



The global language of business

# GS1 Healthcare Conference 2010



## From paper to RFID A Brief History of Time

Geneva 22<sup>nd</sup> June



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GHX UK Product Council Member



# The Big Bang

- 1999
  - Development of in-house SPAMMIS
  - Materials Management Target Areas – AIDC
  - KPI's agreed for measuring success
- 2000 – Strategy approved by Trust Board
  - SPAMMIS roll-out
  - Catheter Lab Project – bar coding
  - JnJ e-commerce project – valuable experience
- 2001
  - SPAMMIS / Oracle integration
  - e-Commerce in Action Project
    - Global Healthcare Exchange
  - Vision
    - Deliver patient value by increasing purchasing efficiencies and transforming the way we work with customers, suppliers and Healthcare partners.



# E-Commerce in Action Project

## □ 2002

- First hospital in Europe to trade through GHX
- e-Commerce in Action Conference in Leeds - Lord Hunt as keynote speaker



## □ 2003

- HSJ Awards 2003
  - Winner – Improving Patient Care through e-Technology
  - Runner-Up – Partnership with Industry
- Radiology Project

**While the NHS grapples with its e-procurement plans, The Leeds Teaching Hospitals has already made the leap”.**

**Healthcare Finance Journal – May 2002**

# 2004 – Looking Back, Going Forward

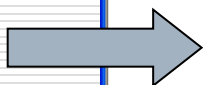
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- Need for Data Standards
  - Measuring Success – Touchless Order
- National Finance & e-Commerce project scrapped
- Oracle 10.7 required update – SBS
- e-Sourcing
- Contract & Catalogue Management
- Inventory Control roll-out plan
- Receipting
- e-Invoicing



# SPNet Radiology Track and Trace

Select  
Patient via  
Attendance  
Number



Display  
Products  
used in  
Attendance



The screenshot displays the SPNet v1.0 web application interface. At the top, there are navigation tabs: Rad Cat Comparison, Patient Attendance (selected), Attendance Costs, Attendance Avg Costs, Radstock Req Tracking, My Info, and Log Out. Below the tabs, a welcome message reads 'Welcome Kevin | June 15, 2005'. A search bar for '\* ANUM:' contains the value '5147' and an 'Ok' button. Below this is a table with the following data:

Attendance Number	Attendance Date	Patient Name	Type	Referring Clinician	Referring Practice	Referring Department	Speciality
<a href="#">5147</a>	29 OCT 1990	THOMAS MCNAB	Outpatient	MR BF REEVES	-	OUTPATIENT DEPT SJH	TRAUMA AND OOPD

Below the attendance table is a table listing products used in the attendance:

Attendance Number	Description	Product code	Quantity	Price	Date Created	Oracle Code
R01/89242V	PIGTAIL CATHETER (4F 100CM)	HNR4.0-35-100-P-10S-PIG	1	8.9500	2001-06-01 12:02:51.750	XAF-0091
R01/89242V	STOPCOCK	H1FLC	1	.7500	2001-06-01 11:54:34.230	XAA-0880
R01/89242V	HYDROPHYLIC WIRE - ANGLED (0.035" 180CM)	RF*GA35183M	1	19.5000	2001-06-01 11:54:34.180	XAF-0333
R01/89242V	AVANTI SHEATH + WIRE (11CM 4F)	402-604X	1	8.4500	2001-06-01 11:54:34.180	FAA-0320
R01/89242V	HIGH PRESSURE TUBING (30INCH)	HPF300E	1	3.5000	2001-06-01 11:54:34.180	XAA-0875

Real time data linking CRIS patient details to attendance and product details in RadStock through to Oracle 10.7 financials & purchasing.

# DH Coding for Success

## □ Patient Safety

- Healthcare needs standards

## □ Connecting for Health

- GS1 – Global Data

- GTIN

- GLN

- Healthcare User Group



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# National e-Enablement Programme

- National program launched November 2007
- Stakeholders from
  - NHS Trusts/Hubs/PCTs
  - Suppliers
  - Technology Providers
- Promote best in class enablement processes and solutions
- Agree standards to facilitate e-Enablement
  - GS1
  - Classification
    - eClass mapped to UNSPSC, Expense types, TFR3
  - Supplier Coding
    - Dun & Bradstreet
  - Transactional standards in e-Commerce
    - XML



# Meanwhile .....Leeds e-Toolkit

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1. Sourcing



2. Catalogue Management



3. Demand Management



4. ERP



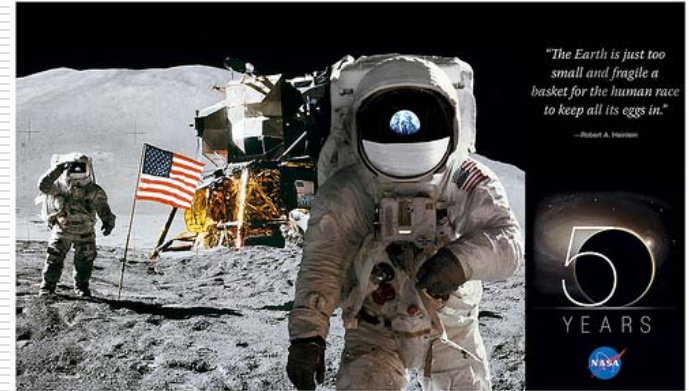
5. e-Commerce





# Current Projects

- Continuing roll-out of Demand Management
  - Target top 50 requisition points
  - Powergate Inventory
  - Electronic Dispensing Cabinets
  - New Top-Up handheld devices
  - Web Requisitioning
- GHX Nexus / Exchange
  - Target top 100 suppliers – supplier managed catalogues
  - Links to GDSN
  - Tariff items
  - e-Invoicing
- SPaCE Project (Case Study to follow)
- RFID of Ortho Kits (see Case Study)
- Global Location Number Project (Case Study to follow)



- A global location number (GLN) is used to identify any location (physical or legal) that needs to be uniquely identified in the supply chain.

- GLNs are 12-digit numbers plus a final check digit.

**5055218800008      Primary GLN - Leeds General Infirmary**

- External facing

- Project Stakeholders

- Leeds Teaching Hospitals
- NHS Supply Chain (Distributor)
- Bunzl (Distributor)
- GHX
- Covidien
- Johnson & Johnson
- GS1

# Data Quality – NHSSC

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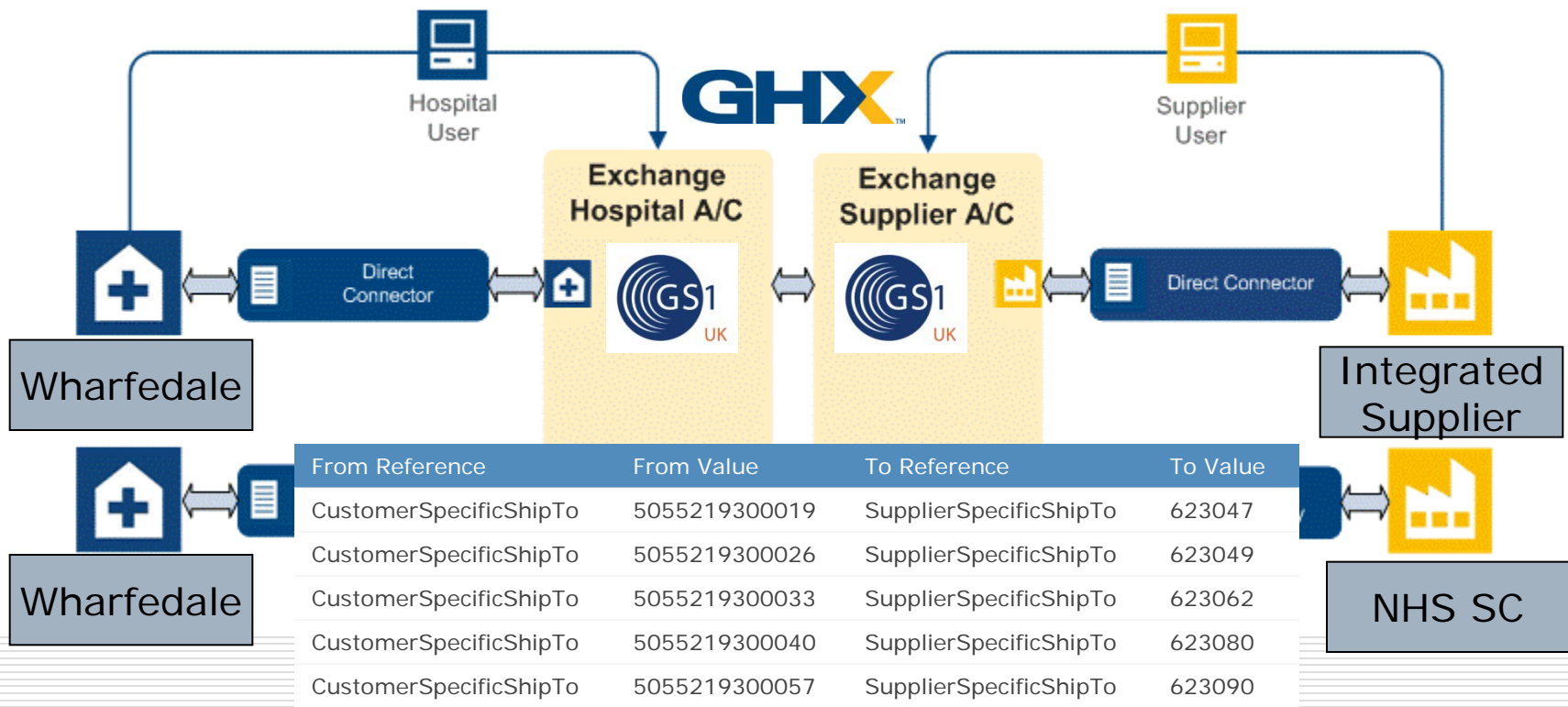
- 46 duplicates (92 records) in Oracle
  - Matched to NHSSC
  - Some already inactive in Oracle
- Difficulty at point of use
  - 6 digit transfer or requisition point now includes alpha and numeric characters
    - 620008
    - 62000B
    - 620005
    - 62000S

# Bunzl – no standards

- ❑ 254 delivery points in last 12 months
- ❑ Over half duplicated
- ❑ Incorrect descriptions –
  - Renal Satellite units not using electronic trading
  - Louise Patterson !!!
- ❑ Back Office Work
  - Dump cost centre codes
  - Data cleansing
  - Validation

603115	BEESTON RENAL SATELITE (JEFF)
603115	BEESTON RENAL SATELITE (PALLET)
603115	BEESTON RENAL SATELLITE UNIT
603116	HALIFAX RENAL SATELLITE
605000	SKIN OUT PAT DEPT OS BW D LGI
605000	WARD 43 OS BW E
605000	WD 43 DRESSING RM OS BW E FL
606000	HALIFAX RENAL SATELLITE
606607	Ward 62 HDU Clarendon D floor
606607	WD 74 HDU D FLR CW
640034	HDU LEVEL 2 ROOM L2-054 BEX WG
640052	THEATRE RECOVERY PACU LV2 BEXL
707000	SEA STORES Seacroft Hospital
800140	SWITCHBOARD CLARENDON WING
802056	LIBRARY Seacroft Hospital
999999	BRACHYTHERAPY THRE LVL 1 BEX W
999999	HDU LEVEL 2 ROOM L2-054 BEX WG
999999	LOUISE PATTERSON SUITE D20
999999	SPARE
999999	THEATRE RECOVERY PACU LV2 BEXL
999999	THRE THORACIC LEVEL 2 BEXLEY
999999	WARD 2 JB C FL

# GLN Messaging using the GHX Exchange



# Catalogue & Contract Management

## GHX NEXUS

- Customer-specific Catalogues with Pricing
- Supplier Managed Catalogues
- Full Supplier Catalogues
- National, Regional, Local Contracts
- Content Distribution Network

## Global

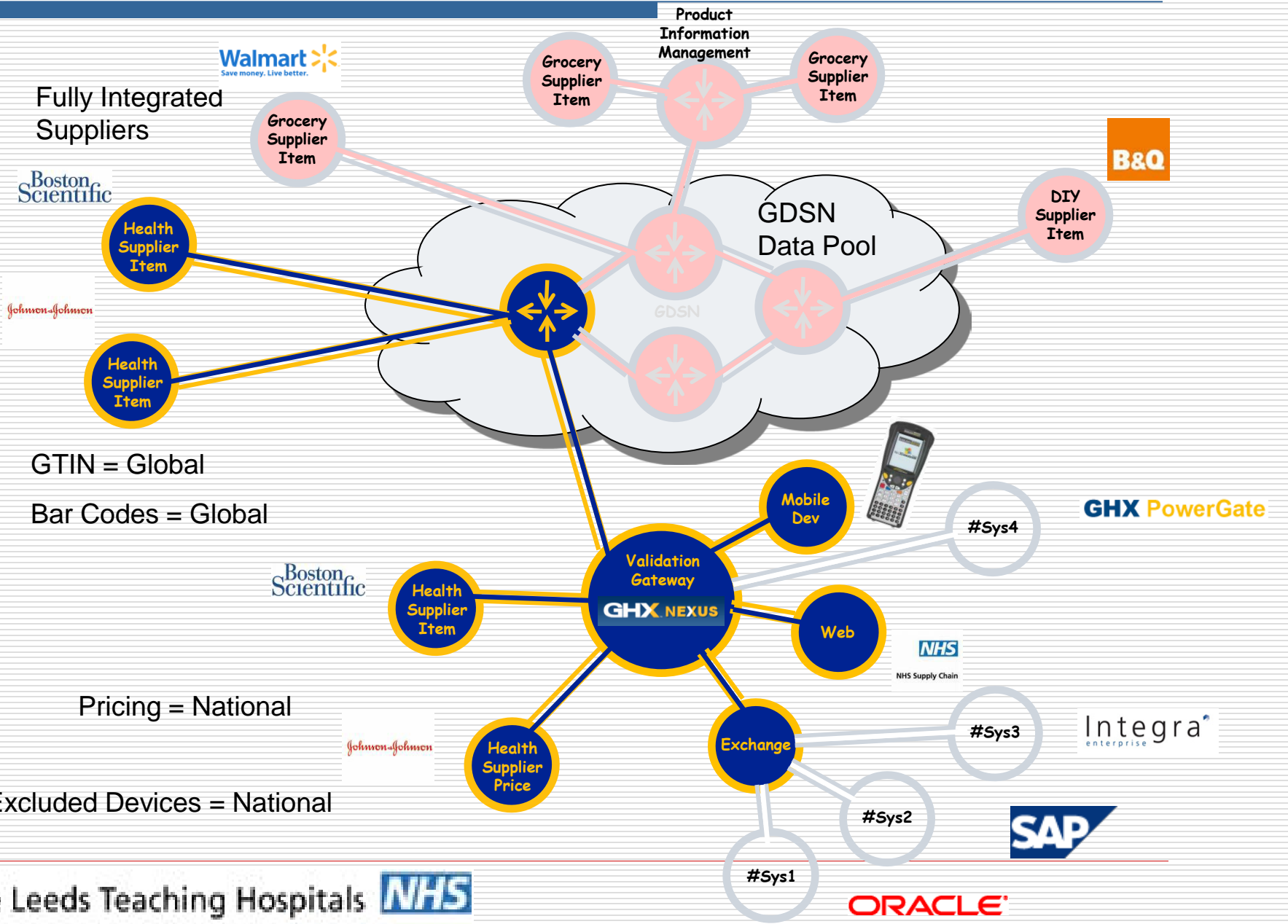
- GTIN
- Bar Codes

## Local

- Pricing
- Local excluded devices



# Content Distribution Network



Fully Integrated Suppliers



GTIN = Global  
Bar Codes = Global

Pricing = National

Excluded Devices = National

GDSN Data Pool

Validation Gateway  
GHX NEXUS

GHX PowerGate



NHS Supply Chain

Integra enterprise



ORACLE

The Leeds Teaching Hospitals



NHS Trust

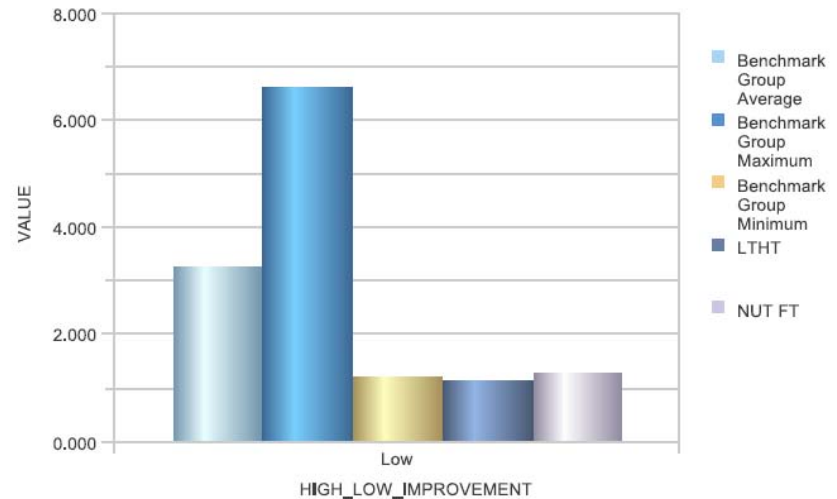
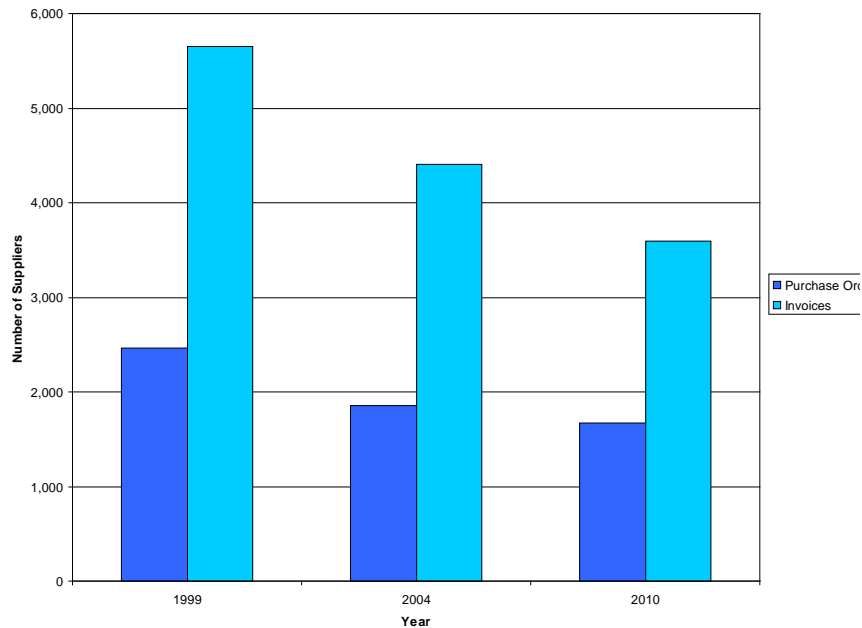
# Targets in NHS e-Procurement – KPI's 1999- 2010

Year	1999	2004	2010
Supplier Base Rationalisation - PO	2,459	1,858	1,674
Supplier Base Rationalisation - Inv	5,654	4,405	3,591
Items in Catalogue	3,063	167,297	300,110
Supplier Managed Catalogue	NIL	NIL	32
Receiving Points	40+	6	6
Materials Management Customers	50	240	270
Materials Management Influence	£1m	£12m	£19m
Materials Management Order Items	247,926	581,566	618,240
Electronic Stock Check	NIL	£0.7m	£7.1m
Autofax Purchase Orders	85%	94%	27%
EDI, XML, E-mail	NIL	5%	72%
PO Matched Invoices	68%	74%	93%
Goods Receipting	<1 hour	<1 hour	<1 hour
Cash releasing savings cumulative	?	£2.4m	£2.9m
Electronic tenders issue & receipt	NIL	NIL	1,067
GHX 'System to System' Integration	NIL	£5m	£15m
Electronic Auctions	NIL	NIL	NIL
Electronic Invoices	NIL	NIL	£98m
Electronic Requisitions	1,497	27,572	33,549
Electronic Requisition Lines	4,521	60,920	69,602
Purchase Orders	50,805	49,332	42,413
Purchase Order Lines	109,859	110,319	120,484
Purchase Order Lines per order	2.16	2.24	2.84
Purchase Card	NIL	£4,918	£114,369
Spend Influenced	£65m	£107m	£210m
Number of Contracts	?	624	720



# P2P Improvements

Supplier Base Rationalisation



- Number of suppliers down 37%
- Number of Purchase Orders Placed down 17%
- Average Lines per Purchase Order up from 2.16 to 2.84
- Number of Invoices Received down 5%
- Average Lines per Invoice up from 2.89 to 3.17
- Lowest cost per invoice in NHS Benchmark for Acute Hospitals

# So what do we save through all this technology?...



Total Savings Opportunity Across All Elements					
	Typical Total Time Cost per PO (Minutes)	Typical Total Process Cost per PO	Total Savings (%)	Total Time Cost Savings Opportunity per PO (Minutes)	Total Process Cost Savings Opportunity per PO
	129.74	20.44	58.86%	76.79	12.03
<a href="#">View Top Inhibitors Across All Elements</a>				<b>Total Savings Opportunity For All Elements per annum</b>	
				3839500.00	601500.00

<a href="#">Total Purchase</a>	<a href="#">Spend by Industry</a>	<a href="#">Spend by Commodity</a>
<a href="#">back</a>	<a href="#">print page</a>	<a href="#">home page</a>

Total Savings = £6.0m

# Our Experience

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- ❑ The savings are **ONLY** realised through expert support at hospital level.
- ❑ Service level agreements with customers before work commences.
- ❑ Continuous improvement project implemented and owned at senior level in the hospital.
- ❑ Short sharp focussed projects – ‘step to step’.
- ❑ Rigorous benefits measurement.
- ❑ Accurate clean data is the backbone.

# AIDC in Healthcare...

- Your hospital gift shop scans bar codes for Coca Cola and bars of chocolate.
- Do they scan wristbands and medications for a match?
- If not, ask “Why?”
  - Mark Neuenschwander
  
- Thank you for listening...
  - [graham.medwell@leedsth.nhs.uk](mailto:graham.medwell@leedsth.nhs.uk)

