

# GS1 Healthcare User Group – Submission to Australian Digital Health Agency Digital Health Strategy

## Background to this submission

This submission has been coordinated on behalf of the GS1 Healthcare User Group (Australia) to provide a consolidated response representative of this community. The purpose of this group is to help guide and support the implementation and use of GS1 standards where they will enhance patient safety, systems and data interoperability, product traceability, plus the ongoing accuracy and efficiency improvements within the Australian Health care system. As an industry group we support the findings of the [McKinsey “Strength in Unity”](#)<sup>1</sup> and the global alignment of our local industry as a means of providing sector wide benefits. Further information regarding the group is available for reference [online](#).<sup>2</sup>

Considerable investment in time and resources has been made by our industry to implement and adopt national foundations leveraging standards and solutions. As a group we strongly encourage the Australian Digital Health Agency to look to leverage these foundations in the future Digital Health Strategy.

The submission was coordinated on behalf of the group by Catherine Koetz from GS1 Australia in response to the [discussion paper](#)<sup>3</sup> and related survey issued by the Australian Digital Health Agency within the National Digital Health Strategy [“Your health. Your say”](#) consultation process. We have endeavoured to provide responses where possible addressing the survey questions as they apply to the organisations represented within this group and the focus of this group as a whole.

We hope that this collective submission to the consultation process will prove informative to the development of the future Digital Health Strategy for Australia.

## Stakeholders

The following representatives from the industry who form the leadership team for this group, have had input into the submission in order to ensure that it provides a broad, representative stakeholder view.

- Ged Halstead, Clifford Hallam Healthcare (CH2) (Chair)
- Lyn Cormack, 3M Healthcare Division
- Darren Tyler, Abbott Australasia
- Valentino Bulaon, HealthShare NSW
- Eva Chow, Medtronic
- Graeme Scott, ResMed
- Clive Calder, Pfizer
- Mandeep Sodhi, Nestle
- Sarah Lankshear, Stryker
- Matt Malone, Healthscope
- Andrew Potter, Ramsay Health Care

Note: In addition to the above representatives from industry the leadership team also includes Gary Hartley from GS1 New Zealand and Paul Broadbridge from the Australian Digital Health Agency.

## Contact

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## National Digital Health Strategy consultation submission

### *How well does the current healthcare system work?*

All parts of the system (or system of systems) often seem to work well in and of themselves, with various areas such as Emergency departments improving greatly in their delivery of care to patients in recent years. There has been a gradual introduction and increased utilisation of technology across some parts of the system for treatments, communication with patients and in record management. This is especially so within new practices/practitioners, where new facilities are being built or in instances where major refurbishments are being undertaken.

Procurement and supply chain within health has also seen improvement as some processes have changed and new tools from other industries and countries have been gradually and somewhat successfully adopted to support how the supply chain delivers their portion of the “rights” – right product, to right place, at the right time. This incremental improvement is not only occurring within hospitals or supplier organisations, but also within community pharmacy, aged care, community care, allied health and more. The question remains however is it enough? Will we meet our future needs if we change at the current pace, without proper coordinated direction? Are we doing enough to ensure continuous, safe, consistent care for all patients/consumers? Have we delivered and implemented all of the tools and changes we know are needed? The simple answer is that no as a whole we have not.

Although individual health services, service providers, practitioners and networks seem to have continued to improve their quality of delivery and internal systems, the challenges continue to appear where there is a need for these parts to intersect, interact, interoperate or share. Each group within primary, allied and acute care all contain talented people and increasingly sophisticated systems to support them, as again do the supplier community, but sadly many of the systems in place are not scalable, they remain heavily proprietary and therefore have not been built in a way that allows them to share information with other systems or parts of the health network supporting our patients. Sharing within organisations can be as much of a challenge as providing quality data into a centralised medical record such as My Health Record.

There is sadly still little or no automation of patient flow or workflow management within and between services, often leading to duplication of records (which are frequently incomplete and inaccurate), unnecessary replication of effort/work to complete processes, frequent repetition of tests, plus a general wastage of time and resources due to lack of visibility across the patient journey. The effect of these and more inefficiencies impact directly on the patient/consumer and their experience, they add immeasurable costs to the system and impact overall efficiency.

Within the supply chain, although several global standards were identified as being foundational in supporting the much needed changes in this area, the implementation has been somewhat slowed in many cases due to lack of understanding and buy in by many at a strategic level. The initial consultation and sign off by the National eHealth Transition Authority (NEHTA) stakeholder group was left for the industry, including the health jurisdictions to ‘opt in’ and though many have, we sadly have not seen the scale and therefore not seen the complete benefits that were expected. It has been proven in other countries such as the United Kingdom that the use of unique identification in the form of Global Trade Item Number (GTIN) for products and Global Location Number (GLN) for locations in conjunction with Data Synchronisation and Electronic Data Interchange can provide substantial benefits to clinical process, safety for patients, and the traditionally viewed supply chain but they also are providing improvements to the financial performance of the organisations involved. The key however has been clarity of requirements, support of demonstration projects to provide exemplar sites and a clear pathway for implementation compliance across the entire system.

Part of the same consultation and agreement with the jurisdictions, resulted in the development of national solutions introduced with initial sponsorship from NEHTA. These industry solutions were intended to provide much needed foundations for data standardisation, process improvement and much needed data analytics. Whilst nationally these foundations are now in place, and there have been some successful implementations within some health services, they have failed to achieve the level of ongoing strategic commitment and priority that was initially agreed. The result is that several of the foundational elements of procurement, inventory management and traceability have still not been adopted across the health system.

We acknowledge that a health system with a federation of states and territories, along with an increasingly heavy reliance on a growing private sector, and the various competing agendas of groups within the system is a continuous challenge. There was and remains basic agreement to implement change, but sadly whilst the national governance successfully ensured foundations were in place, organisational accountability related to implementation has been lacking to move industry forward in a harmonious fashion. As a result there is still much more to adopt in order to achieve the shared benefits; benefits that extend far beyond the traditional supply chain into where care is delivered to a patient or consumer – our families, our friends and us.

Apart from the confusion and dissatisfaction that this lack of consistent adoption has caused over the past 10 years, the facts show that some of the issues faced in health on a daily basis could be resolved in part through use of identified standards and the better use of the national solutions that have been put in place. There is a need for continued but stronger support for these initiatives to ensure success, but we also highlight that the commitments, requirements and projects must be better integrated into the clinical care process so that we are realising the benefits our system desperately needs.

Just some of the issues that industry wide adoption would help resolve relate to the following:

- Lack of visibility/traceability of products including those which are high risk;
- Incomplete patient records due to manual processes and time delays;
- Inaccuracy of procedure costing and planning;
- Unnecessary wastage of product due to lack of controls;
- Inefficient end-to-end recall processes;
- Wasted capacity and patient waiting time;
- The necessity to write off products due to poor inventory management; and
- Unused capacity where right product is not in the right place at the time it is needed.

Something as simple as the lack of visibility of available products can lead to issues with the ability to treat patients – a recent example of the challenge this creates took place in Victoria in December 2016 where stocks of Salbutamol that were needed to treat thunderstorm Asthma were at critically low levels and the ability to source urgently proved incredibly challenging as many key treatment facilities and supplier channels in the state ran out of all stocks within hours.

This is just one illustration of our limitations caused by a continued reliance on paper based, manual, proprietary and often disconnected systems in order to manage the products in our health system through to our patients. Sadly this is a daily occurrence for many products including high risk implantable devices and the medications that should be recorded throughout the chain to the patient/consumer. The current processes leave us with a higher propensity for potential errors and a challenging process to identify those impacted in the event of a product recall.

The standards and solutions that industry are still in the process of implementing were sadly viewed as only affecting procurement processes in isolation, however they are in fact foundational in supporting the end to end process that will ultimately benefit all those using our health system.

We are not advocating that any solutions or technology need specific funding, but instead as part of the Digital Health Strategy we would highlight the need to better define the minimum requirements for data standards, data capture and interfaces within all areas across the health care chain – supply chain and clinical - to ensure that data is captured accurately and shared where it is needed on a timely basis.

The challenge remains how to ensure that the industry understands the need for change and what their organisational and individual benefits are so that we remove the current reliance on financial incentives or heavy handed mandates. Most important is to clearly define what needs to be done and for the Digital Health Agency to lead development of the framework which supports this. A framework should not restrict any innovation, but instead should ensure that innovation is scalable, interoperable and that we can measure and review benefits and thus support the ongoing evolution of our health system.

One final point that we would like to raise under the heading of ‘what we need to do better in digital health’ is to review the historical approach of incentivising individual groups or organisations in order to make things happen as this has in fact hindered broader adoption. Change needs to be driven through effectively encouraging the needed evolution, underpinning this by properly identifying benefits and driving the desired change with industry requirements and timelines that will force industry in the right direction with a sense of urgency. Again we acknowledge that this is not an easy task given the fragmentation and political/cultural landscape of our health system, however the current method is not sustainable and will not achieve the scaled results that are needed.

We hope that the National Digital Health Strategy will include supporting the continued change to supply chain related aspects of health care where they can enable improvements to patient safety and has the potential to deliver improvements to the financial sustainability of our health system.

### ***Digital technologies used in health and wellbeing activities?***

As a group we strongly agree that digital technology has the power to transform and improve healthcare outcomes for Australia. Any technologies that are implemented need to be able to work together or share data in a meaningful way. The focus of the Digital Health Strategy should be to clearly define the foundations required for all new technology implementations to ensure we remove the fragmentation that currently exists to ensure we become more interoperable both in systems and data.

Remaining agnostic where possible regarding specific technology platforms is important in order to allow for individual user interface preferences to ensure that the clinical and patient experience is more positive. This same principle ensures that organisations can build solutions to support their ongoing improvements without specific technology limitations. Clearly defining base requirements for data standards, data interchanges and the need for interoperation should help ensure a minimum set of functionality within all solutions in our health system.

The desired network of the future will be a technology agnostic Application Program Interface (API) network. Where smart machine to machine interfaces will leverage standards based identifiers to communicate automatically with each other and reveal required accurate data to the right system / person at the right time in the right place.

## *Health professionals*

The need for health professionals to connect, communicate and coordinate with the right people includes organisations in the supply chain, not just each other if we are going to deliver right product, to right place, at the right time. If a patient at home is receiving community care they often need products delivered to them; If a consumer needs urgent or unusual medication we need a system that can help them locate which pharmacies have it available or has the mechanism to get it to them; If a surgeon is planning a procedure for a patient, the manufacturer or supplier needs to ensure the right product is on hand at the right time to suit that specific patient needs instead of relying on best guesses and sending six of every item, only to have 5 of them all returned again – these are all areas where a consumer centric, efficient health system needs digital solutions that ensure that the right products are in the right place when needed.

## *Organisational Priorities and digital health*

The organisations represented by this group are a broad selection; we cover manufacturers and distributors of medical devices, medical consumables and pharmaceuticals as well as health providers – public and private. Together our priority is the continued support and effective implementation of standards and solutions that will help to deliver a more effective digital health future that we and our organisations are part of.

In addition to this, some of the other key priorities we highlighted as a group include:

- Ensuring traceability of products utilising unique identification of products and locations using GTIN and GLN along with the effective data capture throughout the health value chain ;
- Interoperable systems, delivering information to the people and systems that need it, when they need it;
- Evolving to be more predictive in how we treat patients and therefore be better able to plan for their care;
- Using technology and systems to better manage recall processes beyond the minimum notifications through the end to end process;
- Increase the use of Electronic Data Interchange (EDI) using GS1 messaging standards to remove manual processes and create useful data;
- Maintaining better connection to patients in order to monitor sophisticated medical devices and thus support optimal results;
- A need to better define ‘Digital Health’ and what is meant by ‘interoperability’ in health care as they reach far beyond our hospitals;
- Bridging the gap between Clinical and Support, and perhaps even across clinical disciplines, so that both understand the role the others play in ensuring they are a success and foster a collaborative culture.

### *Data, technology and improved health & wellbeing*

Self-managed care in the future and more integrated care today have a necessity on accurate and timely data that is leveraged by technology and clinicians. The reliance on manual and disconnected processes is inefficient and will not provide for a quality health system in the future.

The industry needs to change in order to free up valuable resources and improve the overall process surrounding many patient interactions for a self-managed environment to truly be possible. We need to take a closer look at how we can use technology interfaces such as telemedicine, but need also to review something simpler like improving the process for a repeat prescription used to treat long term illness – there must be a technology based solution that eliminates the need for a face to face appointment in many cases. Although the tendency is to look only at the large areas of infrastructure, we remind those reviewing the submissions that smaller changes may also substantially improve the process and overall health system.

### *Innovation in healthcare*

Once again the collective thoughts of our group with regard to barriers to innovation and priorities in this area were widely varied. We did agree however, that there is a need for clarity regarding minimum requirements for systems and processes and that there must be the appropriate level of control in place to ensure effective adoption. As shown in other countries examples for instance, getting the supply chain right has substantial flow on effects in how care is delivered. The safety of patients, effective use of clinical time and the more efficient financial management of our health system have been some of the benefits highlighted – as a group we hope some consideration is given to this when looking at what can be achieved in the shorter term by leveraging what has already be partially implemented.

Sadly although innovation and benefits are well documented in other countries, we seem to have not clearly measured benefits from changes we have made to date. Without clear guidance, we also seem unwilling to commit to changes similar to those made by our global colleagues without seeing them for ourselves. To overcome the local aversion to change and our tendency to compete versus collaborate, we also strongly encourage the support for demonstrator/exemplar sites within Australia. These sites could help our local health communities test, refine and share best practices based on innovation. The Scan4Safety<sup>4</sup> program in the UK has become a superb example of how investment in a small number of sites can raise the collective awareness and sponsor broader change across a whole system, whilst delivering tangible benefits in the process.

Some of the key barriers to innovations we highlighted as a group included:

- The lack of proper clarity with regard to the standards to be used has perpetuated the inefficiency within the system, but has also provided excuses for those who are more resistant to change;
- The need for data standards, quality data and data sharing needs to be better understood by all within the industry in order to achieve what is needed;
- There is a need to remove the perception that proprietary solutions are better and reinforce that interoperable solutions are the only ones that are acceptable; and
- Fragmentation across the industry and lack of willingness to collaborate to share benefits inhibits our potential.

### **Priority initiative for My Health Record**

As a group we agree that much of the challenge related to 'My Health Record' lies in the lack of understanding as to why it is important. Addressing the seeming lack of understanding of this in organisations, clinical communities and the general public is the first priority if as an industry we are to deal with the lack of uptake. The incentive to connect cannot continue to be based solely on financial payment, and there has to be a way to encourage the clinical community to share their data instead of viewing it as a competitive advantage on which they trade.

It has been shown in other countries that there are real tangible benefits in ensuring all services and their data related to a patient are connected. The issue locally with value stems from the My Health Record not having everything that is needed in the system, until it contains all data from all health related interactions the ability to show true value is undermined.

A key illustration where supply chain intersects with My Health Record is the enablement of uniquely identified medical products to be able to be uploaded into the record either by consumers or by health professionals. This helps to provide visibility through the care journey of the actual medical products that are consumed/used or implanted. The data this provides assists in the management of patients, but could also be leveraged for post market surveillance, medical research, patient safety initiatives, and importantly could provide greater information to support self-management by consumers.

### **References:**

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