THE NEW HEALTH SYSTEM CATALOGUE – ENABLING VALUE VISIBILITY AND ULTIMATELY SAVING LIVES.

Background

On 24 June 2019 Cabinet approved a business case for the Finance Procurement Information System (FPIM) project. FPIM is a major IT and business initiative for the public healthcare sector system.

Led by a governance board chaired personally by Dr Ashley Bloomfield, Director General of Health, the project specified the need for all District Health Boards (DHBs) to adopt a single national **Healthcare System Catalogue (HSC)**, based on national data standards (mostly global GS1 standards), a central **Spend Repository** of actual spend, and a framework for **procurement compliance**. It is planned that these components will not only enable our taxpayer-funded healthcare system to have visibility of what is purchased but also streamline national procurement of medical devices by PHARMAC. Substantial potential savings per year were identified in the business case, with down-stream health outcome benefits for data flowing into clinical systems.

Fundamentally this project was to address the very real problem that collectively, the public healthcare system has no idea about what is purchased, from whom and at what price. Previous attempts to do this relied on spreadsheet 'mash-ups' and free-text searches with all the data distributed in disparate systems without data standardisation (and often included notes hand-typed-in by charge nurses or supply officers).

Getting the facts – recently we interviewed:

Shayne Hunter Deputy Director General, Data & Digital at the Ministry of Health, who previously was a consultant and CIO of three District Health Boards. Shayne is the Director General's nominee to the GS1 NZ Board.

Cushla Currie, the CEO of the Medical Technology Association of NZ (MTANZ). With a background as a nurse, senior roles at Health Alliance and EBOS Group's OneLink subsidiary, Cushla took the helm at MTANZ in July 2021.

The interview was led by **Dr Peter Stevens**, CEO of GS1 NZ, who was appointed by Dr Ashley Bloomfield to the Health System Catalogue Design Authority and the Implementation Steering Committee.

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Key Points from the conversation

On the programme:

- There have been 'two-false starts' on this initiative, but this programme is properly funded, well-governed and supported by the whole public healthcare system.
- Standardised data is the key, both in identifying efficiencies and effectiveness in procurement, purchasing, supply chain and, also providing patient safety opportunities such as traceability in areas such as registry management and utilisation (e.g., for implantable medical devices) to improve overall patient journey visibility and patient outcomes.
- It is intended that the systems will provide an improved, data-driven understanding of the utility, benefits and true value of medical devices over time, beyond just the purchasing price. Enhanced supply chain optimisation is another area of opportunity.
- There is keen interest from clinicians wanting to use the data for benchmarking and comparison purposes such as measuring the quality of medical devices, quality of procedures, clinician performance, patient outcomes and to better understand the value-based healthcare equation.

On engagement with suppliers and their products:

- With ~250,000 medical devices used in NZ healthcare, medical devices are the best opportunities for improved procurement, purchasing, supply chain optimisation and data analytics, as well as identifying and understanding insights into value-based healthcare outcomes.
- Development of the HSC is targeting a first go-live phase at the end of 2021. New Zealand Health Partnerships (NZHP) are currently targeting a total of 250 medical device suppliers, divided into five groups, prioritised on a mix of volume and data matching.
- NZHP are targeting to get as many suppliers as possible into the HSC by the end of the Foundation Phase - July 2022.

Key phases are:

December 2021: Go-live for the "View" phase of the HSC. This is the first point where early adopter DHBs will be able to view the HSC, and the item and price data in it.

March 2022: Go-live for the "Interact" phase of the HSC. This is the stage where DHBs will be able to extract item and pricing information from the HSC to use in their ERP systems for purchasing.

July 2022: The scheduled completion of the HSC Foundation Phase. At this point, NZHP expect to have a high percentage of suppliers and medical devices in the HSC.

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After the completion of the Foundation Phase, it is likely that plans will be developed to enhance and further develop the HSC by:

- Including the full range of medical devices (those not included in initial data sets).
- Working with suppliers to get product images and other product information in the HSC.
- Extending the scope of the HSC to allow for more than medical devices (e.g. general consumables).

On extending standardised, high-quality product master data to clinical systems:

- It was observed by both speakers that once the 'system' has good product data available, then that data should be engineered to 'flow out' of the Health System Catalogue to power other functional and clinical systems, ideally right up to the patient bedside.

- Benefits could include simply recording what is used in treatments and procedures (e.g. scanning implantable medical devices) for service records, recalls management etc. In time, bedside verification processes will be possible - like the ones seen globally (e.g. preventing the wrong medicine or instrument being used on a particular patient).

On the learnings from COVID-19:

In February 2020 at the start of the pandemic, visibility of how much Personal Protective Equipment (PPE) was available in New Zealand was crucial. However, it became immediately obvious how difficult it was to source data and to easily access relevant product information. Data had to come from over 20 data sources and very often, the data was inconsistent with different descriptions and units of measure and limited access to product specifications. Did NZ have 600,000 pairs of gloves, or 600,000 gloves (a 100% error factor)? Were masks reported as being in stock N95 grade or different sizes? Were they the same specification? When were they purchased - were they beyond their best before date? These were very real scenarios encountered, most of which hit the press!

Having a national view of PPE across all NZ hospitals would have made a huge and meaningful difference to the effectiveness of the initial COVID response.

A strongly negative comparison was made between the lack of the NZ healthcare systems' ability to gain supply chain visibility for critical PPE and what was seen in the supermarkets with food & grocery items (such as toilet paper!).

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On how suppliers load data into the Health System Catalogue:

- Suppliers are being progressively approached to load their data by the joint onboarding team from NZ Health Partnerships and GS1. Suppliers are encouraged to load their data into the Health System Catalogue via GS1's National Product Catalogue (NPC), which is purpose-built to assist suppliers to deliver internationally-standardised data to multiple recipients (e.g., including Southern Cross Hospitals).
- Typically, in the GS1 National Product Catalogue a "supplier" will own distribution of a product to a specific trading partner. This supplier is deemed the "information provider" and is normally the one with the primary commercial relationship for supply of that product.
- The NPC does permit the same "product" to be loaded into multiple supplier accounts (as trading partners may source the product from multiple suppliers). Indeed, it is expected that multiple instances of the same Global Trade Item Number (GTIN) might be loaded into different supplier's NPC catalogues. Because suppliers are in competitive situations where they may be supplying the same product to an organisation, there are strict controls on data sharing within NPC and any prices loaded flow securely from the supplier to the government's system.

For further information

NZ Health Partnerships Programme nzhealthpartnerships.co.nz/about-our-programmes/health-finance-procurement-information-management-system/)

Email further HSC questions to HSC@nzhp.health.nz

Health System Catalogue Data Set - health.govt.nz/publication/hiso-1008412021-suppliers-and-items-data-standards

GS1 National Product Catalogue - gs1nz.org/services/national-product-catalogue/

Supplier data requirements - support.gs1nz.org/hc/en-us/articles/4407174912153-NZ-Health-Partnerships-Ltd-Healthcare-System-Catalogue-Initial-Supplier-Information-including-data-requirements

EUDAMED – also using GS1 global standards for key attributes. https://ec.europa.eu/tools/eudamed/#/screen/home