Foundation Trust Network

Briefing

September 2011

PRODUCT PRICING PROJECT

NHS providers face a significant challenge to deliver the efficiency savings that the current economic environment demands. The National QIPP Procurement Workstream, led by the Procurement, Investment and Commercial Division (PICD), in the Department of Health, aims to support trusts in achieving £1.2bn savings through improved procurement.

However, to improve procurement efficiency trusts need to overcome considerable barriers such as a lack of transparent and comparative information on prices. This pilot benchmarking exercise was conducted to examine the prices paid by individual trusts for the same goods, and promote the greater transparency between trusts that is needed to deliver greater efficiency.

KEY MESSAGES

- This study provides comparable information on the prices paid by trusts for commonly purchased products. Trusts reported that sharing this information is a critical starting point for improving procurement efficiency.
- Significant price variations were observed, with some individual trusts obtaining prices that were 30% below the average price paid.
- There was no significant correlation between the prices paid and the volumes purchased for the investigated products. The relationship between price and volume may be masked by the complexity of contracts, which often involve a product range rather than single products
- For some products there was greater price variation across trusts that sourced the product through NHS Supply Chain (NHSSC) compared to trusts that sourced the product directly from suppliers. This may be the result of differences in the approach chosen by trusts in terms of the commitment to purchase high volumes of products, the complexity of contracts and the level of service included.
- Reported procurement practices were similar across the participating trusts with the exception of corporate level engagement which was more variable. Participating trusts cited clinical engagement as a key factor in securing the best prices. Good procurement practices were shared at the results workshop, including methods for improving procurement through greater clinical engagement and communication

INTRODUCTION

Non-pay spend typically accounts for 30–35%of acute trusts'operating costs; about half of this is on drugs, clinical supplies and services. The Department of Health estimates that trusts could save up to 20%of their non-pay spend by effective procurement and supply chain management.

Some organisations are not currently using national partners, such as NHS Supply Chain (NHSSC), as often as is needed for the estimated savings to be made at a system level. There is a mixed perception among trusts of the value delivered by NHSSC and there is little comparable data demonstrating the benefits of committing to purchasing through it.

Indeed, more widely there is limited reliable and comparable pricing information for trusts to access in order to assess the variation of prices paid nationwide or even regionally. This lack of information both within and between trusts restricts the ability of trusts to assess the market and negotiate effectively. The potential competitive advantages of partnerships may also be compromised by this opaque situation.

The role of the Department of Health (DH) in delivering the QIPP programme is to create the right environment for good procurement, providing clarity and promoting transparency, procurement leadership and improvements in product coding through implementation of GS1 barcodes. Chief executives and their boards will be ultimately responsible for delivering the savings expected. In line with this role, DH commissioned FTN to run a pilot study to compare pricing information for a specific group of products. The project has been designed to:

- Examine the price variations for 11 clinical products
- Provide trusts with transparent information on the prices paid by other trusts to provide leverage for them to reduce the prices they pay
- Explore the range of procurement practices and share best practice

BENCHMARKING PROCESS

An initial scoping phase was used to determine the products most commonly purchased by interested trusts. A final list of 11 products was then selected and used for further investigation in this study (shown in Table 1). To obtain consistent and comparable information the product supplier, part and unit of measure were all specified in detail.

A group of 20 trusts participated in this pilot study and established a project team with a procurement lead, data lead, and a board-level sponsor.

Participating trusts collected information on:

- The prices paid and volumes purchased for each of the 11 investigated products; this information was collected for the months April to December 2010
- Trust procurement practices, including participation in collaborative procurement groups, and information on supply sources

Trusts provided actual (not historical or contract) monthly cost figures excluding VAT and any carriage, capital, maintenance or training costs associated with the product. Some of these products were not purchased by all trusts (see Table 2).

During data collection, and subsequent data validation, support was provided by the FTN Benchmarking team, with regular contact to ensure trusts were collecting comparable data. During the data validation period trusts confirmed that the information provided met the specified criteria.

A findings workshop provided an opportunity for participating trusts to discuss these data as a group, identify improvement opportunities, and share learning resulting from different procurement practices and innovative approaches.

1 No significant trust-wide variations in prices during the Apr-Dec 2010 period were observed. Information on contracts (e.g. who the product was purchased from, who held the contract and the period it covered) was collected to further ensure that contract changes were not a major factor in price variation during the period.

BENCHMARKING RESULTS

VARIATION IN PRICES PAID ACROSS TRUSTS

The mean, minimum and maximum prices paid by trusts were calculated for the specified products (Table 2). These figures use the mean prices paid over the period April-December 2010[1]. The variation in prices for individual products was examined using:

i. The ratio of the maximum and minimum prices paid for the product by trusts (this gives an indication of overall variation in prices across trusts, with higher values for this ratio indicating greater variation);

ii. The percentage difference between the average price paid by all trusts and the minimum price paid (this gives an indication of the extent to which trusts were able to obtain prices below the average)

The variation in prices paid across trusts was product specific (as shown in Table 2 and Figure 1).

The greatest range in prices was for the adult Bair Hugger by Arizant, where the highest average unit price for April-December 2010 of £128 was nearly three times the lowest obtained price of £46. A wide range in prices for Knee Implants was also observed, with the highest price paid of £936 being over 70% higher than the lowest price obtained.

TABLE 1: LIST OF PRODUCTS FOR THE STUDY

	Supplier	*Part number*	*Unit of measure*	*Description*
1	Arizant UK (Bair Hugger Brand name)	31000	Box of 10	Blanket patient warming for use with hot air blower – Paediatric (Patient Warming System) – NPC – VCB016
2	Arizant UK (Bair Hugger Brand name)	30000	Box of 10	Blanket patient warming for use with hot air blower – Adult (Patient Warming System) – NPC -VCB007
3	Becton Dickinson	440474	384 Tests	BD Probetec ET CT/AC Reagent Pack 384 tests (For Chlamydia)
4	Boston Scientific	1009527-18B	Each	Promus Stent 2.5 x 18mm
5	CME MCKinley UK Ltd	100-100sm	Each	McKinley T34 syringe pumps- 100-100SM (Ambulatory syringe pump)
6	Depuy	960003	Each	FJK3601 960003 PFC sigma cr non-porous femoral left size 3 (Knee implant component)
7	Johnson & Johnson Medical Ltd	ACE36E	Box of 6	Harmonic Laparoscopic Curved Shears – NPC – FGP966
8	Kodak	1811884	Box	Film: Mammography, Kodak Min-R 2000, 180mm x 240mm
9	Marshall Products	300100D	Box of 10	300100D Disposable Magills Adult Forceps – NPC FSM1179
10	Smith & Nephew	7208678	Each	Passing Pin Drill Tip 2.4mm x 38cm Sterile for Endobutton Indicator
11	Stryker	400800000	Box of 36	0400800000 Turbo 4 Hood lge/X-lge Box of 36 B\4\C\1964 (Single-use surgical hood)

The lowest variation was for Kodak mammography film, McKinley syringe pumps and Smith & Nephew pin drill tips, where the highest price paid was within 15% of the lowest price paid by trusts.

VARIATION IN PRICES FOR HIGH AND LOW COST ITEMS

Five of the products had average prices between £20 to £70 (low-cost products), and five products had average prices in excess of £700 (high-cost products)[2].

Figure 1 shows that similar variation levels in prices were observed for both high cost and low cost items, indicating that large price variations are not restricted to lower cost items where price variation might be less important. Reducing avoidable variation in procurement prices for these higher cost products will result in substantial savings for trusts.

TABLE 2: VARIATION IN PRICES PAID BY TRUSTS

	Mean (£)	*Minimum (£)*	*Maximum (£)*	*Maximum / Minimum ratio*	*% difference between minimum and mean*	*Number of trusts providing data for this product*
Kodak: Film	70	68	73	1.08	-3%	6
CME MCKinley UK Ltd: Pump	915	875	955	1.09	-4%	2
Smith & Nephew: Pin Drill Tip	39	36	40	1.12	-9%	15
J & J Medical Ltd: Shears	2,652	2,318	3,059	1.32	-13%	20
Becton Dickinson: Reagent pack	1,020	908	1,218	1.34	-11%	5
Arizant UK : Bair Hugger Paediatric	52	46	62	1.36	-13%	8
Marshall Products: Forceps	23	20	30	1.51	-17%	7
Stryker: Surgical hood	920	648	1,054	1.63	-30%	12
Depuy: Knee implant component	717	546	936	1.71	-24%	14
Arizant UK : Bair Hugger Adult	62	46	128	2.82	-27%	13

Notes:

- Larger maximum/minimum ratios indicate greater variation in prices
- Unweighted means have been used
- Data on stents have not been included in the table above or in further analyses, as only one trust reported purchases of this specified product
- Two trusts sourced individual items rather than boxes of 10 for Bair Hugger (Adult) products; these data were pro-rated to estimate the price of a pack of 10 items for this product

2 Categorising products based on total expenditure (price x volume) produces similar groups

RELATIONSHIP BETWEEN PRICES AND VOLUMES

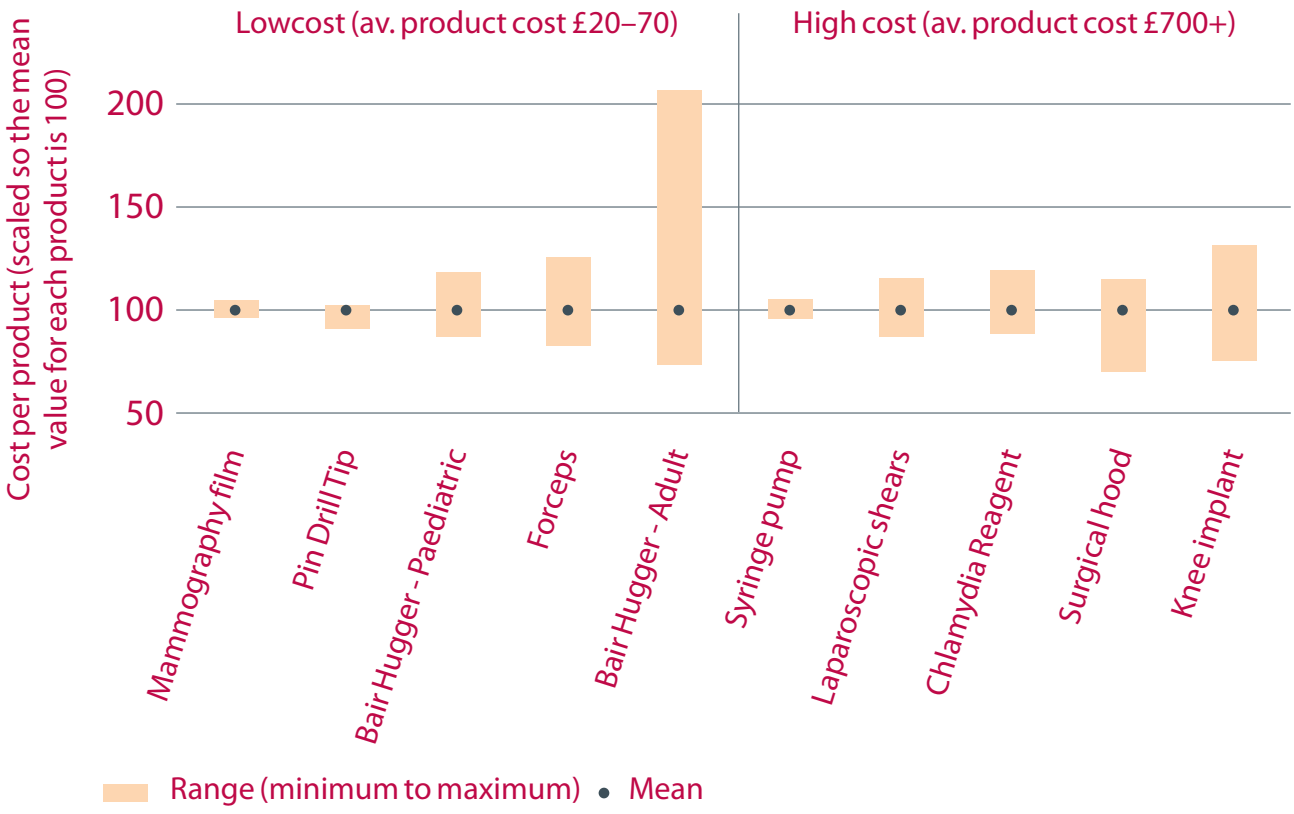
It might be expected that trusts purchasing significantly higher volumes of products would report lower unit costs for these products. But analysis of the total volume purchased and the average price paid showed that there was no clear correlation between these variables for most of the products in this project.

Figure 2 shows the relationship between the price paid and volume purchased for J&J's laparoscopic shears. Although it does appear that better prices are achieved when larger volumes are purchased, some trusts are able to negotiate the best prices for relatively small volumes.

A similar graph for Smith & Nephew's passing pin drill tip (Figure 3) is an example of the remaining products where there was no clear correlation between price and volume.

Although the volume purchased may influence the price obtained, this is only one of several factors affecting price. Trusts participating in the workshop sessions suggested that the complexity of contracts with suppliers could mask the impact of purchase volume on the cost of a single product, for example contracts are often negotiated for entire product ranges rather than individual products, and discounts may be triggered only when certain purchase volume thresholds are reached regionally.

FIGURE 1: VARIATION IN PRICES PAID FOR LOW AND HIGH COST ITEMS



Notes:

• Mean, minimum and maximum prices have been scaled so that information can be presented in comparable terms for products that have substantially different unit costs.

FIGURE 2: RELATIONSHIP BETWEEN VOLUME AND PRICE FOR LAPAROSCOPIC SHEARS

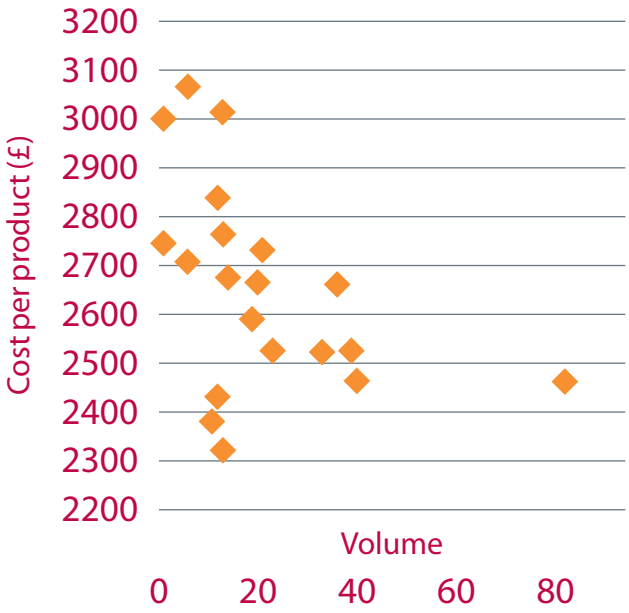
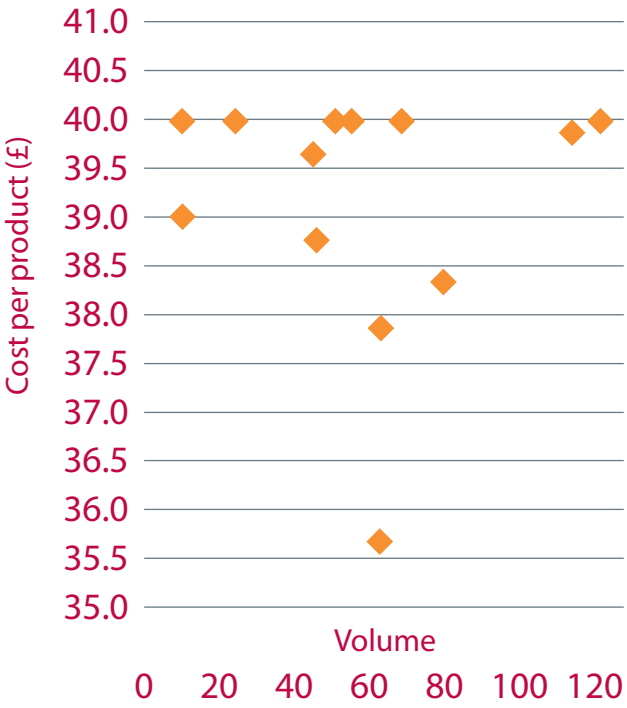


FIGURE 3: RELATIONSHIP BETWEEN VOLUME AND PRICE FOR PASSING PIN DRILL TIP



IMPACT OF TRUST PROCUREMENT PRACTICES ON PRICES PAID

General information was also collected about trust procurement practices. The questions were developed from previous work conducted to develop a procurement diagnostic tool "Procurement matters – a best practice procurement diagnostic".

Overall, most trusts reported similar practices for procurement, with the type of corporate level engagement[3] being the most variable element. There was no significant relationship observed between trust-wide practices and the price variation seen for the products in this study.

15 (or 75%) of the 20 participating trusts stated that they were part of a collaborative procurement group (19 of the 20 trusts specified that they used NHSSC to source clinical products).Of these 15 trusts, three specified that they sourced 20–49%of all clinical products through these collaborative groups, with the remaining 12 trusts sourcing less than 20%of products through such groups4. For the 11 products in this study, no relationship was found between participation in collaborative procurement groups and the average prices paid.

3 The questions asked on Corporate-Level Engagement were:
- 'Is there procurement representation on the board and are procurement issues and risks given board time monthly?',
- 'Are procurement objectives clearly linked to overall strategy and vision of the trust?'
- 'Are critical product and supplier risks managed through your corporate risk register?'

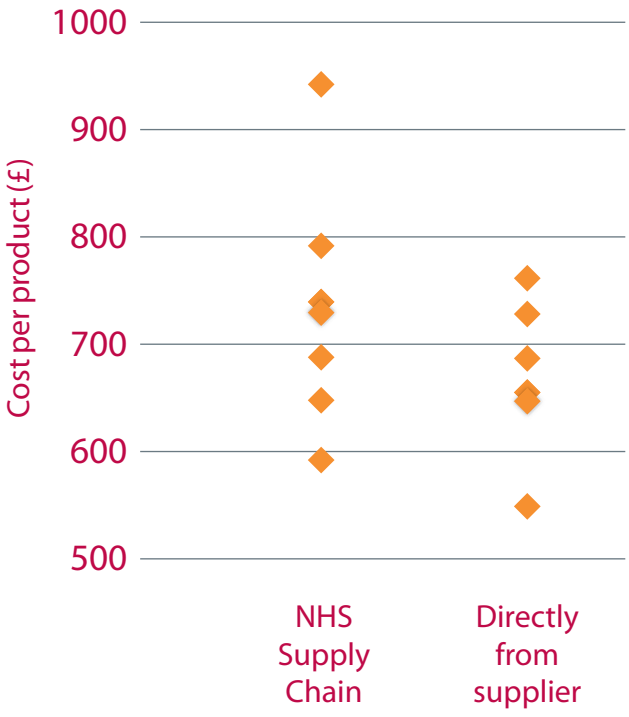
4 These figures are reported for all clinical products, rather than for the 11 products investigated in this study

The relationship between the supply source (NHSSC or direct from supplier) and the average price paid was assessed for products where enough trusts supplied data for comparison. Figure 4 shows that both the average price and the variation in price for the Depuy knee implant were greater for trusts that sourced the product through NHSSC, compared to trusts that had direct contracts with suppliers.

During a workshop session, participating trusts highlighted three possible reasons for the variation in prices obtained through NHSSC compared to the prices obtained directly from suppliers:

- Contracts with suppliers are complex and often cover expanded product ranges rather than individual products. These contracts will be influenced by the commercial expertise and strategic negotiation skills of procurement staff. The effect of these contracts could not be quantified.

FIGURE 4: RELATIONSHIP BETWEEN SUPPLY SOURCE AND AVERAGE PRICE PAID FOR DEPUY KNEE IMPLANTS



Data for one trust has not been reported as the supply source was not specified for this product.

- Trusts suggested that there will be some variation in the ability to exclude all the added value services (such as e-ordering, direct ward delivery, and inventory management) from the prices paid for products purchased through NHSSC. There was also discussion at the workshop about the balance between the bottom-line price paid for products and the value of these added services received from NHSSC. Trusts were divided on this issue.

- It was noted that for some trusts, a reluctance to commit to purchasing high volumes of products through Supply Chain would restrict their ability to obtain larger discounts.

Exploration of these issues was outside the scope of this pilot study, but could be explored in future work.

OUTCOMES FROM THE PROJECT

This study provided a comparable and concrete comparison of the prices trusts pay for their clinical products. Clear specifications of the products and costs that should be included in the study provided a solid basis for obtaining consistent information from trusts, and this information was then shared to provide the flow of information which is necessary for improving efficiency in procurement practices and delivering the savings trusts need to achieve. Discussions with participating trusts have indicated that future work would be useful for assessing the relationship between complex supplier contracts, value added services and prices.

The potential benefits of partnerships are not being fully exploited due to a lack of information-sharing and the competitive advantages this would provide. The benchmarking exercise and workshop enabled trusts to share data and discuss the challenges faced by trusts. Through the workshops, trusts were able to discuss the issues raised by the benchmarking exercise. This was a significant step in promoting transparency between trusts nationwide, which participants felt should be developed further following the momentum created by the project.

Workshop discussions between participants also enabled the sharing and discussion of areas of good practice to provide ideas for future development. Trusts identified the potential benefits of improvements in their procurement practices and skill mix, and shared ideas about how to use technology, such as electronic auctions, to expedite the procurement process. One trust had also raised the profile of procurement by setting up a board level standing committee to oversee procurement strategy and award contracts.

Methods for promoting clinical engagement in procurement within trusts were also a key topic of discussion. Trusts felt that promoting communication between clinical and procurement departments would lead to a better balance between clinical needs, clinical good practice and the efficient use of resources.

CONCLUSION

This benchmarking exercise has demonstrated that price variation is multi-factorial and is influenced not only by the volume purchased but also by the procurement skills of staff, and the strategic procurement priorities of trusts. Clinical engagement was identified during workshop sessions as a key factor in making sound procurement decisions.

Leadership and commitment at trust level are needed to raise the profile of procurement and deliver savings. Procurement departments need to become more strategic to improve their efficiency. Further training of staff and recruitment of commercial expertise were cited as being key targets for some trusts to increase the capability and capacity of procurement staff.

This was a useful first step, not only in obtaining price comparison data, but also in promoting discussions between peers about the challenges facing trusts and how sharing innovation and best practice can drive improvements and achieve savings in procurement.

DEPARTMENT OF HEALTH'S MESSAGE

The objective of this initiative was to demonstrate that NHS providers can benefit from sharing pricing information. However, these savings can only be achieved when this information is acted upon so plans should be developed locally to consider how these gaps in pricing should be addressed.

Whilst this project has been a managed process, NHS organisations can undertake benchmarking as formally or informally as they wish and should use this report to initiate discussions with colleagues on how pricing transparency can be developed in their trust.

The Department of Health considers transparency to be at the heart of the QIPP programme for procurement and is exploring ways of working with the FTN to develop and launch a programme which builds on this work in early 2012 that will provide a route for trusts to share procurement information.

THE FOUNDATION TRUST NETWORK

The Foundation Trust Network (FTN) was established to provide a distinct voice for NHS foundation trusts. We aim to improve the system for the public, patients and staff by raising the profile of the issues facing existing and aspirant foundation trusts and strengthening the influence of FTN members.

The FTN runs a series of benchmarking projects on different topics. For more information, visit www.nhsconfed.org/FTNBenchmarking or contact Sivakumar Anandaciva, Benchmarking Manager, at Sivakumar.Anandaciva@foundationtrustnetwork.org