

Australia

NSW Health continues to benefit from its implementation of GS1 standards

NSW Health is the largest public health system in Australia and had been reliant on manual processing of procurement information using several methods and from various sources. These processes led to inaccurate, unreliable and variable sources of information and posed a deterrent to business growth. They were not conducive to system-to-system integration, essential for procurement process efficiencies.

In 2005, NSW Health adopted GS1 Australia's global data synchronisation network compliant data pool, GS1net - known as the National Product Catalogue (NPC) in the Australian healthcare market - as its optimal and compliant solution to facilitate the exchange of accurate, timely and synchronised data across its supply chain.

The NPC has enhanced the quality of data within the NSW Health procurement information system. The established processes by GS1 Australia provide system architecture improvement to ensure the solution is flexible in terms of accommodating industry endorsed additions and improvements over time.

by Valentino Bulaon



Background

The NSW public health system is world-class, consisting of approximately 220 public hospitals, 105,000 dedicated staff (FTE) and 15 Local Health Districts (LHDs) - eight servicing the Sydney metropolitan region and seven servicing rural and regional NSW.

HealthShare NSW was established in 2007 to deliver efficient non-clinical and corporate shared services for NSW Health and is the largest public sector shared services model in Australia, with an annual operating budget of more than \$1 billion.

With approximately 6,400 employees, HealthShare NSW processes 72,000 purchase orders per month and 8,000 accounts payable invoices daily.

Challenge

NSW Health was reliant on manual processing of procurement information. Procurement information was obtained from a myriad of sources, such as phone calls, emails and paper catalogues creating double handling and costly reprocessing.

Budget control, contracting and tendering had also become a major concern with diminished reporting capabilities due to inconsistent system information and sources that did not support the production of reliable spend-trend reports.

Valentino Bulaon, *NSW Health's Procurement and Catalogue Information Manager.*

Each week, 18,000 purchase orders were being processed, of which 45 to 55 % were free-text, i.e., requiring manual entry by both clerical and clinical staff. This contributed to invoice processing on-holds estimated to be valued at \$10 million per week.

NSW Health realised inaccurate, unreliable and variable sources of information posed a deterrent to business growth and were not conducive to system-to-system integration, essential for procurement process efficiencies.

Solution

NSW Health set itself a task to identify a solution designed to meet a specific set of criteria. The solution sought needed to:

- support service improvement through the provision of accurate procurement data;
- have the ability to monitor procurement activities, analyse trends, influence buyer and supplier behaviour, and ensure compliance to NSW Government policies;
- generate savings for NSW Health through reduced manual processes, reduced data errors and subsequent processes required to rectify errors;
- support the roadmap to making procurement business intelligence available across the state through a shared system;
- contribute to NSW Health standards for intelligence gathering and analysis.

In 2005, working with the National eHealth Transition Authority NeHTA, NSW Health was involved in identifying GS1 Australia's data synchronisation network compliant solution - the NPC as its solution.

Today the NPC is a repository of master data and presents as the "central source of truth" for procurement purposes. Suppliers who own and maintain the data pertaining to their products, enter product information into the NPC. The entry of data is based on global standards and is validated for quality control and accuracy. Standards governing how and what data is entered, inclusive of category and health item codes, assist delivery of consistent and accurate procurement information.

The NPC uses global standards governing unique identification keys, including the Global Trade Item Number (GTIN) which uniquely identifies each product at all layers of packaging, and the Global Location Number (GLN) which uniquely identifies the physical, operational and legal locations of trading partners. A separate system, GS1 Locatenet, a central directory of GS1 Global Location Numbers (GLNs), enables the matching of NSW Health Location GLN to receiving Trading Partner GLN.

The NPC met the NSW Health solution criteria as it enabled system-to-system access to accurate procurement information directly from data owners, thereby addressing data quality issues and removing reliance on manual processes. In addition, the NPC data supported the automated processes NSW Health wanted to implement, including data extraction, linking, validation and the subsequent data push to procurement information systems.

NSW Health uses the Bizcaps Master Catalogue Information System, which enabled integration between the NPC and the NSW Health internal systems.

The GS1 Australia Data Services

Support team was of great assistance to HealthShare NSW when the NPC project was implemented and continue to provide ongoing support. Ongoing consultation with these specialists is strongly recommended.

Valentino Bulaon, *NSW Health's Procurement and Catalogue Information Manager.*



Post the NPC implementation, NSW Health applied an image project designed to enhance the user ordering experience. It chose GS1 SmartMedia as one of two options available to NSW Health suppliers to populate product images on the NPC and supplement the NPC data. GS1 SmartMedia is a whole of industry solution that fulfils the need for a single repository of valid, up-to-date multimedia files, other digital assets and basic product data attributes, allowing easy sharing with trading partners and seamless integration with the NPC.

Benefits

Implementing the NPC has addressed the key issues deemed as deterrents to business growth, such as inaccurate, unreliable and variable sources of information. The NPC data has proven essential to system-to-system integration required to deliver procurement process efficiencies.

The NPC has enhanced the quality of data within the NSW Health procurement information system. Once the full system-to-system integration is complete, invoices "on hold" resulting from free-text ordering are expected to be drastically reduced if not eliminated altogether. The average time spent for the requisitioning process is

expected to also reduce. Additional time savings are to be realised through reduced time spent rectifying wrong deliveries and returns.

Manual data processing undertaken by hospitals and NSW Health business units during the cataloguing requisitioning, purchasing, warehousing and accounts payable processes, have almost been eliminated through automated vendor product data updates. In turn, this has enabled the introduction of robust data control tools, with auditable and comprehensive reporting capabilities, sound work flow processes for improved management of the state catalogue.

The NPC incorporates industry standard specifications which supports seamless integration of internal systems. The established processes by GS1 Australia provide system architecture improvement to ensure the solution is flexible in terms of accommodating industry endorsed additions and improvements over time.

Conclusion and next steps

NSW Health plans to expand system-to-system integration to other non-health specialised procurement information systems across the state. This will maximise the use of global standards for unique product identification and data in cataloguing, spend trend analysis and product traceability.

It is important to share with others what the implementation of GS1 standards can achieve when coupled with a dedicated vision.

NSW Health is receiving national recognition for its success in making its procurement processes more efficient using GS1 standards.

GS1 global standards now form the key components of NSW state cataloguing, requisitioning, purchasing, accounts payable and state spend reporting. As of December 2014, the NPC holds the catalogues of more than 460 supplies, and shares data with each of Australia's seven State jurisdictions across Australia in addition to a number of providers (private hospital providers).

The NPC enables trading partners to have accurate, real time information in their systems upon which to base decisions. If any changes are made to one company's database, the change is automatically sent via the NPC to all trading partners.

The important work undertaken in electronic data validation, synchronisation and integration between the NPC and the Health Information Master File (HIMF) and related NSW Health procurement contract, financial management and electronic clinical systems is of national significance as an exemplar of Electronic Healthcare Supply Chain Reform.

Paul Broadbridge, *Supply Chain Manager at the National E-Health Transition Authority (NEHTA).*

About the author



Valentino Bulaon is Catalogue & Procurement Information Manager for HealthShare NSW.

Valentino is responsible for a number of successful procurement projects and ongoing programs.

These are the establishment, implementation and administration of the NSW Health Supply Chain Information System incorporating the Health Quality Reporting System and Clinical Product Evaluation Registries; the state catalogue that is associated with the National Product Catalogue; and the integration of a number of data systems with NSW Health's Master Catalogue Information System. These projects paved the way for NSW Health's successful implementation of national and global data nomenclatures and GS1 Global Standards in the management of its supply chain. Previously, Valentino held a senior role in NSW Health and led the implementation of whole of NSW Health procurement reforms, including the successful pilot and rollout of the Electronic Tendering System.

About HealthShare New South Wales

HealthShare NSW is a statewide organisation established to provide shared services to support the delivery of patient care within the NSW Health system. The organisation employs more than 6,400 people and is the largest public sector shared services model in Australia.