Department of Health

The procurement of consumables by NHS acute and Foundation trusts
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Department of Health

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Amyas Morse
Comptroller and Auditor General

National Audit Office
31 January 2011
The procurement of medical and other supplies (‘consumables’) by NHS hospitals is essential to the quality of patient care and successful treatment outcomes.
Summary

1. The procurement of medical and other supplies ('consumables') by NHS hospitals is essential to the quality of patient care and successful treatment outcomes. At a time when the NHS is required to deliver £15-20 billion of annual savings by 2014-15, it is a key area of expenditure for review, both by trusts themselves and at regional and national levels, to ensure that better value for money can be secured for the taxpayer.

2. Government policy is that increasingly, hospital trusts have the freedom to manage their operations with minimal intervention or direction from central government. The government expects that this approach will encourage innovation and improvements in the quality and efficiency of services. Under this model, the Department of Health provides a framework and incentives for trusts to improve efficiency, but does not mandate particular actions.

3. As part of this model of devolved responsibility, hospital trusts in England have complete freedom to decide what consumables they buy and how they go about doing so. Trusts can make use of a network of regional collaborative procurement hubs, and a national supplies and distribution organisation, NHS Supply Chain, but there is no requirement for them to do so, and they are free also to buy directly from suppliers. Most trusts use a combination of all three arrangements.

4. The local control of procurement decisions and budgets in the NHS contrasts with the direction that is being taken for central government procurement. As part of the Efficiency and Reform Group work being carried out by the Cabinet Office at the time of writing, plans to centralise commodity procurement across central departments are being developed that are expected to deliver annual savings and cost reductions of £500 million. In October 2010 Sir Philip Green's efficiency review of central government departments' spending found large inefficiencies in procurement. However, this approach does not apply to the NHS which operates as a discrete sector, increasingly driven by a regulated market approach, in which the government does not control providers such as hospital trusts. Central government, by contrast, operates as a single body of departments where consistent and collaborative procurement arrangements can be pursued.

Key findings

Information on procurement

5. There is limited data on what is purchased by individual trusts, and there are no practical ways of examining the variation in prices being paid by different trusts, across England, for the same commodities. This means that trusts cannot easily identify how the prices they are paying compare with those paid by their peers, and, more importantly, whether better prices might be available if they were to engage with the market more effectively.
Trusts’ procurement behaviour

6  The majority of hospital trusts are outside the Department of Health’s direct control because they have Foundation Trust status and the remainder are expected to achieve this status in coming years. There is therefore no mechanism to secure commitment by 165 separate hospital trusts to purchase a single item or class of supplies, much less the hundreds of thousands of separate consumable products which the NHS uses. Many trusts take part in collaborative purchasing arrangements to some extent, but nevertheless, trusts are often paying more than they need to, for basic supplies.

7  NHS hospital trusts pay widely varying prices for the same items. Our analysis of spending data found around 66,000 products, where data permitted a like-for-like comparison, which showed some variation in the price trusts paid for them. The average variation between the highest and lowest unit price paid was around 10 per cent. For 5,201 products, the variation was greater than 50 per cent. We estimate that £150 million or an average of £900,000 per trust could be saved if trusts had bought the same volume and type of products, but paid the lowest available price at the point of purchase.

8  Much hospital purchasing is administered in multiple, small purchase orders, which means unnecessary administrative costs for trusts. Our data shows that NHS trusts are carrying out a large number of transactions in key categories; the 61 trusts in our dataset issued more than 1,000 orders each per year for A4 paper alone. Taking just four high volume products, around £7 million in administration costs could be saved on purchase order costs, if the number of orders were reduced to the level achieved by the best 25 per cent of trusts. Reducing the number of purchase orders can also result in better unit prices, since consolidated purchases allow volume discounts to be secured, although additional stock holding should be avoided. For four key product categories, we estimated that consolidating purchases on a weekly basis could save the 61 trusts in our sample up to a total of £631,000. Large numbers of small volume transactions may indicate poor inventory management within trusts. Sophisticated ‘just in time’ supply management techniques can also involve multiple small transactions, but there is little evidence to indicate that these are widely operated in the NHS.

9  Some hospital trusts buy a much wider range of key commodity products than others. This lack of product standardisation reduces value for money. We found that the 61 trusts in our dataset bought 21 different types of A4 paper, 652 different types of surgical and examination glove, 1,751 different cannulas and 260 different administration sets. The range of products varied widely from trust to trust; for example, one trust bought 13 different types of glove while another purchased 177 types. There are examples of local efforts to standardise which point to the wider potential across the NHS; for example, in 2010 Doncaster & Bassetlaw Hospitals NHS Foundation Trust, formed from a merger of three formerly separate trusts, standardised its nurses’ uniforms, reducing costs for 23,000 garments a year by more than 50 per cent, from £300,000 to £148,000 annually. Standardising product choices will not necessarily mean choosing the cheapest product available; clinical judgments and the overall cost-effectiveness of items must be part of the decision.
Overall scope for savings

10 We estimate that if hospital trusts were to amalgamate small, ad-hoc orders into larger, less frequent ones, rationalise and standardise product choices and strike committed volume deals across multiple trusts, they could make overall savings of at least £500 million, around 10 per cent of the total NHS consumables expenditure of £4.6 billion. This could be achieved through a combination of amalgamating small ad-hoc orders into larger, less frequent ones; rationalising and standardising product choices, and striking ‘committed volume’ deals across multiple trusts. The public sector procurement agency Buying Solutions has estimated, on the basis of discussions with suppliers, that for some types of office supplies such as IT hardware and paper, committed volume arrangements combined with standardised product specifications could produce discounts of between 10-30 per cent for central government departments. If similar discounts were available for the range of products in the scope of this report, accounting for £4.6 billion in expenditure, using a conservative estimate of 10 per cent, savings of around £500 million could be made.

11 There is potential for much larger savings of up to 30 per cent in some categories. Evidence from specific initiatives indicates that where trusts and procurement hubs come together to identify a common requirement around specific products, whether they are straightforward such as nurses’ uniforms, or more specialist items such as cardiac or orthopaedic devices, they can secure significant savings. For example, the HPC Collaborative Procurement Hub estimates that discounts of 10-30 per cent are possible for orthopaedic products and 10-20 per cent for cardiology devices, through trusts joining together and engaging with the market more effectively.

Collaborative Procurement Hubs and NHS Supply Chain

12 The limited evidence available suggests that trusts, Hubs and NHS Supply Chain are frequently establishing new contracts and framework arrangements which overlap and duplicate each other, incurring unnecessary administrative costs. Our sample of contract notices published in the Official Journal of the European Union during 2009-10 showed 378 separate notices were issued by trusts, Hubs and NHS Supply Chain for ‘medical consumables’ in the financial year 2009-10; we estimate that these notices cost the NHS between £14 million and £84 million to administer, depending on their scale and complexity.

13 The former NHS Purchasing and Supply Agency recorded that the Hubs delivered savings of £170 million to the NHS between 2004-05 and 2007-08, 63 per cent of their target of £270 million for this period. We came across examples where Hubs had generated significant savings for members in certain categories of procurement. However, there is no national performance framework for Hubs which would enable comparisons to be drawn between them or an assessment of their potential optimal performance to be made.
NHS Supply Chain has great potential as an efficient source of supplies to NHS hospitals, but trusts’ use of the service has been below expectations. In its contract year ending September 2010, NHS Supply Chain’s turnover was £1.2 billion, 70 per cent of the expected level of £1.7 billion. Profit was £18 million, 69 per cent of the £26 million forecast for this year in the ten-year contract signed in 2006. The cumulative savings which NHS Supply Chain delivers for the NHS, meanwhile, were above target up to 2009 but on current activity levels are projected to reach between £0.8-1 billion against a published target of £1 billion, by the end of the ten-year contract in 2016.

The Department’s role

The Department has supported the development of procurement services which trusts can use, particularly NHS Supply Chain and the Collaborative Procurement Hubs. Under the model of local management, however, procurement is the responsibility of individual trusts and collaborative procurement is voluntary, which means that significant economies of scale are being lost across the NHS. In our view suppliers have benefited from the lack of price transparency and weak price negotiation which is permitted by the fragmented system. Suppliers also incur extra costs, such as the larger sales forces needed to engage with a large number of purchasers, and these costs will be ultimately be passed on to trusts in the prices charged.

The Department is introducing a number of procurement improvement projects in which trusts will be able to participate if they wish. The Department’s Quality, Innovation, Productivity and Prevention (QIPP) programme on procurement, set up in November 2009, aims to save £20 million across all NHS procurement, not just consumables, in the financial year 2010-11 and a total of £1.2 billion by 2014-15. More recently, the Department has developed a draft procurement strategy for the NHS, which aims to ‘offer best-in-class performance’ to trusts. The strategy aims to:

- standardise product bar-coding across the NHS, under the GS1 system, to make comparisons of the prices paid by trusts simpler and improve patient safety;
- make better use of the services which Buying Solutions provides, such as electronic auctions for common commodities;
- carry out projects with individual trusts to improve the way they buy and manage consumables;
- work with NHS Supply Chain on measures such as rationalising product ranges and sourcing cheaper ‘own brand’ goods direct from manufacturers; and
- introduce better IT systems to allow real-time pricing of goods purchased by the NHS.
Conclusion on value for money

17 A combination of inadequate information and fragmented purchasing means that NHS hospitals’ procurement of consumables is poor value for money. We estimate at least 10 per cent or around £500 million of £4.6 billion total NHS consumables expenditure could be saved, and potentially much more for some products. For example, recent work by a procurement Hub has indicated that savings of 10-30 per cent may be possible in areas such as cardiac and orthopaedic products.

18 Under the terms of the NHS Act 2006, an increasing number of hospitals have secured Foundation Trust status, which gives them substantial independence from the Department. That process will continue with the intention that every hospital trust will become a Foundation Trust by 2014.

19 With no central control over Foundation Trusts, the Department cannot mandate more efficient procurement practices. Responsibility to demonstrate value for money in procurement falls upon the management of individual trusts. Given the scale of the potential savings which the NHS is currently failing to capture, we believe it is important to find effective ways to hold trusts directly to account to Parliament for their procurement practices.

20 More immediately, there are a number of steps that the Department should take to encourage trusts to improve their procurement, including securing the considerable benefits which follow from information sharing and collaboration.

Recommendations

21 We believe that in the current climate of strained public spending, there is a new appetite among trust chief executives for improving procurement to secure savings. We will revisit procurement spend by trusts in around two years’ time to see what progress has been made.

Recommendations for the Department:

a With no direct control over Foundation Trusts, the Department cannot require them to collaborate in ways which would secure better value in procurement. The Department should, however, take forward and publish its procurement strategy for the NHS, currently in draft, to include specific, time-bound commitments and performance measures under the three general themes (product bar-coding, use of Buying Solutions and work with NHS Supply Chain) of its strategy.

b There is a need for much greater transparency on prices being paid to suppliers by individual trusts. Price comparisons within and across trusts are difficult because of the lack of a standard coding system for products purchased. As proposed in its strategy, the Department should require the NHS to adopt standard product bar-coding, to improve procurement data and enable price comparisons.
NHS Supply Chain is in danger of not delivering the value expected for the NHS. The Department should work with NHS Supply Chain to develop services which will encourage more effective usage by trusts, such as running more electronic auctions in which suppliers bid to supply multiple trusts’ requirements. NHS Supply Chain represents a means by which trusts’ aggregated requirements can be articulated to the supplier market and this needs to be much more frequently used.

Recommendation for Collaborative Procurement Hubs:

There is no national performance benchmarking of Hubs. Hubs should work together to establish common measurements of their performance, which would provide clear measures of the results they are delivering for members and improve trusts’ ability to choose the Hub or Hubs with which they would like to work.

Recommendations for trusts:

Few trusts know what they are spending on specific supplies and whether they are securing a good price. Trust chief executives need to consider procurement as a strategic priority, in the new NHS environment of limited budgets. Each trust should review its current consumables purchasing strategy and prices paid, identifying in particular any weaknesses in information, and the scope for collaboration and volume commitment deals. It should consider how key stakeholders such as clinicians can be involved more effectively in the procurement strategy.

Trusts’ in-house procurement capabilities vary widely and more collaboration is likely to reduce the need for in-house specialists. Each trust should review its procurement capability and consider options for more effective operation, including whether merging the procurement function with those of other trusts, or outsourcing it, would be appropriate.

Individual trusts acting alone can only make limited improvements in their procurement of consumables. Much depends on collaboration with their peers to achieve greater purchasing power, and use of the available procurement infrastructure. Each trust’s procurement strategy should include:

- an analysis of its current purchasing practices, including its use of direct purchasing, NHS Supply Chain and Collaborative Procurement Hubs;
- an assessment of the trust’s current use of e-commerce systems and the scope that e-commerce could offer for improved information on procurement, to support product standardisation and compliance with agreed contracts;
- proposals for product standardisation in key categories, with the intention of reducing the range of products purchased and suppliers used;
- proposals to improve control over purchasing and ensure that purchases are made using agreed contracts, rather than as ‘spot’ transactions; and
- an assessment of stock control and its effect on procurement costs, for example the number of small, short-notice orders being placed and whether these tend to be at higher prices.
Part One

Introduction

1.1 This report examines the procurement of medical supplies and other types of consumable product by NHS hospitals in England. The 165 hospital trusts spend approximately £4.6 billion on consumables each year.

1.2 There is no generally-accepted definition of ‘consumable’ in the NHS; for the purposes of this report we have chosen to focus our work on classes of goods that have to be bought regularly because they are routinely consumed or have a limited life, e.g. dressings, beverages or staff clothing. We have also included medical and surgical devices which are implanted into patients, such as heart pacemakers and replacement joints. More details of the categories of purchase included in our work are given in the Methodology paper accompanying this report.

1.3 Consumables are supplied to the NHS by thousands of supplier companies, ranging from large multinational corporations to smaller specialist firms. There were over 17,000 suppliers of consumables to the 61 trusts in our dataset.

1.4 Spending on consumables is a major part of trusts’ expenditure, typically accounting for 25 per cent of an average trust’s non-pay expenditure and 10 per cent of total expenditure including pay. Spending on consumable procurement per trust ranged from £7 million to £103 million\(^1\) in 2009-10, with an average spend of £28 million.

1.5 Hospital trusts can purchase consumables in various ways (Figure 1), dealing direct with suppliers, through independent distributors, through the national supplies organisation NHS Supply Chain or via the nine Collaborative Procurement Hubs – regional organisations which are intended to improve NHS bodies’ procurement capabilities and save trusts money through aggregating their spending. In addition, some trusts have set up their own collaborative purchasing arrangements, either with neighbouring trusts or covering particular types of supplies. Purchasing decisions are controlled by individual trusts; there is no national or regional control of trusts’ product choices or the prices they pay. This approach is in line with the government’s overall strategy to give NHS organisations increasing freedom to operate independently of central control, while their quality of care and financial management are overseen by regulatory bodies.

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\(^1\) This range excludes Foundation Trusts and is based on NHS acute trusts only, since data for individual Foundation Trusts was not available.
1.6 Framework agreements list a number of suppliers in key categories, which may include agreed prices which users of NHS Supply Chain or Hub members can access. Such agreements do not include any commitment from trusts to purchase a particular volume of product; as a consequence, we have been told, the prices that suppliers agree to incorporate into framework agreements are frequently their ‘list’ or highest price, and are very rarely their ‘best’ prices. Trusts can run mini competitions between suppliers listed on framework agreements.

NOTE
1 The NHS’ use of frameworks run by the government agency Buying Solutions, to purchase products within the scope of our study, is minimal. Buying Solutions typically provides frameworks for areas outside the scope of our study, such as energy, fleet vehicles and information technology.

Source: National Audit Office
NHS procurement has been the subject of a number of external reviews in recent years, most recently the Procurement Capability Review of the Department of Health and the NHS, carried out by the Office of Government Commerce in November 2008. This found a number of weaknesses, including:

- confusion, duplication and some ‘dysfunctional’ behaviour caused by the lack of an understood and agreed strategy and operating model for commercial activities across the NHS;

- dissatisfaction with the operation of NHS Supply Chain, expressed by trusts, Collaborative Procurement Hubs, suppliers and NHS Supply Chain itself. (NHS Supply Chain’s activity levels have been lower than expected and this is discussed later in this report); and

- an ‘unsustainable’ funding model for the Collaborative Procurement Hubs that focuses on ‘short term price reduction rather than improving real value’, and a lack of clear direction for them.

The Department has made a number of changes to procurement in the NHS during 2009 and 2010, as part of its wider commercial strategy for the NHS. This strategy is intended to support the market-based model of patient choice and competition between providers, which has determined the reshaping of the NHS in recent years. The key changes are:

- closure of the NHS Purchasing and Supply Agency in December 2009. The framework agreements which the Agency used to operate in areas such as energy procurement are now operated by the government-wide procurement agency Buying Solutions (see Figure 1). While the Department has taken on the Agency’s previous responsibilities for procurement policy and for pharmaceuticals procurement, the Department does not plan to reinstate the advisory role of the Agency;

- the introduction in 2009 of Commercial Support Units, regional organisations supported by £20 million start-up funding from the Department, which are intended to support local commissioners of health services. In some cases the corresponding Collaborative Procurement Hub is expected to merge with the Commercial Support Unit. At the time of writing this process was still in train; and

- establishment of the National Procurement Council, a body including representation from the Department, the NHS and industry to ‘develop and deliver a strategic vision of a coherent procurement landscape in health and share good procurement practice’.
1.9 The Department has a number of projects in train aimed at improving NHS procurement through influence and encouragement for trusts; under local management of the NHS hospital trusts are independent and the Department does not have the power to mandate change. The Department’s Quality, Innovation, Productivity and Prevention (QIPP) programme on procurement, set up in November 2009, aims to save £20 million across all NHS procurement, not just consumables, in the financial year 2010-11 and a total of £1.2 billion by 2014-15. More recently, the Department has developed a draft procurement strategy for the NHS, which aims to ‘offer best-in-class performance’ to trusts. The strategy aims to:

- standardise product bar-coding across the NHS, under the GS1 system, to make comparisons of the prices paid by trusts simpler and improve patient safety;
- make better use of the services which Buying Solutions provides, such as electronic auctions for common commodities;
- carry out projects with individual trusts to improve the way they buy and manage consumables;
- work with NHS Supply Chain on measures such as rationalising product ranges and sourcing cheaper ‘own brand’ goods direct from manufacturers; and
- introduce better IT systems to allow real-time pricing of goods purchased by the NHS.
Part Two

Trusts’ procurement capabilities and use of regional and national structures

2.1 This Part of the report examines trusts’ in-house procurement capabilities, their use of regional collaborative arrangements including the Collaborative Procurement Hubs, and their use of NHS Supply Chain.

Trusts’ procurement capabilities

2.2 Since trusts’ procurement of consumables is controlled by each trust independently, value for money is primarily dependent on ‘in-house’ expertise and systems, which each trust develops for itself. There are no national requirements for trusts to have particular procurement processes or systems. As with all public bodies, however, trusts are required to comply with European Union regulations on public procurement, and they are also expected to follow HM Treasury guidance for public bodies.

2.3 Our census of hospital trusts, which had a 97 per cent response rate, found that most trusts treat procurement as an important issue. Nearly all trusts – 94 per cent (151 of 160) – reported that they had a director or senior manager at board level with responsibility for procurement, and 95 per cent (152 of 160) of trusts said they had set a target for efficiency savings through procurement in the financial year 2010-11. These targets ranged from £67,000 to £13 million in savings, with an average of £1.6 million. Some 68 per cent (109 of 160) trusts said they had a procurement policy or strategy that had been agreed at board level and 62 per cent (99 of 160) said they used performance indicators to assess their procurement effectiveness.

2.4 The majority of trusts employ in-house procurement teams; larger trusts generally have larger procurement teams. We found that the largest procurement team had 45 staff and the average was between 12 and 13 per trust. Some trusts have combined their procurement staff with those of neighbouring trusts.

2.5 Procurement staff’s skill levels, as measured by professional qualifications, vary between trusts. Trusts responding to our survey who had specialist procurement teams reported a range from all to none of their specialist procurement staff having full or partial procurement qualifications such as those issued by the Chartered Institute of Purchasing and Supply (CIPS). On average, trusts employ procurement teams in which 25 per cent of staff have a specialist procurement qualification.
2.6 There are some indications from our work that trust procurement staff have not had access to up-to-date guidance for some aspects of their work, since the closure of the NHS Purchasing and Supply Agency in 2009:

- Standard terms and conditions for inclusion in supplier contracts have not been available to trusts as a national resource following the Agency’s closure. The Department has now issued revised guidance on this.

- Guidance for trusts on tendering and contracting processes, known as the Trust Operating Procedures Purchasing Manual, was provided by the Agency but is not being maintained or updated, in order to achieve savings in administration costs. It is still available to trusts on the Buying Solutions website, however.

- Individual trusts and Hubs have been developing their own guidance on legal aspects of procurement and on the European Union’s public procurement processes.

2.7 Trusts’ access to and use of good information to inform procurement decisions is variable. Although trusts in our survey said they were generally satisfied with the information available to them – more than 70 per cent were very or fairly satisfied with the timeliness, level of detail and accuracy of internal procurement information – our discussions with various stakeholders including Collaborative Procurement Hubs and the Department identified a number of concerns. These included:

- **Product coding** – a unique identification code for each product bought, which is included in all transaction records, is standard practice in private sector procurement of supplies and brings a range of benefits such as reducing errors and improving trusts’ ability to analyse their expenditure. Although coding systems exist in the NHS, their use is not mandated. The Department is developing plans, working with suppliers, for universal adoption of the Global Standards 1 (GS1) coding system which is already widely used for pharmaceutical products bought by the NHS.

- **Back office processes** – trusts’ ‘purchase to pay’ systems for ordering supplies and processing invoices are not standardised. Although some trusts have developed improved systems in collaboration with others (Figure 2 overleaf), this is not general practice.

- **Data sharing and analysis** – there are few examples of trusts using procurement information strategically to drive value for money in their procurement activities. The Procurement Capability Review highlights the lack of commercial procurement data available at a national level.
The procurement of consumables by NHS acute and Foundation trusts

Catalogue services

- trusts make use of catalogues, usually in electronic format, to inform staff about the range of products available to purchase from approved suppliers and the prices which have been agreed, either by direct negotiation with supplier companies or through collaborative arrangements such as Hubs. The process of producing a catalogue is frequently duplicated from trust to trust, however, and is complicated by the fact that suppliers may not provide their information to trusts in a standard format.

Stock control and materials management

- although a full assessment of trusts’ performance in managing their supplies of consumable products was outside the scope of this report, the Department’s Quality, Innovation, Productivity and Prevention programme has identified it as a key concern.

Regional support for trusts: Collaborative Procurement Hubs

2.8 As well as dealing direct with suppliers, many trusts also work with the nine Collaborative Procurement Hubs. The former NHS Purchasing and Supply Agency recorded that the Hubs delivered savings of £170 million to the NHS between 2004-05 and 2007-08, 63 per cent of the target of £270 million for this period. ‘Seed’ funding of £5.5 million was provided by the Department to support the establishment of the Hubs during 2005-07. Since then Hubs have been funded primarily by subscriptions from the NHS bodies and other public organisations which are their members; in 2009-10 their total income was £23 million, ranging from around £1.5 million to £9.3 million.

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**Figure 2**

Case example: The North East Shared System Group

Twenty seven acute and Foundation trusts, most based in the North East of England, are members of the North East Shared System Group, a consortium of NHS organisations which have combined their finance and procurement systems to provide better shared information, leading to savings from reduced prices and administration costs. The project includes the development of a common catalogue used by all trusts and a standard product classification based on NHS-eClass, and links to all contracts provided by the Collaborative Procurement Hubs and to the NHS Supply Chain catalogue.

Central Manchester University Hospitals NHS Foundation Trust said its usage of the North East Shared System Group had helped the trust to achieve average annual savings of £3 million each year since 2006.

**NOTE**
1 NHS-eClass is a classification system for products and services, which is owned by the NHS in England.

*Source: The North East Shared System Group*
2.9 Hubs’ activities are determined by their members’ priorities; to date the majority of their activities have been concerned with setting up framework agreements or a limited number of ‘committed volume’ contracts in key product categories (Figure 3). The services which Hubs provide frequently duplicate or overlap with those of NHS Supply Chain, leading to confusion for trusts and lack of value for money in their procurement efforts. In 2008, a review by Hub chief executives and NHS Supply Chain executives found that on average each Hub’s business overlapped with NHS Supply Chain by 30 per cent, but in some Hubs the overlap was as great as 70 per cent.

2.10 Not all trusts see value in Hub membership, which is voluntary. According to data supplied to us by the Hubs in summer 2010, only two of the nine Hubs, London and South East Coast, had all the acute and Foundation trusts in their regions as members. For the remaining seven Hubs, more than half of the trusts in each region were members. Some Hubs had members outside their region.

2.11 Trusts in some parts of the country have opted to set up alternative collaborative arrangements rather than subscribe to a Hub. In the Bristol region, for example, the Bristol and Weston NHS Purchasing Consortium involves three hospital trusts which have combined their in-house procurement functions into one. Trusts may also make use of non-NHS collaborative arrangements where these exist, such as those set up by local government organisations.

Figure 3
Example of a Collaborative Procurement Hub project: cardiac stents

East of England NHS Collaborative Procurement Hub recorded savings of £1.7 million in 2009-10 (and £1.1 million in 2008-09) from aggregating indicative demand for cardiac stents across eight trusts in the region. This represented savings of 22 per cent and 33 per cent, compared to what would have been spent using the previous pricing structure.

The savings were achieved by tendering for a regional framework, in conjunction with the local cardiac network. The framework enabled each trust to individually commit indicative volumes then collectively benefit from the regional aggregation. The savings were assisted by a change in national guidance from the National Institute for Clinical Excellence regarding the usage of drug eluting stents, resulting in manufacturers being very willing to discount for aggregated volumes.

This project enabled greater standardisation of stents across the region through supplier rationalisation.

NOTES
1 A cardiac stent is a tube inserted into a blood vessel to keep it open.
2 There are local cardiac networks in most regions which bring together a wide range of staff, patients and charitable groups including clinical staff, managers, senior leaders and commissioners involved in all aspects of heart care across a defined geographical area.
3 A drug eluting stent releases drugs that prevent stented blood vessels becoming blocked.

Source: East of England NHS Collaborative Procurement Hub
2.12 The value delivered by the Hubs – usually measured in terms of the return on investment for each member, a ratio between procurement savings achieved and the fee which each member pays – is difficult to measure and the performance of different Hubs cannot be directly compared, since approaches to calculating savings vary and there is no national performance framework. Hubs report widely varying results. In the financial year 2009-10, the total savings which Hubs reported ranged from £4.3 million to £41 million.

2.13 The Hubs are currently being affected by the development of Commercial Support Units, regional NHS bodies proposed in 2009 which are intended to provide a range of commercial advice and support to NHS commissioner and provider bodies, including procurement expertise. This is as yet in its early stages, and is affecting Collaborative Procurement Hubs in a variety of different ways. Some Hubs are expected to become part of their local Commercial Support Unit, while other regions are developing alternative approaches. In the West Midlands, for example, the current Hub, Healthcare Purchasing Consortium (HPC), intends to move out of the NHS and seek private funding to provide a supplies service to trusts. In some regions NHS bodies do not support the Commercial Support Unit approach and are developing alternative arrangements, such as a ‘cluster’ arrangement in the East of England.

NHS Supply Chain

2.14 NHS Supply Chain is a national supplies and distribution organisation operated by the private distribution company DHL, under contract to the NHS Business Services Authority. The organisation operates the network of seven warehouses and the vehicle fleet formerly run by NHS Logistics, the publicly-owned organisation from which NHS Supply Chain was formed in 2006. Customers mainly purchase low value, high volume consumables from NHS Supply Chain via its catalogue. The NHS Supply Chain agreement, which was forecast in 2006 to deliver £260 million of profit to DHL over the ten-year contract period, is managed by the NHS Business Services Authority on behalf of the Department of Health.

2.15 The amount of trust purchasing carried out via NHS Supply Chain has been lower than expected when the contract was set up, resulting in NHS Supply Chain’s turnover and profit both being below forecasts (Figure 4). In the contract year ending September 2010, NHS Supply Chain’s turnover was £1.2 billion, 70 per cent of the expected level of £1.7 billion and its profit was £18 million, 69 per cent of the £26 million forecast in the contract. The cumulative savings which NHS Supply Chain delivers for the NHS, meanwhile, were above target up to 2009 but on current activity levels are projected to reach between £0.8-1 billion against a published target of £1 billion, by the end of the ten-year contract in 2016.
Figure 4
Performance of NHS Supply Chain

NHS Supply chain annual turnover figures against forecast turnover figures

NHS Supply chain annual profit figures against forecast profit figures

Source: NHS Supply Chain
2.16 Most acute trusts make use of NHS Supply Chain to some extent to purchase consumables. All 160 trusts that completed our census placed orders with NHS Supply Chain at least once a month. They were generally satisfied with its services:

- 153 of 160 trusts (96 per cent) were very or fairly satisfied with NHS Supply Chain’s convenience.
- 127 of 160 trusts (80 per cent) were very or fairly satisfied with its reliability.
- 129 of 160 trusts (81 per cent) felt using NHS Supply Chain reduced administration costs.

Customer satisfaction surveys carried out by NHS Supply Chain and NHS Business Services Authority have shown satisfaction scores of between 6.8 and 7.5 out of 10, in recent years.

2.17 Trusts believe that NHS Supply Chain’s prices are generally higher than those available through other routes, but the available data does not show this. Only 55 of 160 trusts (35 per cent) in our survey were very or fairly satisfied with the price of NHS Supply Chain’s products. However, in a sample of 4,300 individual products that trusts in our sample purchased via NHS Supply Chain and directly from the supplier, just over half, 2,206 products (51 per cent) were more expensive when purchased via NHS Supply Chain compared to the same product purchased through other routes. The remaining 49 per cent of products were the same price or cheaper from NHS Supply Chain compared to other routes. It is likely that trusts who use NHS Supply Chain regularly will also make savings in administration costs, since they will not need to ‘shop around’ with large numbers of suppliers.

2.18 There are a number of factors which influence NHS Supply Chain’s prices and whether they are lower or higher than those available elsewhere. In particular:

- its inability to strike ‘committed volume’ deals with suppliers, based on best-estimate forecasts of the volumes required, which would drive down the prices it pays and hence the selling prices NHS Supply Chain could offer to trusts. NHS Supply Chain’s business depends upon its ability to offer the widest possible choice of products and suppliers to its customers, which means that it has an incentive to include as many as possible in its catalogue, rather than negotiating aggressively with a reduced number of suppliers for large-volume deals with lower unit prices;
NHS Supply Chain’s prices may also include additional services not offered by some suppliers, such as delivery direct to the ward which has placed the order (rather than just to the goods entrance of the hospital), the cost of carrying out processes such as European Union tenders and electronic auctions, and administrative benefits such as a single invoice covering multiple transactions;

- NHS Supply Chain uses an on-line catalogue listing prices of the goods it supplies, which allows other suppliers to opportunistically undercut its prices; and

- it has been suggested to us anecdotally that some suppliers may be deliberately attempting to cut NHS Supply Chain out of the market for their products, by selling to NHS Supply Chain at high prices, which means that the prices NHS Supply Chain can offer to trusts will be higher than those available direct from the supplier.
Part Three

Spending on consumables by NHS hospital trusts

3.1 This Part of the report examines patterns of spending on consumables by NHS hospital trusts and the prices they pay. It looks at the range of products purchased in various categories, the number and size of purchases and trusts’ use of the various procurement routes open to them. It presents our analysis of price variations and our estimates of the scope for savings through improved procurement.

Data on NHS trusts’ procurement

3.2 There is no single dataset giving details of trusts’ spending, which would enable comparisons of prices paid and spending patterns across all trusts. Comparisons of purchasing patterns and prices paid can be made by extracting information from purchase orders and invoices held in trusts’ financial systems, for example where trusts are engaging in Hub-led or other collaborative purchasing projects, but such analyses are resource-intensive. Limitations to this type of analysis include differences in trusts’ systems and inconsistencies in the way product data is recorded; for example, there is no requirement on trusts to hold records of the products they buy that are coded according to the standard international classification system GS1. This can lead to inconsistent coding of purchases within trusts as well as between different trusts, making data analysis difficult.

3.3 Individual trusts only have a limited view of prices being offered by suppliers for the products they need to purchase, and cannot easily compare the prices they are paying with those paid by their peer trusts. The sources of price information available to them will usually include NHS Supply Chain, framework prices offered by their local Hub or through other collaborative arrangements, and prices available direct from individual suppliers. Some price benchmarking work has been carried out by organisations which offer back-office support and consultancy to trusts; for example, NHS Shared Business Services offers a price benchmarking service to the trusts with which it works.

3.4 We estimate that NHS acute and Foundation Trusts spent £4.6 billion on consumables in 2009-10. Purchase of medical and surgical equipment accounts for almost half of this (Figure 5).
There is considerable variation in the unit price paid by trusts for consumables

3.5 Since each NHS trust chooses how to obtain the consumables it needs – by dealing direct with suppliers, using NHS Supply Chain or working with the Collaborative Procurement Hubs – trusts often pay different prices for the same products. Even within an individual trust, the price for the same item also often varies from one purchase to another. The price paid in an individual transaction may be the ‘spot’ or ‘list’ price available ‘on the day’ (generally the highest price); a price agreed under a collaborative framework arrangement, or a (generally lower) price agreed as part of a commitment by the trust (alone or in collaboration with others) to purchase a certain volume of that product over time. Suppliers we consulted said the volume of product purchased, including discounts for ‘committed volume’ based on trusts’ forecast requirements,
was a key factor in determining the price offered, though the relationship between price and volume varied depending on the category of product. For some specialist product categories, such as orthopaedic devices (replacement hip joints, for example), the unit price of the item is significantly influenced by the trust’s preferred approach to funding the surgical equipment required to implant it, which is also provided by the product supplier. The method of placing the order can also affect the price, with electronic transactions generally offering better prices than traditional paper-based orders.

3.6 Data quality limited our analysis, but we found around 66,000 products which showed some variation in the price trusts paid for them. The average variation between the highest and lowest unit price paid was around 10 per cent. For 5,201 products the variation was greater than 50 per cent. Figure 6 shows an example of a commonly purchased diagnostic product form a large supplier which showed considerable variation in price, of more than 81 per cent from the highest to the lowest price paid. The supplier received 352 orders for the product from 38 trusts over the period of our analysis, worth a total of £267,000.

Figure 6
Variation in unit price for a commonly purchased consumable product

Unit price on purchase order (£)

NOTE
1 The data shown represents 352 orders for the same product, by 38 trusts.

Source: National Audit Office analysis
To illustrate the scale of variation we examined in detail the 100 products in our sample which had the highest number of purchase orders raised. The majority, 84, showed some difference in price paid, with the difference ranging from 0.3 per cent to over 183 per cent. Figure 7 illustrates the scale of the difference between the minimum and maximum prices paid for these products.

Some products show extreme variations between the minimum, maximum and average prices paid (Figure 7). For the 10 most commonly purchased products in our sample, two had wide price variation in which the maximum price paid was more than double the average price.

Reducing price variations could provide a significant source of savings for the NHS. We estimate that at a minimum, savings of 3.3 per cent of total expenditure on consumables, amounting to total savings of £150 million, an average of £900,000 per trust.

**Figure 7**
Difference in minimum and maximum price per item for the 100 most commonly purchased products

**Percentage price difference**

![Graph showing the difference in minimum and maximum price per item for the 100 most commonly purchased products.](image)

**NOTE**

1. The data shown is the difference between the lowest and highest price paid as a percentage of the mean price paid.

Source: National Audit Office analysis

2. This is the difference between the lowest and highest price paid expressed as a percentage of the average price.
3.10 Our estimate of the level of savings which each of the trusts in our sample could have achieved shows considerable variation between trusts (Figure 8). There does not appear to be any association between the level of potential savings and factors that might be expected to improve procurement efficiency, such as the size of the trust, whether it has achieved Foundation Trust status or the number of procurement staff.

**Figure 8**
Total annual savings identified for the 61 trusts in our sample

Trust savings identified (£m)

Source: National Audit Office analysis
Order numbers and administration costs

3.11 Our data shows that NHS trusts are carrying out a large number of individual transactions in key categories (Figure 9). A large number of products are purchased in transactions of £50 or less, i.e. less than the estimated administration cost to the NHS of processing the purchase order for each transaction (Figure 10).

Figure 9
Number of transactions for high volume products, for 61 trusts

<table>
<thead>
<tr>
<th>Product</th>
<th>Average number of purchase orders issued by each trust</th>
<th>Average number of purchase order lines per product</th>
<th>Average number of purchase order lines per product per trust per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves</td>
<td>4,501</td>
<td>56</td>
<td>1.1</td>
</tr>
<tr>
<td>Cannulas</td>
<td>4,393</td>
<td>41</td>
<td>0.8</td>
</tr>
<tr>
<td>Administration sets</td>
<td>2,696</td>
<td>114</td>
<td>2.2</td>
</tr>
<tr>
<td>Paper</td>
<td>1,062</td>
<td>290</td>
<td>5.6</td>
</tr>
</tbody>
</table>

NOTE
1 A single purchase order may contain multiple purchase order lines, i.e. orders for different products.

Source: National Audit Office analysis

Figure 10
Orders for less than £50

<table>
<thead>
<tr>
<th>Product</th>
<th>Total number of product orders for less than £50</th>
<th>Percentage of all product orders which were less than £50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannulas</td>
<td>220,300</td>
<td>83</td>
</tr>
<tr>
<td>Gloves</td>
<td>215,830</td>
<td>80</td>
</tr>
<tr>
<td>Administration sets</td>
<td>114,526</td>
<td>71</td>
</tr>
<tr>
<td>Paper</td>
<td>47,686</td>
<td>82</td>
</tr>
</tbody>
</table>

Source: National Audit Office analysis
3.12 Reducing the number of purchase orders can bring benefits in reduced prices, since suppliers offer discounts to reflect their reduced administration costs. If the multiple orders described above had been consolidated to take advantage of discounts available through NHS Supply Chain, for ordering on a yearly, monthly or weekly basis, substantial savings could have been made (Figure 11). Even if each trust consolidated their orders for these four products on a weekly basis, they would have saved £631,000 between them, whilst monthly consolidation would have saved £918,000. Consolidation could also mean committing volume over a fixed time, but still receiving regular deliveries of small quantities.

**Figure 11**
Savings available from more efficient use of the discounts offered by NHS Supply Chain on bulk purchases

![Savings Chart](image)

Source: National Audit Office analysis

3.13 Reducing the number of purchase orders would also bring reduced administration costs. We estimate that for these four product groups, if all trusts in our sample had issued the same number of purchase order lines per product as the 25 per cent of trusts with fewest purchase orders, the total number of purchase order lines would have reduced by 405,000. This reduction would achieve savings of around £7 million.

**Scope for product standardisation**

3.14 Reducing price variation in the existing pattern of transactions by trusts is only one way of delivering savings. Product standardisation is likely to produce further savings. This is a two-stage process of determining the product or products which offer the best value for money in particular areas, followed by aggregating the demand for these products and negotiating a deal with suppliers based on the aggregated volume.

3 Based on NHS Supply Chain data for 2009–10.
Our data shows that trusts are currently buying a wide range of products in key categories, indicating great scope for standardisation. The four highest volume products bought by the trusts in our sample were paper, surgical and examination gloves, cannulas (small flexible tubes used for draining fluid or introducing medication) and administration sets (equipment for administering fluids from a container into a patient’s vein, via a needle or catheter). Trusts bought 21 different types of A4 paper, 652 different types of surgical and examination gloves and 1,751 different cannulas and 260 different administration sets. Figure 12 shows the variation in the number of different product lines purchased.

![Figure 12](image)

**Figure 12**

Range of different products bought by trusts

<table>
<thead>
<tr>
<th>Product</th>
<th>Spend by trusts in sample (£m)</th>
<th>Minimum number of different products purchased</th>
<th>Maximum number of different products purchased</th>
<th>Average number of different products purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves</td>
<td>10.1</td>
<td>13</td>
<td>177</td>
<td>72</td>
</tr>
<tr>
<td>Cannulas</td>
<td>9.6</td>
<td>11</td>
<td>287</td>
<td>98</td>
</tr>
<tr>
<td>Administration sets</td>
<td>9.3</td>
<td>3</td>
<td>49</td>
<td>23</td>
</tr>
<tr>
<td>Paper (A4)</td>
<td>2.3</td>
<td>1</td>
<td>15</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: National Audit Office analysis

Product standardisation is more straightforward for some product categories than others; for medical and surgical supplies, clinicians’ preferences for particular products can be an important consideration. This means that we were not able to quantify the total savings which could arise from product standardisation across the products in our dataset, since we do not have the clinical expertise to determine which products are functionally equivalent and how product ranges could be rationalised while maintaining standards of care. We estimate that spending on A4 paper, the most straightforward of these four categories to rationalise, would yield £76,000 savings on expenditure of £2.3 million (4 per cent) if the cheapest product had been bought in all cases. We also found examples of local projects by trusts that had achieved savings through product rationalisation (Figures 13 and 14 overleaf).

---

4 This figure includes gloves bought in a range of different sizes, typically around four different sizes for each type of examination gloves and eight different sizes for surgical gloves, where precise fit is important.
It is important to note that some variation in the range of products used by individual trusts is to be expected, since some trusts specialise in treating particular conditions. In some cases also, the price of a particular product may be affected by the range of other products bought from the same supplier; for example, the price of paper may be affected if it is bought as part of a ‘basket’ of other stationery items.

**Committed volume**

3.18 Commitment to purchase a larger volume of products generally reduces the unit price of the product, as much in the case of consumables purchased by NHS trusts as in other commercial transactions. Volume discounts can be obtained by an individual trust aggregating its total spend on a product or category of products, and through collaborative arrangements by multiple trusts.

3.19 The current structure of NHS purchasing means that large committed volume contracts are comparatively rare. NHS Supply Chain purchases only a small proportion – £85 million spend in 2009-10, mainly on purchases of capital equipment and around 5 per cent of NHS Supply Chain’s total spend – of the goods it supplies on a ‘committed’ basis, since trusts can choose whether to use NHS Supply Chain. There is therefore no guarantee that it would be able to sell large volumes of purchased goods. Collaborative Procurement Hubs have been able to strike some committed volume deals (Figure 15), but these are limited. Suppliers are unsurprisingly unwilling to give estimates of the level of volume discounts which they would be prepared to offer.
The procurement of consumables by NHS acute and Foundation trusts

Part Three

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Use of existing contracts

3.20 The limited evidence available suggests that trusts, Hubs and NHS Supply Chain are frequently establishing new contracts and framework arrangements which overlap and duplicate each other, incurring unnecessary administrative costs. There is no overall ‘mapping’ of such contracts and frameworks, which means that many trusts may not be aware of an existing contract or framework which could offer a better deal. In 2009-10 trusts, Collaborative Procurement Hubs and NHS Supply Chain published 378 new contract notices for ‘medical consumables’ in the Official Journal of the European Union, as public bodies are required to do for large contracts.

Overall scope for savings from NHS procurement

3.21 The examples and analyses which we have quoted in this report, including those identified from our own analyses, indicate significant scope for savings (e.g. Figure 16 overleaf). Other major reviews of NHS procurement practices have also identified scope for significant savings, though these had wider terms of reference than this report’s focus on acute sector procurement of consumables:

- In May 2010 the consultancy firm McKinsey estimated in a report for the Department of Health, published in May 2010, that £1.1-1.9 billion of savings for the NHS could be achieved ‘over three to five years’ by improvements in NHS procurement of goods and services as a whole, including primary care as well as hospitals.

- A 2009 report by HM Treasury on collaborative procurement found that £6.1 billion annual savings in the public sector’s procurement of goods and services, on an expenditure of £175 billion, could be achieved by the end of 2013-14, through better use of collaborative purchasing.

Figure 15

Patient warming blankets: savings through aggregation and commitment discounts

Healthcare Purchasing Consortium (HPC), one of the nine Collaborative Procurement Hubs, generated savings of £0.93 million on patient warming blankets for their member trusts, based on a combination of aggregating spend and committing volume. HPC aggregated the orders of 17 trusts to deliver these savings from a total spend on warming blankets of £1.73 million. Trusts were required to forecast their requirement for one year, and as a result a commitment to order in excess of 40,001 units was agreed. This enabled the supplier to pass on discounts of up to 62 per cent off their catalogue price.

NOTE

1 Patient warming blankets circulate warmed air within a blanket system to assist in preventing hypothermia.

Source: Healthcare Purchasing Consortium
More recently, the government procurement agency Buying Solutions has suggested that discounts in the range of 10 to 30 per cent could be obtained by central government departments, for a number of products such as office supplies and IT hardware. These discounts would result from various measures including the mandatory use of central framework agreements, standardised product specifications and committed volume contracts. If applied to NHS procurement of consumables, a conservative estimate of 10 per cent of the total £4.6 billion spent would suggest more than £500 million is achievable.

There is potential for larger savings in some categories, demonstrated through initiatives by trusts and procurement hubs. For example, the HPC Hub estimates that discounts of 10-30 per cent are possible for orthopaedic products and 10-20 per cent for cardiology devices, through trusts joining together and engaging with the market more effectively. These estimates of potential discounts would, of course, need to be tested by carrying out real procurement exercises.
### Methodology

The main elements of our fieldwork took place between April and August 2010

<table>
<thead>
<tr>
<th>Method</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quantitative analysis by the consultants @UK, of the purchasing data of 61 acute trusts.</td>
<td>To compare the procurement patterns and prices paid by trusts, and to calculate potential savings.</td>
</tr>
<tr>
<td>2. Quantitative analyses of trust financial accounts 2008-09 and 2009-10 and of NHS Trust Financial Returns expenditure data 2009-10.</td>
<td>To understand the scope of expenditure on consumables by trusts. To validate the proportion of trust consumable expenditure covered by the sample of 61 acute trusts.</td>
</tr>
<tr>
<td>3. Census of all 165 acute trusts (88 Foundation Trusts and 77 NHS acute trusts). The response rate was 160 of 165 or 97 per cent of hospital trusts.</td>
<td>To gain the trusts’ perspective on consumable procurement. To build an understanding of trusts’ procurement capabilities and how trusts view collaborative procurement.</td>
</tr>
<tr>
<td>4. Structured interviews with seven key suppliers, including discussing specific example of price variance from the trust level data.</td>
<td>To understand the supplier perspective of selling to the NHS and the reasons for price variations.</td>
</tr>
<tr>
<td>5. Analysis by the consultants BIP Solutions to establish the number of contract notices published in the Official Journal of the European Union.</td>
<td>To understand the number of consumable procurement contract notices published in the Official Journal of the European Union and to allow estimation of associated costs.</td>
</tr>
<tr>
<td>6. Semi-structured interviews with key stakeholders including the Department of Health, Quality, Innovation, Productivity and Prevention stakeholders, OGC, Buying Solutions, NHS Supply Chain, NHS Business Services Authority, NHS Shared Business Services, three acute trusts, five Collaborative Procurement Hubs and two Strategic Health Authorities.</td>
<td>Qualitative analysis of themes to identify the key issues with procurement and to triangulate with quantitative data.</td>
</tr>
<tr>
<td>7. Review of key policy documents, reviews and research.</td>
<td>To develop our understanding of the procurement landscape and for triangulation with data collected from our visits, census and our quantitative analysis.</td>
</tr>
</tbody>
</table>
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