

The Australian Supply Chain Reform Agenda - Now and Then

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Agenda

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1. Australian Healthcare Supply Chain Reform
2. National Supply Chain Updates
 - National Product Catalogue
 - eProcurement Solution
 - Locatenet
 - Recallnet
 - Australian Medicines Terminology – GTIN
3. Healthcare Data Crunch Report

Australia at a glance

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- **23 million people** currently live in Australia
- **Life expectancy continues to increase**, so an Australian male born today can expect to live to 79.2 years and a female to 83.7 years
- **Australians aged 80 years or over** is about 800,000 (3.7% of the total population); nearly 2/3 are female
- **64% of people live in capital cities**, numbering 14 million in June 2009
- **Expenditure on health was 9.1% of GDP** in 2007–08, amounting to over \$103 billion or \$4,874 per person (just \$10 billion in 1980)
AUD\$130 billion in 2010-11 (9.8% GDP)
 - 70% is publically funded & 30% privately funded
 - 8 State & Territory Governments (State Health Departments) and Federal Department of Health and Ageing



STATE	2011
ACT	356,900
NSW	7,317,500
NT	231,200
QLD	4,599,400
SA	1,659,800
TAS	511,000
VIC	5,640,900
WA	2,366,900
Total	23M

NEHTA's Structure

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The National E-Health Transition Authority (NEHTA) is a company established by the Australian, State and Territory governments in 2005 to develop better ways of electronically collecting and securely exchanging health information.

Independent company – state and federally government funded, including:

- Board of Directors (CEOs of Health Jurisdictions, an Independent Director and an Independent Chair)
- Board Committees
- The Chief Executive Officer
- The Company Secretary
- The NEHTA Organisation

eHealth Supply Chain Reform

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Supply Chain Reform needed because:

1. Lack of standardised **product** identification
2. Lack of standardised **location** identification
3. Multiple product data catalogues being maintained per hospital, per hospital network and per state

Poor supply chain costs the health system money:

- **Wrong product** ordered/delivered
- Wrong quantity/**poor forecasting** and inventory management

Automating processes enables supplier and buyer organisations to:

- Reduce **redundant** purchasing tasks
- Improve **inefficient** work practices
- Achieve greater **accuracy** in procurement and tendering

eHealth Supply Chain Reform

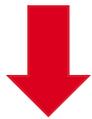
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Information is the enemy of disease

70yr old woman goes to hospital for a hip replacement...

Wrong prosthesis turns up...



No surgery =

1. **Cost to patient** – pain, increased iatrogenesis, stress, time, financial
2. **Cost to health system** – theatre, staff, bed, medications, other patients



eHealth Supply Chain Reform

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Accurate Data is Critical

eHealth Supply Chain Reform can deliver:

- ✓ The right **products**, at
- ✓ The right **price**, for
- ✓ The right **person**, in
- ✓ The right **location**, at
- ✓ The right **time**

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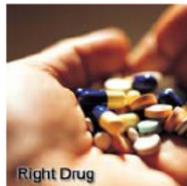
The National Product Catalogue

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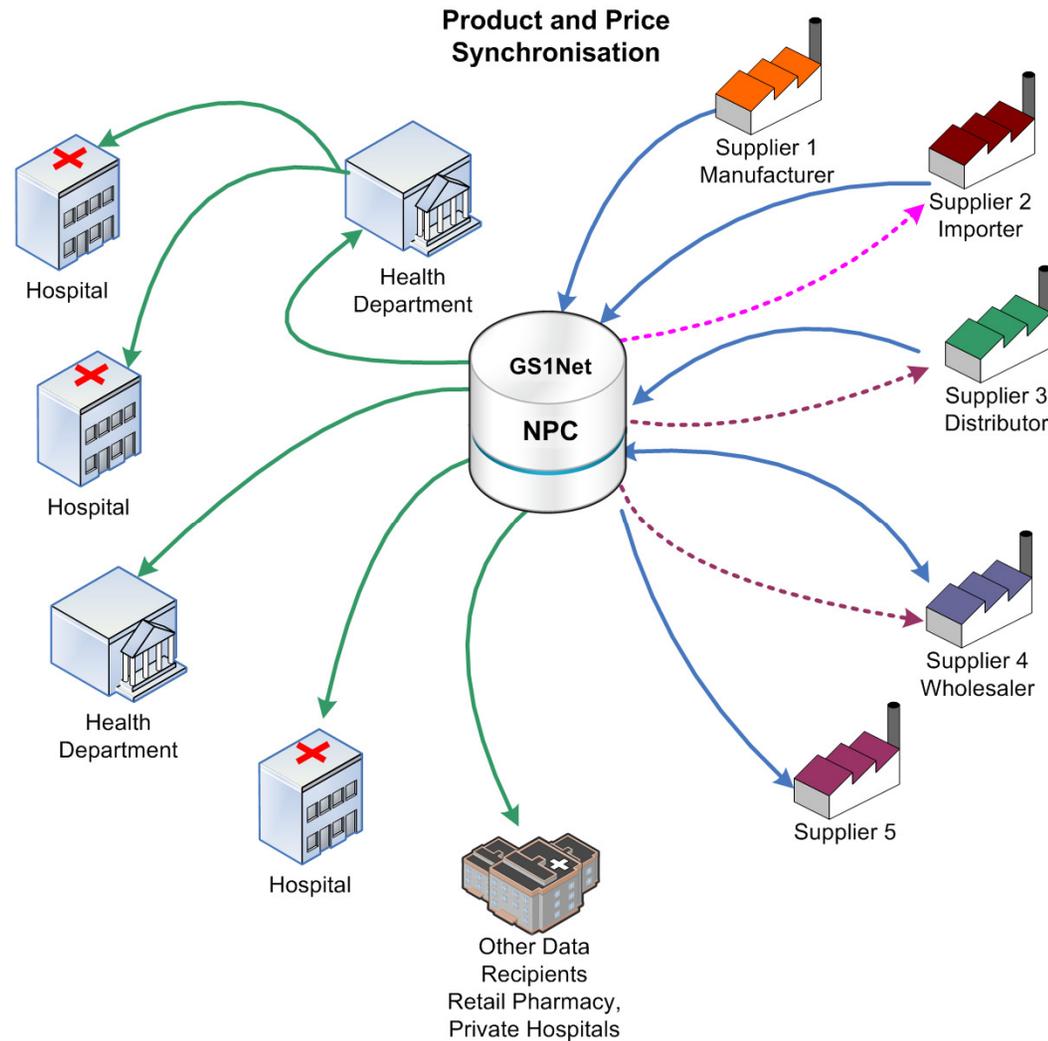
The Solution:

- The National Product Catalogue (NPC) is a way for suppliers to provide standardised and accurate product and price data electronically to the Australian health departments and private hospital providers.
- The NPC provides suppliers with a single mechanism to communicate structured catalogue data to many health customers – and the health customers a single way to access this data from multiple suppliers.
- The NPC enables synchronisation of product and pricing data for accuracy in electronic procurement.



NPC – Data Synchronisation

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Product data is common to all - Price data is customer specific

NPC – Data Usage

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National Product Catalogue

- **314,000+** items, **400+** suppliers
- All **jurisdictions** accessing data
- Clean, standardised data in all systems

Private Sector

- Private Hospitals
- Community Pharmacies / pharmacy software providers
- Accurate reference of Prosthesis Rebate Code for billing benefits



Clinical Outcomes Focus

- Clinical Terminologies – Australian Medicines Terminology (AMT)
- Product tracking and recall
- Bedside scanning (incl. batch, exp., serialisation, etc) => patient record
- TGA approval of pharmaceuticals



NEHTA anticipates that full implementation of the NPC will save the public healthcare sector at least \$AUD200 million per annum by ensuring accurate, valid and up-to-date product data, and improved communications and supply chain operations

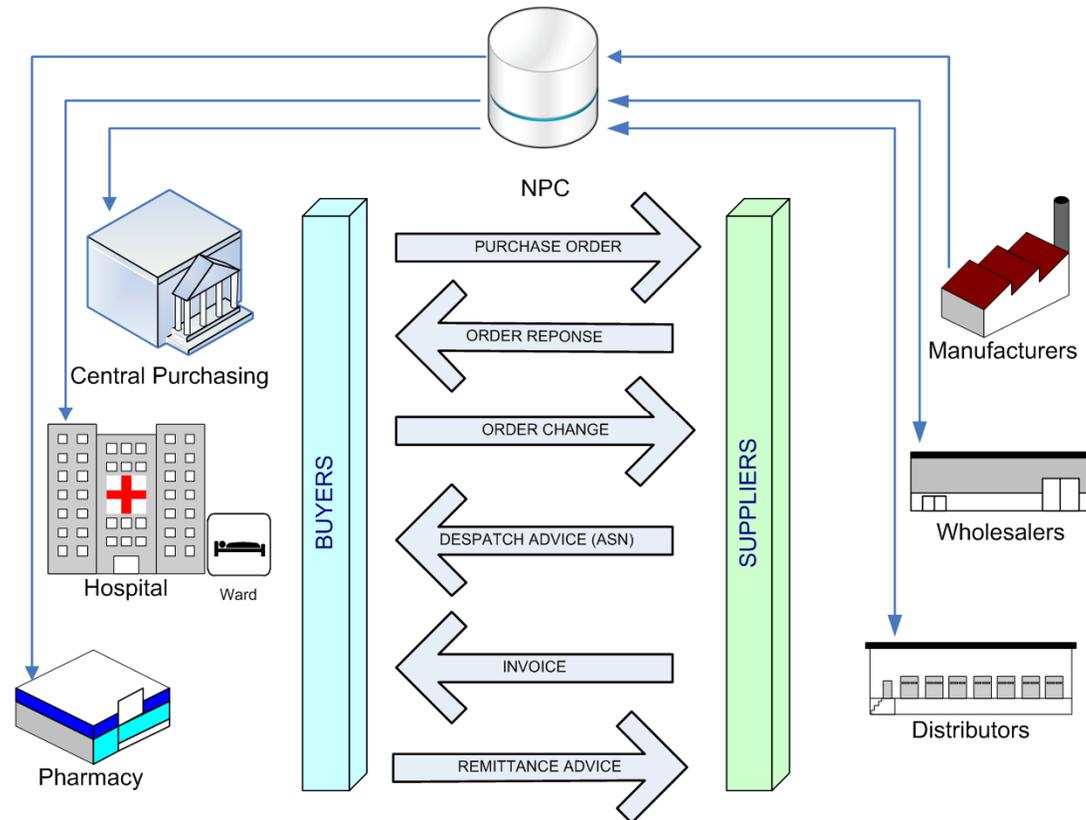
(Deloitte, 2004. Recommendations for National IM & ICT Enablers in the Health Sector Supply Chain report).

eProcurement Solution



eProcurement

NPC is key to standard **data** and a shared identifier across all parties – **GS1 Product Number (GTIN)**



Healthcare Locatenet

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- Centralised repository for supply chain locations
- Uses GLNs as the unique location identifier
- Standardised, industry-driven communication tool
- Provides a network of uniquely identified Healthcare locations
- Enables trading partners to electronically share location information
- Provides ability to bill-to and ship-to different locations
- GLN Rollout for Jurisdictions using Browser Template and APIs for Enterprise Systems

Traceability

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NPC + Locatenet = Better Tracking and Recall

1. Enterprise Resource Systems provide the capability
2. Use the GTIN to identify the Product
3. Use the GLN to identify its location
4. eProcurement used to put product on shelf
5. Recallnet used to pull product off shelf

Healthcare Recallnet Overview

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Project Need

- Product recalls have a large impact on all involved
- Product recalls are increasing
- Opportunities exist to improve the product recall process through new technologies, data standards and a more streamlined process

Project Mission

To deliver an electronic product recall notification system in the Australian healthcare sector, through a phased approach, to improve the speed and accuracy of the therapeutic goods recall process with the aim of improving patient safety.

NPC is key to standard **data** and a shared identifier across all parties
GS1 Product Number (GTIN) and Location Number (GLN)

Current Status

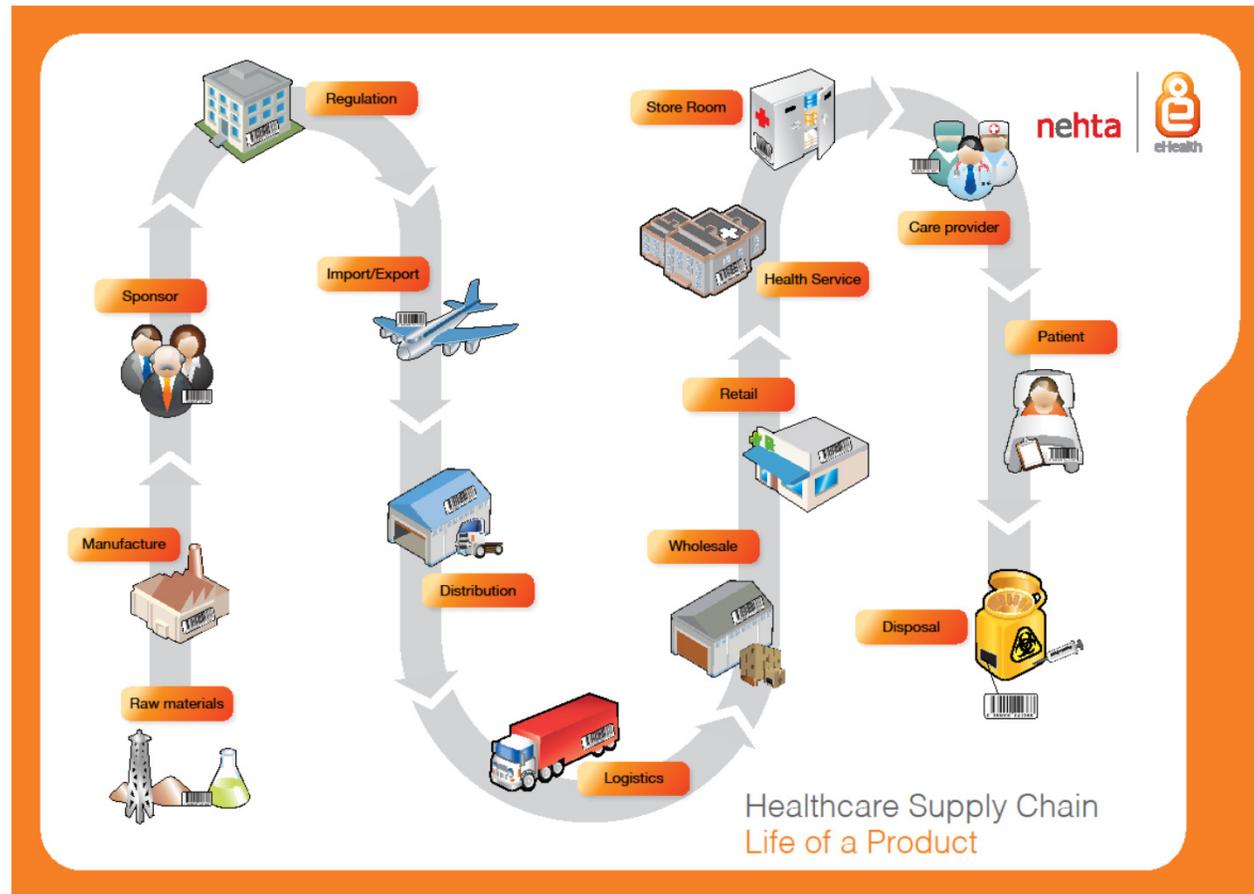
- Integral component of eHealth Supply Chain reform agenda
- Standardised, industry-driven communication tool
- Enables organisations to electronically view, share and report recall information
- End to end, real-time product recall and withdrawal notification
- Aligns with current URPTG and Jurisdictional process
- Creates efficiencies and effectiveness in product recalls
- Compliance increasingly asked for at tender
- Launched to Industry during Supply Chain week 2013
- Best practice for clinical safety and quality

Life of a Product

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[Life of a Product.pdf](#)



Conclusion

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1. Lack of standardised **product** identification = **GTIN**
2. Lack of standardised **location** identification = **GLN**
3. Multiple product data catalogues being maintained per hospital, per hospital network and per state = **NPC**
4. Inaccurate and inefficient procurement practice = **eProcurement**
5. Inefficient product recall processes = **Recallnet**

Australian Medicines Terminology

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- The Australian Medicines Terminology (AMT) is the intended national standard coding system for selecting, recording and communicating categorical descriptive medicines information within and between Australian eHealth applications.
- It delivers a unique code along with standard naming conventions to identify and accurately describe both branded (trade) and generic (medicinal) products at a number of levels of detail.



- AMT evolved from Australian Catalogue of Medicines (ACOM) and the NHS Dictionary of Medicines and Devices (**dm+d**).
- AMT is an Australian drug extension to SNOMED CT[®], a SNOMED CT licence is required.
- The **dm+d** is a UK drug extension of SNOMED CT[®].
- SNOMED CT[®] is a registered trademark of the International Health Terminology Standards Development Organisation (IHTSDO).

Australian Medicines Terminology

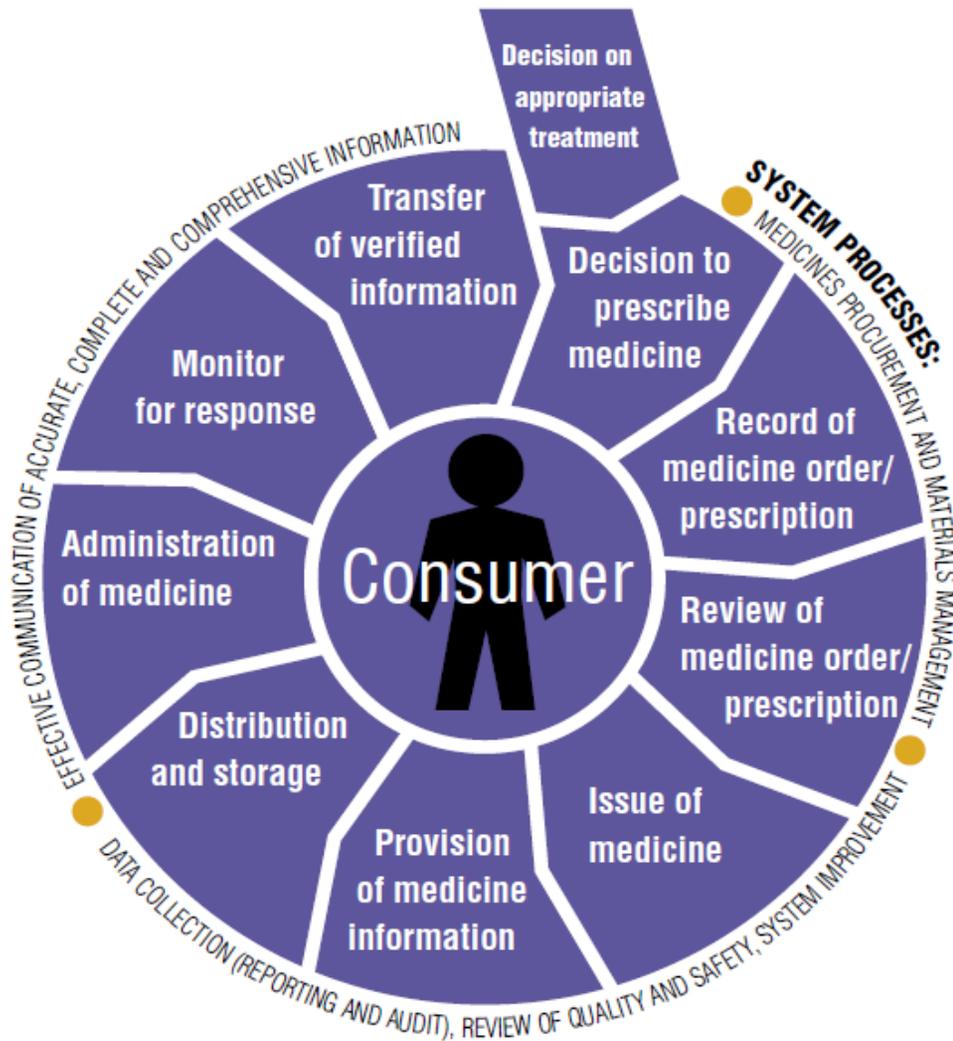
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- Developed to be fit for the purpose of unambiguously identifying for clinicians and computer systems, commonly used medicines in Australia and can be implemented in clinical information systems for the following activities:
 - Prescribe
 - Record
 - Review
 - Issue – including dispense
 - Administer
 - Transfer of information

Medications Management Cycle

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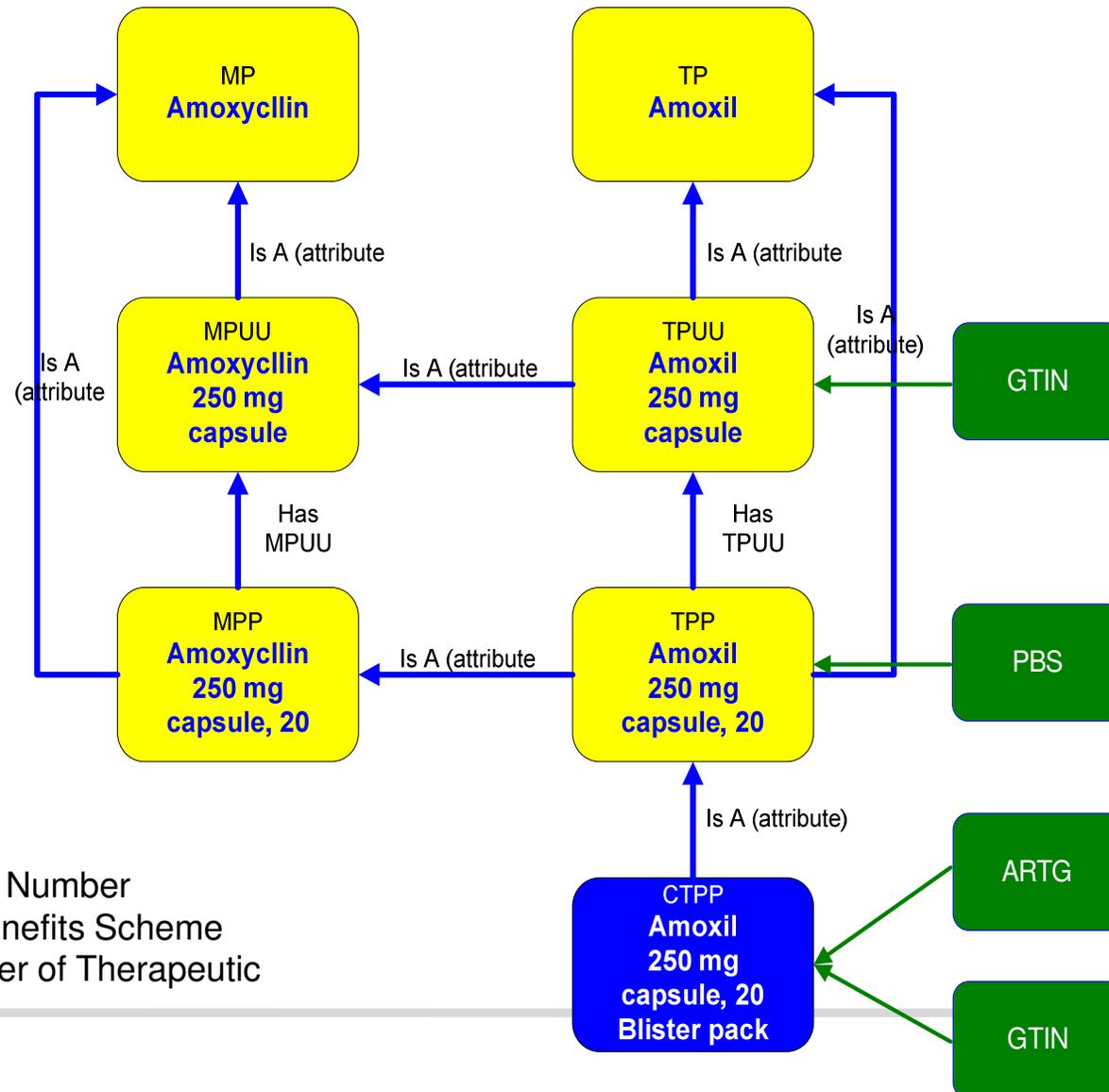


Information Required:

- Procurement
- Product
- Materials management
- Pharmaceutical
- Terminology
- Clinical
- Logistics
- Patient

AMT and NPC

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GTIN: Global Trade Item Number
PBS: Pharmaceutical Benefits Scheme
ARTG: Australian Register of Therapeutic Goods

Proposed Next Steps

1. **Phase 1:** Associate AMT identifier to GTIN – align with TGA processes for new medicines.
2. **Phase 2:** Associate AMT identifier to GTIN – existing medicines on the NPC.
3. **Phase 3:** Enable interoperability between applications and CIS to deliver greater quality, safety and efficiency of care in relation to medicines, e.g. barcode scanning to the bedside.

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3. **Healthcare Data Crunch Report**



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Launched 6 March 2014

“The report identifies the **benefits** to all parts of the supply chain from bringing healthcare **product data** quality up to **best practice.**”

National E-Health Transition Authority
www.nehta.gov.au

Background

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1. Commissioned by industry under the auspices of the National E-Health Transition Authority (NEHTA) Supply Chain Reform Group (NEHTA SCRG)
2. Aim is to focus industry attention on the need for continual data quality improvement in healthcare
3. Confirmation of anecdotal feedback that inaccurate product data has a direct impact on healthcare efficiency and costs

The Participants

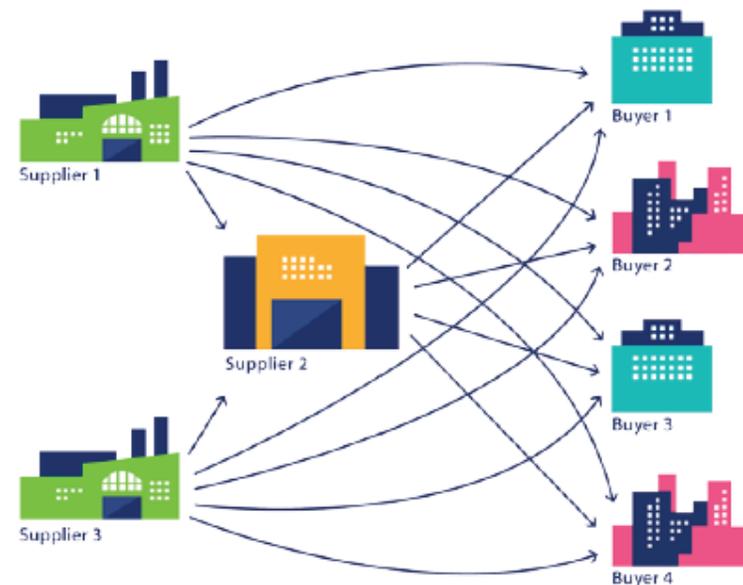
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- 4 buyers and 3 suppliers
- Each buyer represents up to 20% of their supplier's total sales volumes

Role	Approx. number of orders / month	NPC status ⁴
Buyer	3,235	Integrated
Buyer	850	Integration project in progress
Buyer	900	Integration project in progress
Buyer	12,500	Integrated
Supplier	4,500	Data loaded
Supplier	47,000	Data loaded
Supplier	3,500	Data loaded

Integrated - the supplier automatically pushes electronic messages containing changed data or new products to the NPC and the buyer receives automatic updates (via electronic messaging) of this changed or new data



Manual PRC Clarification

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1. Work effort in keeping the product to PRC relationships up to date manually is not only onerous and prone to error
2. Advice from one participant as was that their hospitals spend up to one hour per week per hospital phoning suppliers to verify codes



Potential cost of manual PRC clarification by hospitals

Unclaimed Joint Replacement Prostheses

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1. One participant claimed that up to 20% of prostheses claims are being rejected due to inaccuracies
2. A single health services organisation identified equated to \$175,000 of lost revenue



Potential lost revenue from unclaimed joint replacement prostheses

Manual Checking of UOM

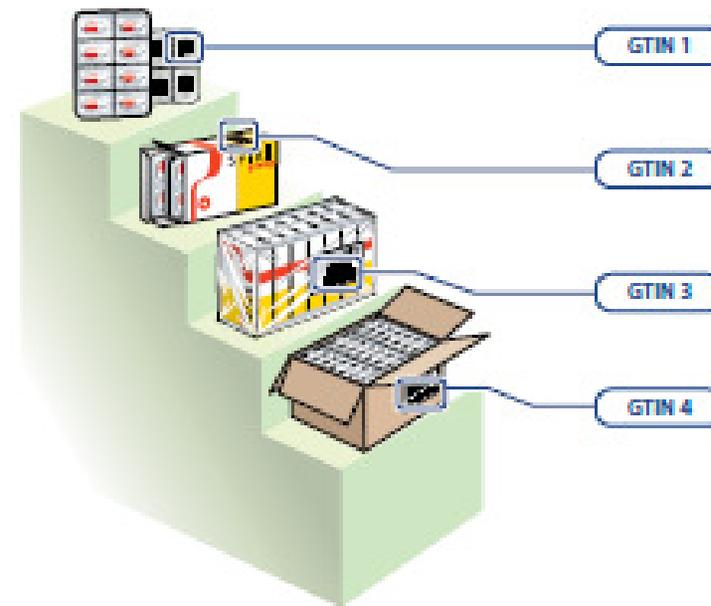
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Unique product identification at all levels of packaging will lead to potential savings



Potential cost of manual checking of unit of measure



Urgent Deliveries

1. The end result of an incorrect unit of measure will be either undersupply or oversupply
2. At least once a month there is a need to place an emergency delivery order due to undersupply
3. Incurs priority shipping costs at approximately \$1,000 for each shipment to a regional location



Weights and Dimensions



Potential cost associated with independently sourcing product weight and dimensions

1. Each part of the healthcare supply chain is currently measuring the same products to collect weights and dimensions data
2. One participant hired a weight and dimensions measuring device for one month to measure, at carton level, the top 1,000 products traded by their business

5 scenarios - \$30 million AUD

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Potential savings for 5 scenarios studied

But more were identified:

1. Time and effort required to address the initial error and arrange the urgent delivery
2. Reverse logistics in the case of oversupply
3. Rejection of prostheses claims due to inaccuracies, coupled with the cost of the supplier companies providing on-site staff to verify claim information
4. Lost revenue from inaccurate linking of data to patient for non-joint related prostheses claims
5. Stock being unavailable for patient care and associated costs of delayed or cancelled procedures

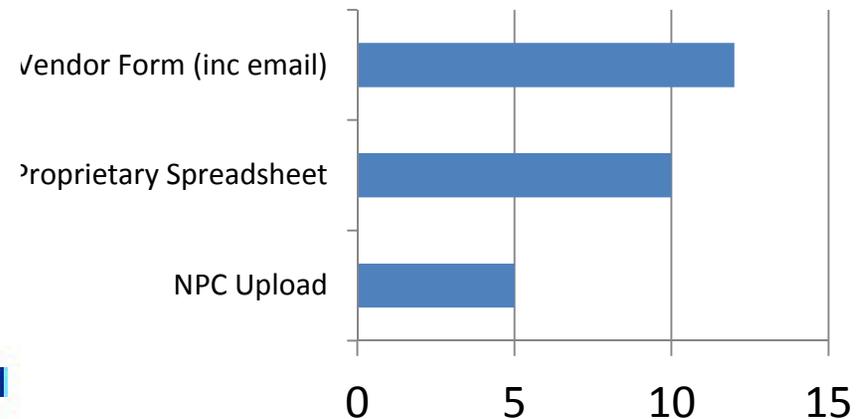
What is the potential?

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Conservative potential savings from improved data quality for all business processes met by the NPC data set

Communicating product data work effort (mins)



The project participants call on all Australian healthcare companies to adopt the National Product Catalogue and work together to improve product data quality for supply chain efficiency and to improve patient safety.

Summary

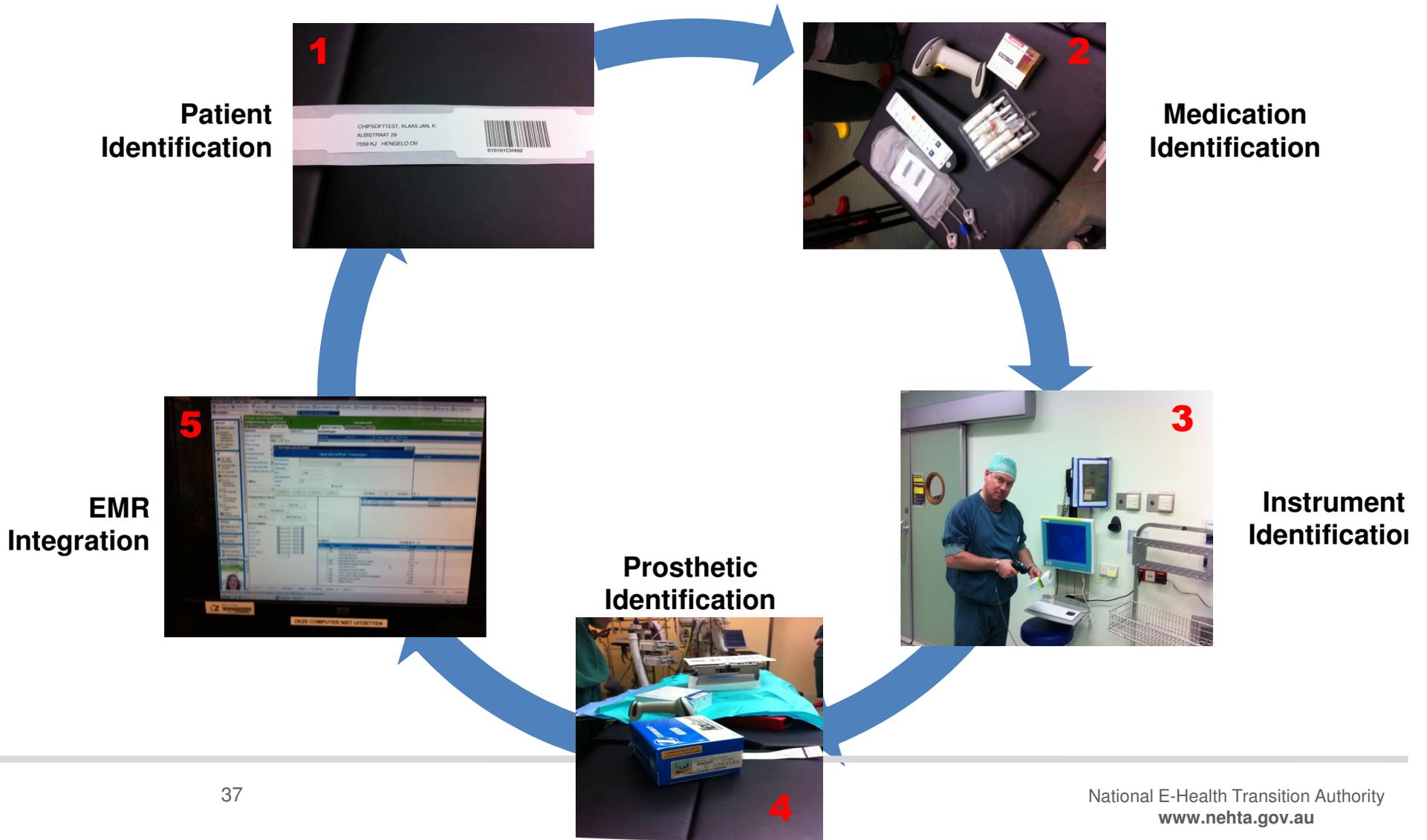
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Supply Chain Nirvana

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Contact and Questions

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Supply Chain

www.nehta.gov.au/our-work/supply-chain

NEHTA specific information

www.nehta.gov.au

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www.ehealth.gov.au