otherwise preventable hospitalisations. Annually, medication errors across the entire healthcare system alone cost **$1.2 billion** and make up roughly **20 per cent of hospital admissions**. This cost for the aged care sector is not known, nor is the price of administrative oversights or the inappropriate use of medicine.

For these same reasons, Strong Room developed an end-to-end digital medication management platform that has the potential to drastically reduce errors and time spent on administrative tasks. Strong Room's platform provides interoperability and solves data sharing and communication between pharmacies, aged care facilities and hospitals. It has already been adopted by over 700 pharmacies across Australia, including Direct Chemist Outlet, Alive Pharmacy, Advantage Pharmacy, and other well-known brands, and has contracts in place to hit 2000 pharmacies by the end of 2022.

The platform is now ready to be deployed into the aged care sector with three modules: e-prescribing and electronic national residential medication charts (eNRMCs); controlled drug register; and drug administration. Strong Room has an agreement in place with Residential Medication Management Review (RMMR) providers Mederev and Careteq (WardMM) to roll out its platform to their network of aged care providers by March, representing approximately 55,000 aged care beds.

Pilot Program Proposal

In support of the Government's commitment to digitise the aged care sector and address several of the Royal Commission's recommendations, Strong Room is proposing a partnership to see its platform rolled out to the aged care sector for free to providers across Australia for one year.

Strong Room's proposal would require $5 million in funding for a 12-month national trial of the platform to 50,000 aged care beds. This amount would cover the subscription fees, implementation, training, and ongoing technical support for all trial participants.

Strong Room would be ready to deploy this solution to participating providers as soon as the Government decides to proceed. The company has already received full approval to operate in Queensland, New South Wales, Victoria, the Australian Capital Territory, the Northern Territory and Tasmania, and is in the final stages of approvals with the South Australian and Western Australian Governments. Approvals from these two jurisdictions are expected in February.

Throughout the pilot, **Strong Room would provide regular, in-depth reporting with expert data analysis in real time to the relevant government agencies**, including Quality Use of Medication reports (QUMs), RMMRs and quality indicators, among other data points (detailed below). Further, a dedicated platform login would be created for Department of Health officials to allow access at any time to up-to-date, macro data and reporting on key pilot statistics, tailored to the Government's requirements.

This information would afford unprecedented insights into the aged care sector's operations, particularly around medication prescribing and use, and support the Government to progress its aged care reform agenda.

Financial Rationale

A subscription to Strong Room's aged care platform costs users $120 a bed, per year. Strong Room's proposal for $5 million for 50,000 beds is a **17 per cent reduction on a full priced subscription**.

Should the Government wish to increase the number of beds covered, Strong Room can apply further discounts due to economies of scale. For example, a grant of $9 million would cover 100,000 beds (a 25 per cent discount).

ROOM

Federal Contribution	Number of Beds Covered	Cost per Bed (Annual)	Discount Rate
$9,000,000	Up to 100,000 beds	$90 per bed	25%
$5,000,000	**Up to 50,000 beds**	**$100 per bed**	**17%**
$2,400,000	Up to 20,000 beds	$120 per bed	0%

<u>Financial Savings Gained</u>

Piloting Strong Room's platform for 12 months to 50,000 aged care beds could realise an estimated $43 million in savings for Australia's healthcare system by reducing administrative errors, allergic reactions and adverse drug reactions and the inappropriate use of medicine, as well as alerting care providers to unplanned weight loss before it becomes a serious problem.

A Royal Commission report found that 1,132 permanent aged care residents in Australia in 2018/2019 had a hospitalisation or emergency department presentation as a result of an adverse medication event. In addition, 3,940 residents were sent to hospital with weight loss and malnutrition as either a principal or secondary diagnosis.

According to the Australian Institute of Health and Welfare, the average cost across public hospitals to treat an admitted patient is roughly $5,205. Using the Royal Commission's data, this means roughly $5.89 million is spent treating adverse drug events and $20.51 million on weight-loss associated medical issues in aged care residents.

Adoption of Strong Room's platform could save the health system $26.4 million over the 12-month period by reducing the number of otherwise preventable hospital admissions that result from inadequate administrative and medication management systems and failures to identify unplanned weight loss and the cause(s) early.

Further, an Australian study from 2018 suggested that 81 of every 100 aged care residents has been exposed to a potentially inappropriate use of medicine, and that this costs the Pharmaceutical Benefits Scheme (PBS) $410.89 per exposed resident, per year. Strong Room's platform, which includes reporting abilities to monitor and reduce medication misuse, could thereby save an additional $16.6 million over the 12-month period.

Should participating providers decide to renew their subscription to Strong Room's platform at the conclusion of the pilot, these savings would continue to be realised on behalf of the healthcare system annually.

Solution Description

Strong Room's aged care platform is the only 100 per cent digital solution on the market. The platform:

- manages prescriptions, dispensing history and professional medication programs;
- enables controlled, diversional and high-risk drug management (sub-categories of S8 and S4);
- allows pharmacists, health practitioners and carers to securely monitor medication in real time;
- identifies and alerts polypharmacy interactions using data insights and **Artificial Intelligence**;
- monitors medication misuse and quality indicators (chemical restraint use and unplanned weight loss);
- automates alerts and reminders to patients and healthcare providers, including for renewals; and,
- automatically generates reporting, including RMMRs, QUMs, Point of Administration, and quality indicator benchmarking.

Strong Room's platform, and its reporting, is customisable per user and is already integrated with major software used in the supply pharmacy and aged care sectors. It has been designed with the flexibility to integrate with emerging programs, including MyHealthRecord and eNRMC, and has inbuilt compliance checks to ensure providers are meeting all industry requirements (e.g., schedule eight drug register).

Royal Commission Recommendations

A Government funded 12-month pilot of Strong Room's program for the aged care sector would support the delivery of the following government-agreed-to Royal Commission recommendations:

<u>Recs 19 – 21, 23</u>: the platform enables care providers to monitor, gather data and report on quality standards and three of the five quality indicators, including medication management, unplanned weight loss and use of chemical restraints, in real time. It supports the industry-wide establishment of quality benchmarks.

<u>Rec 56</u>: the platform supports the implementation of eNRMCs and adoption of MyHealthRecord in aged care residential facilities and the requirement of practices to report on performance against prescribing rates.

Strong Room is already in discussions with the Department of Health and Digital Health Agency on conformance with and integration into these two programs, amongst other commercially available programs such as FRED IT.

<u>Rec 64</u>: the platform enables pharmacists to: 1) conduct reviews on entry to residential care, return from hospital, as clinically needed, and annually thereafter (or more as needed); 2) monitor quality and consistency of RMMRs; and 3) provide a link between facilities to ensure a consumer centred multidisciplinary approach.

<u>Recs 66-67</u>: the platform improves data interaction and the transition between residential aged care and hospitals with up-to-date and transferable medical records.

<u>Rec 68</u>: the wide adoption of Strong Room's platform would help industry to meet the requirement to use a digital care management system.

<u>Rec 86</u>: the platform supports residencies to meet 200 care minutes per resident, per day, by reducing hours needed to perform administrative tasks by up to 80 per cent.

<u>Rec109</u>: the platform is designed to be interoperable with information and communications systems already used in the pharmaceutical and care industries and enables the sharing of data and information about people receiving care between age and health care providers and government agencies.

Benefits

<u>For the Government</u>

Beyond the financial savings afforded to Australia's healthcare system as a result of improved administrative and management capabilities, the transparent real time data regularly provided to the Government would offer unprecedented insights in support of its aged care reform agenda. Data insights include:

- Quality indicators for the sector, benchmarked nationally;
- Number of medications dispensed per resident in residential facilities (Commonwealth funded homes);
- Defined categories of medications as per SR's QUM reports: polypharmacy, psychotropics, antimicrobials, as well as high risk, diversional and monitored medicines;
- Controlled drug data reporting, including destructions;
- Automating state requirements around controlled drugs including strict diversional risk management;
- RMMR outcome reports - mainly number of medications ceased, and medications reviewed and the intervention probably avoiding hospital admission; and
- Potential areas for PBS expenditure reduction.

<u>For the Provider</u>

Given the significant financial strain and workforce shortages facing the aged care sector, which have both been exacerbated by the pandemic, a free 12-month trial would enable otherwise hamstrung providers to meet many of the incoming agreed-to requirements set down by the Royal Commission.

Analysis conducted by Strong Room's medical board estimates **the platform delivers an 80 per cent time saving per facility**; time that would be redirected towards care service provision. This is a crucial time saving as many residencies are unable to find or afford the number of sufficiently trained care workers needed to meet current demand or the increased requirement for 200 care hours, per resident, per day set for 1 July 2022.

In addition, assuming a facility has 100 beds and pays its nurses an average of 20-40 per hour (plus associated costs), a free 12-month trial will save a provider **$104,800 per facility** (inclusive of Strong Room's $12,000 annual subscription cost). It would also drastically increase providers' monitoring and reporting capabilities and enable them to uphold the increased RMMR responsibilities that came into effect on 1 January 2022.

<u>For Strong Room</u>

A 12-month trial of Strong Room's program will enable the company to **accelerate the development of its hospital platform, and professional services and at-home care platform extensions**, and focus investment toward the technological capabilities of the program including the AI capabilities.

Cybersecurity & Data Privacy

Strong Room's platform deploys high quality cybersecurity, privacy and data protection standards, including:

- HIPAA compliant platform – meaning the product will exceed Australian regulatory standards.
- AES-256 data encryption – enablement of a military grade data encryption standard to ensure any unauthorised data will be protected.
- ISO27001 (pending) – internal operating standards are in place within Strong Room to enable cybersecurity and data handling standards.
- Australian Medical Terminology standards are used to manage medication data.