

# Health procurement leader turns to Australia's National Product Catalogue to improve tendering

## ABSTRACT

The 'single source' of item master data for health institutions in Australia, the National Product Catalogue (NPC), has been used successfully by one of the state health jurisdictions to improve the quality of data sourced for its pharmaceutical tendering process. In 2009 Health Purchasing Victoria (HPV) requested suppliers who wished to tender to supply pharmaceutical products, to provide tender data in the format of the NPC Browser Template. For current NPC Ready / NPC Populated companies (loading validated data to the NPC), this provided a simplified process for tender submission. For HPV, this resulted in a 60% improvement in data matching with items from the current contract. The NPC is an initiative of the National E-Health Transition Authority (NEHTA) and hosted on GS1net, GS1 Australia's data synchronisation service.



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## About Health Purchasing Victoria

Health Purchasing Victoria (HPV) was established in 2001 by the Victorian State Government to facilitate access by public hospitals and other health related services to goods and services on best-value terms. HPV contracts can be accessed by 76 public hospitals and healthcare services that provide healthcare to more than 5 million Victorians. HPV achieves optimal collective procurement outcomes through innovative practices and collaborative partnerships and by engaging public health service providers, consumers, funders, regulators and suppliers.

The organisation's vision is to be a health procurement leader in Australia, acknowledged for innovation, ethical procurement practices and transformation of the health supply chain. HPV's strategy is aligned with the Federal Government's National eHealth Strategy which is being implemented by the National eHealth Transition Authority (NEHTA). The Strategy outlines four strategic priorities:

- Urgently develop the essential foundations required to enable eHealth.
- Coordinate the progression of the priority eHealth solutions and processes.
- Accelerate the adoption of eHealth.
- Lead the progression of eHealth in Australia.

## The National Product Catalogue

In consultation with the Australian states and territories, as well as the federal government, NEHTA initiated the National Product Catalogue (NPC) as the 'single source' of item master data for health institutions seeking to purchase medicines, medical devices and other necessary healthcare items.

The NPC, which has been endorsed by all state, territory and federal health departments in Australia, is a single repository of product, pricing and healthcare data for all health industry product categories for the purpose of data synchronisation. These categories include pharmaceuticals and medical devices (such as orthopedics, implants, dental products, etc.).

The NPC is hosted by GS1 Australia on GS1net, a GDSN-certified data pool used in Australia and New Zealand by more than 1,400 companies across a number of industry sectors. This platform enables the secure sharing of item master information such as product identifiers and descriptions, units of measure, package contents, product classification, pricing and related healthcare information.

For suppliers in the Australian healthcare sector to become 'NPC Ready', all of their product and price data must be loaded to the NPC, the data validated, and published to the NPC data recipients (i.e., health jurisdictions and private healthcare organisations). Some organisations take a phased approach and achieve NPC Populated status as they load segments of their product range. The validation step in the process, performed by GS1 Australia, is crucial as it ensures the quality of the data provided which will assist all jurisdictions such as Victoria to overcome difficulties in validating tender outcomes.

## Health Purchasing Victoria tenders

Every year HPV is required to consult with public hospitals and health services to develop its Confirmed Annual Tender Program. HPV then publishes Requests for Tenders to establish best-rate prices per product and/or pricing benchmarking.

To assist with tender development and viability assessment, hospitals and health services are requested to supply data and information to HPV about their current purchasing habits and usage volumes. HPV then uses this data to form valid judgments concerning pricing viability of tenders and to perform evaluation of tender outcomes.

For a number of years, HPV has had an established policy of preference for tenderers who demonstrate the highest level of compliance with the requirements of the NPC as well as use of other aspects of the GS1 System, such as GTIN allocation, bar coding and eMessaging capabilities.

Flagging supply chain efficiency as a priority, HPV has also encouraged tenderers to offer and describe any current or proposed supply chain solutions that could provide a demonstrated improvement to the efficiency and effectiveness of delivery.

HPV asked the tenderers to outline the anticipated benefits to all Victorian public hospitals and other health and related services arising from the implementation of solutions, including how the success of each solution would be measured.

### The 2009 pharmaceutical products tender

Working collaboratively, the Victorian Department of Health and HPV recognised the need to improve the data integrity within the Pharmacy supply chain. HPV resolved to integrate the utilisation of NPC data into the tendering process. The steps taken were:

1. Tenderers were to submit the item and price data relating to products they were tendering in the 'GS1net / NPC browser template format'. The browser template is a csv file format that can be used by suppliers to load data to the NPC and also read data output from the NPC. Prior tenders had requested suppliers enter data into a proprietary HPV spreadsheet, which created additional work for suppliers.

For existing NPC Ready / NPC Populated companies, this meant that provision of product data for the tender simply meant downloading information from the NPC and adding appropriate tender pricing. Non-NPC Ready / NPC Populated companies were required to get familiar with the data requirements and prepare their data. However, these companies then had data ready to load to the NPC.

2. HPV stipulated that it would prefer to enter into an agreement with tenderers who would load and publish all product information and pricing for products selected as part of the contract on to the NPC prior to execution of the contract. Loading of this data is required at least one month prior to the anticipated commencement of the contract on April 1 2010, or as otherwise determined by HPV. Data must be published to both Victoria Health (as a data recipient) and also any wholesalers / distributors nominated in the tender submission as authorised suppliers on behalf of the tenderer.

3. Tenderers would be required to maintain in a timely fashion, all product data loaded to the NPC for contracted products, for the life of the Agreement. Should a contractor fail to load all product and price data to the NPC for any deliverable, HPV also reserved the right to contract with an alternative tenderer for supply of those products.

### Tender submissions

The Request for Tender was issued on August 20, 2009 and the tender closing date was October 2, 2009. Significant supplier education and engagement was undertaken prior to the tender. This took the form of two supplier seminars (tender briefings), help desk support provided by GS1 Australia, and face to face supplier meetings.

Using data from past tenders, HPV was able to assess if the new tender data provision process had any impact on the rate of response to the tender.

HPV received 35 tender responses, including responses from all but two incumbent suppliers. Twelve responses were from tenderers not currently on contract, and approximately 3000 product lines were tendered. All distributors responded to the tender and all have now published GTINs to the NPC. Of the currently contracted suppliers who responded, all but three have published to the NPC. Overall, the number of tenderers and number of items tendered has not changed appreciably since previous pharmaceutical tenders, which indicates the new process has not discouraged participation in the tender. Refer to Figure 1.

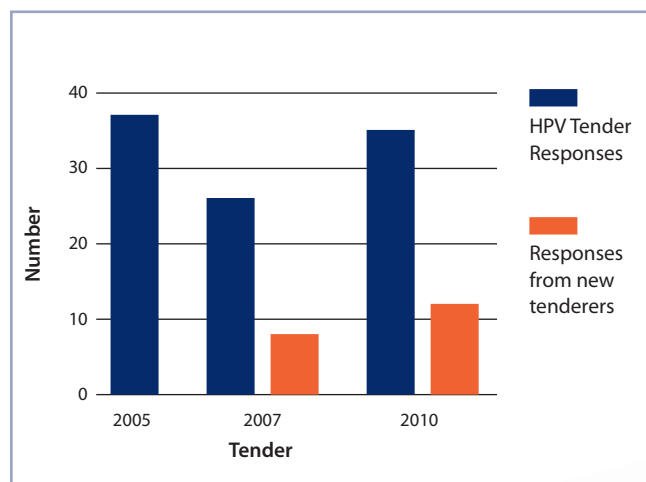


Figure 1: Number of tender responses by tender

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By September 2009, the number of GTINs published to the NPC by HPV's incumbent suppliers increased from less than 8,000 to more than 10,000, an increase of 25 per cent. Refer to Figure 2. By January 2010, the number of GTINs loaded to the NPC by incumbent suppliers had exceeded 11,000. This indicates that use of the NPC for the tender process had a direct impact on the number of companies loading data to the system.

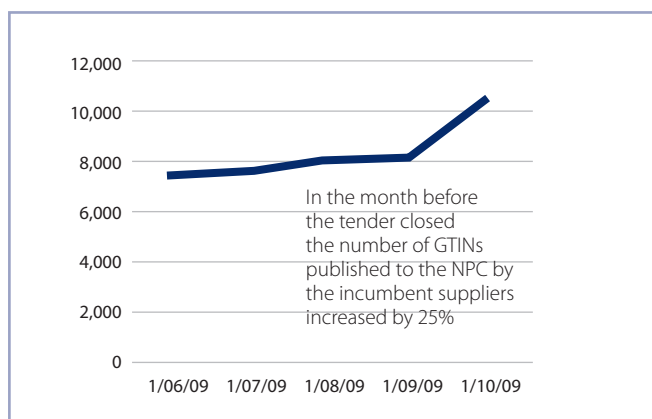


Figure 2: Number of GTINs loaded to the NPC per month

### Tender data quality analysis

Using data from the current tender and as well as the previous tenders, HPV was able to undertake two key comparative analyses:

1. Identify if there was a difference in quality of data provided for the current tender when compared between suppliers who had previously achieved NPC Ready / NPC Populated status versus those who became familiar with the NPC data requirements for the tender and did not complete the strict NPC data validation process.

Accuracy of selected data elements were quantified for all tenderers and a comparison made between those who had published data to Victorian Health (i.e., were NPC Ready / NPC Populated) and those who hadn't. The results of the data quality analysis showed that information provided by companies who were NPC Ready / NPC Populated was of much higher quality than that from other companies, as outlined in Figure 3.

Errors included wrong supplier code, full text used rather than a code value, and fields left blank. These errors would normally be detected and rectified through the GS1net validation process.

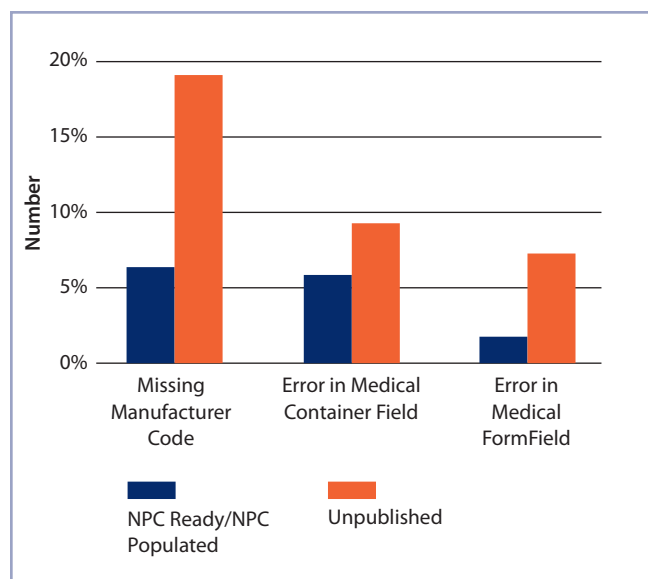


Figure 3: Error rates for common fields

Other data issues revolved around the familiarity of the tenderers with the browser template and inconsistent data typing.

- Not all tenderers installed the template for healthcare specific application and this led to additional columns being present in many submissions.
- Data entered directly into the template (rather than downloaded) was sometimes entered as text rather than numeric values, creating difficulty in manipulation.

Generally, these problems were avoided by tenderers who downloaded published data from the NPC to populate the template.

2. Assess the impact of the improved data quality on the financial evaluation of the tender outcome.

There was a 60% improvement in data matching with items from the the current contract, significantly increasing the confidence in financial impact statements for the Victorian Hospitals' pharmaceutical costs.

### Benefits and next steps

For HPV access to accurate and validated data from the NPC made tender analysis and evaluation significantly easier when submissions were from NPC Ready / NPC Populated companies. More companies becoming NPC Ready will further streamline the tender process.

HPV also intends to utilize the NPC for ongoing contract management as a single source for validating, communicating and promulgating data updates. This eliminates the use of multiple spreadsheets and manual data communication and manipulation, and the attendant opportunity for error.

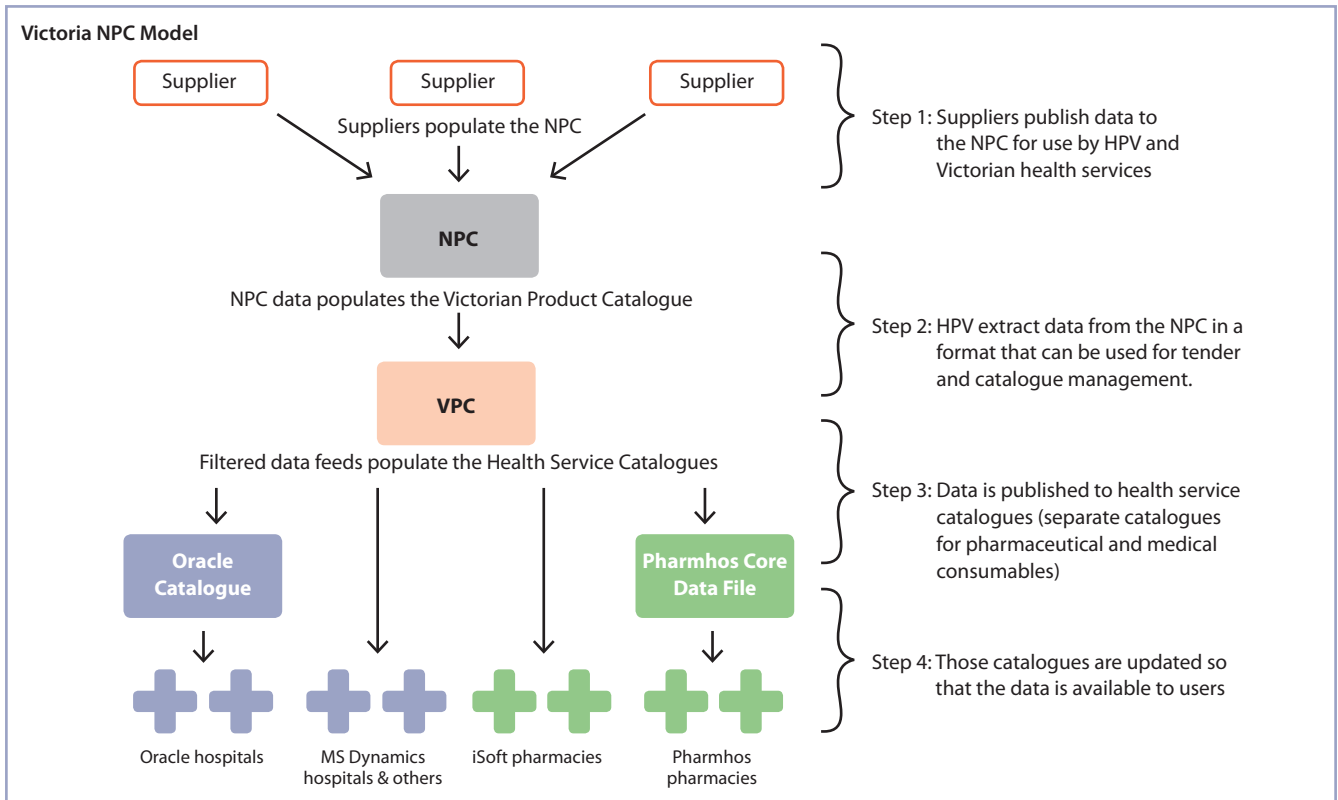


Figure 4: The potential Victorian NPC solution

Given these benefits, HPV intends to implement a plan to roll out a similar process for future tenders in other categories of product, e.g., medical devices, consumables.

### Learnings

Given that this tender was the first undertaken using the new process, a number of learnings and process improvements have been identified. These include updates to supplier documentation, specific supplier training sessions in addition to tender briefings and introduction of alternate supplier support mechanisms. Modifications to all of these areas are currently in progress.

Also, due to the data quality difference seen as a result of this tender (between NPC Ready / NPC Populated and other companies), HPV are currently assessing their ability to ensure that population of the NPC and completion of the NPC Ready / NPC Population process are mandatory pre-requisites for future tender submission. This will ensure that validated data is presented as part of the tender process.

### NPC implementation in Victoria

Use of the NPC data in contracts and tenders is only one element of the business application of the NPC in Victoria. There is currently a project underway to assess the feasibility to implement a solution to allow the automatic receiving and routing of data from the NPC to the various Victorian health locations. This project is being coordinated by both HPV and the

Victorian Department of Health and is integral to the longer term data management and eHealth plan of the state. It should be noted, that apart from the tender process, current data from NPC Ready / NPC Populated companies is being manually accessed by Victorian health locations.

Figure 4 provides an illustration of the potential solution for NPC data synchronisation for Victorian Health.

The opportunity for the use of NPC data in Victoria is significant and the implementation of this system will be a foundation to Victoria's continued development of eHealth infrastructure.

NOTE: The Author would like to acknowledge the contribution the suppliers who participated in the pharmacy tender, GS1 Australia and NEHTA, and his colleagues at HPV, Nigel Allsop, Richard Bowen and Sue McCallum towards assisting with the Pharmaceutical tender and development of this case study.

### ABOUT THE AUTHOR

**Tom Truman** joined HPV in February 2009 from a procurement and contract management role in a public health service. Tom has had over 25 years of experience in the public and private health sector in various management roles in hospital support services, procurement and contract management, including a period as a private consultant. Tom has a degree in Commerce (Deakin) and a Master of Business Systems (Monash) and has a keen interest in supply chain reform. Tom enjoys playing billiards and snooker, and cycling.