

Innovation Procurement

# Delivering Efficiency, Quality and Sustainability in Healthcare

10 Messages from the  
LCB-HEALTHCARE Pilot Projects



A guide to innovation procurement for the healthcare sector



“The LCB-HEALTHCARE pilot projects have demonstrated that by adopting innovation procurement methods customers can stimulate innovation in the supply chain and deliver better outcomes. It does however mean changing attitudes and approaches to procurement. Like any organisational change this can be challenging and takes time. These challenges were set out in ‘Creating Conditions for Innovation’, published by LCB-HEALTHCARE in 2011.

This publication is not intended to be a comprehensive guide to innovation procurement methodologies. Rather we wish to pass on the first hand experience of the LCB-HEALTHCARE Pilot Projects. In these pilots we, with our hospital partners, explored innovation procurement in practice. We hope this publication increases awareness of the benefits that hospitals and clinics could realise by adopting innovation procurement methods.”

Fergus Haradence,  
Deputy Director of Innovation Policy,  
Department for Business, Innovation and Skills

## LCB-HEALTHCARE Innovation Procurement for Low Carbon Solutions in the Healthcare Sector

Buildings account for some 40% of EU CO<sub>2</sub> emissions and the healthcare sector (due to its scale and 24/7 operation) is a major source. The LCB-HEALTHCARE project (November 2009 – October 2012) set out to test innovation procurement and carbon reduction methodologies in demonstration pilots in four countries and to create a European Network to enable the spread of best practice in innovation procurement and the adoption of low carbon solutions.

The project consortium comprised national partners from England, Netherlands, Norway and Poland and a pan-European network (the European Health Property Network). It was coordinated by the UK Department for Business, Innovation and Skills (BIS) that is leading a pioneering national programme to help the public sector better meet its policy goals through new approaches to procurement of innovative products & services.

This publication is based on the practical experience of the LCB-HEALTHCARE pilot innovation procurement and low carbon projects and on the contributions by members of the LCB-HEALTHCARE network.

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The content of this document is based on the experience of the LCB-HEALTHCARE pilot projects and our colleagues from across Europe.

# Foreword

## The healthcare sector needs innovative solutions

In a time of rapid change and escalating challenges the healthcare sector needs new solutions to deliver what is needed in a cost effective and timely way, and to make the most of investment in healthcare facilities and services. If these new goods and services are to be available and affordable, we will need to become proactive managers of our supply chains.

This means becoming more strategic in the way we plan and manage procurement activities and engage with suppliers. It also means procurement professionals, operational staff and policy leads working together to identify and address unmet needs. But to be successful these teams will need the support and backing of their senior managers and leaders. Successful innovation procurement requires leadership that demands and expects solutions; leaders that are unwilling to settle for the status quo and are willing to challenge 'business as usual'. With backing and support, as the examples in this guide show, these teams can transform thinking, deliver better outcomes and stimulate real innovation in services and products.

Experience tells us that, as with any organisational change, the first innovation procurement project is often a steep learning curve. But the pilot projects show that as new systems and ways of thinking are shared among staff and the benefits of innovation procurement become apparent, a new norm is created.

Patients and staff deserve the best that the supply chain can offer. The hope is that proactive supply chain engagement and the drive for innovation to deliver ever better solutions will become the standard for healthcare procurement.

The LCB-HEALTHCARE Team

We hope that the learning from our experience summarised in this document will help you to manage your supply chains to deliver the goods and services you need, when you need them, at a price that reflects their value.

The products and services you buy now will influence your organisation's carbon emissions, energy bills and environmental impact, in some cases, for many years to come. Yet all too often the products and services on offer are not what you need, are too expensive, unproven or seem too risky. Buyers are faced with few, often unpalatable options. This need not be the case. By adopting innovation procurement methods you can enable suppliers to provide the goods and services you need, when you need them, at a sensible price.

“All too often emerging technologies and innovative goods and services fail to make it to market, or do so only slowly, because of the uncertainty of future sales. This is a barrier to progress.

At a time of such rapid societal and environmental change, and in the face of financial pressures, the healthcare sector cannot afford such slow progress, and for good ideas to fall by the wayside.”

**Gaynor Whyles,**  
LCB-HEALTHCARE Co-ordinator  
JERA Consulting

### What do we mean by innovation?

Innovation is the process of translating technology and knowledge into new, usable products and services. The key success factor for innovation is an accurate understanding of the **unmet need** it is targeting.

## Planning for the future - the need for innovative solutions

**Unless the healthcare sector gets better at stimulating and enabling innovation in its supply chain it will simply not be equipped for the future.**

The healthcare sector faces unprecedented challenges over the coming decade. The pace and extent of these challenges means that the healthcare sector needs to be effective in bringing on board innovative solutions and buying innovative goods and services. The risk is that the healthcare sector will not be equipped to meet these challenges and that healthcare delivery will be compromised by a lack of affordable and effective products and services.

There is a pressing need to move beyond incremental improvements and deliver real step change solutions. Yet evidence from the LCB-HEALTHCARE project and other initiatives across Europe<sup>1</sup> suggest that the healthcare sector continues to be an undemanding and risk averse customer, basing decisions on lowest price rather than best value, and rarely playing an active role in the active management of its supply chains.

As a consequence, the wealth of creativity in the supply chain remains untapped for the benefit of patients. As a customer you have both the power and the ability to unleash this potential simply by changing the way you buy and becoming a customer that demands and expects solutions. This will however involve changing the way you go about planning and managing better procurement and having a better understanding of what motivates suppliers.

The healthcare sector urgently needs to find ways to motivate and engage the supply chain in delivering what is needed. The first step is for end users to be clear about what they need; not just in the immediate term; but in the future. If we don't have a clear picture about our future needs how can we expect suppliers to be able to provide the answers?

The Innovation Procurement approaches we have tested in the LCB-HEALTHCARE pilot projects are set out in the coming pages and offer some practical ideas to transform your relationship with suppliers and enable your organisation to plan and prepare for the future with greater confidence.

“Incremental improvements are simply not going to provide the healthcare systems and facilities that Europe needs to maintain, let alone improve, the level and standards of healthcare we benefit from today.”

**Jonathan Erskine,**  
Executive Director,  
European Health Property Network

“Typical purchasing in the healthcare sector tends to maintain the technological status quo and only requires (at best) gradual improvements from suppliers, rather than the step change that is needed.”

**Andrew Camina,**  
Assistant Head of Estates and Facilities,  
Nottingham University Hospitals NHS Trust, City Site

<sup>1</sup>For example: CLIRE, Healthcare Without Harm, RES Hospitals

**“Companies and investors will innovate and invest to provide cost effective solutions to meet our needs. But, only if policies and the behaviour of customers support the business case for their investment. This means changing the way you engage with suppliers and the way you plan and manage your purchasing.”**

**Dr Jonathan Frost,  
Industry Chairman,  
LCB-HEALTHCARE Steering Group**

## Buying smarter – the role of the customer in driving innovation

**Innovation begins with the individual customer asking for what they need, not what they think they can get or afford.**

The healthcare sector is a huge and influential market. Every year the European Healthcare sector spends something close to 10% of GDP on healthcare goods and services<sup>2</sup>. Although most are unaware of it, procurers in hospitals across Europe have the power to both stimulate and enable suppliers to invest and develop better, cost effective goods and services. The power of this customer demand to drive the market to supply ever better solutions remains largely untapped.

The reason for this untapped potential is simple. The lack of a credible, articulated demand for innovative solutions from customers. The vast majority of innovation happens in response to customer demand<sup>3</sup>. If customers fail to make their unmet needs and future needs clear and transparent to suppliers and continue to buy what is available 'off the shelf', there is no incentive for suppliers to innovate. In fact, it would be risky for them to do so.

### The buyer supplier paradox

The healthcare sector urgently needs new and better solutions that are either not available in the market or are available at excessive cost; because they aren't available, customers don't demand them; because there is no demand, the solutions do not receive the investment required to enter and be competitive in the market. As a result, innovative goods and services struggle to reach the market and healthcare customers have few options available to them.

There is a common 'catch-22' that hampers the commercialisation of low-carbon technologies

If there was a demand, we would invest to supply greener products

THE BUYER SUPPLIER PARADOX

If there were suitable and cost effective low-carbon alternatives available, we would buy them

courtesy of Healthcare Without Harm

### Innovation from a supplier's point of view

A critical factor for suppliers of new products is the confidence that there will be a market once the solution is proven. The amount of investment made by suppliers and by their supply chain depends on this confidence. The future customers of the new products can significantly affect investment decisions by making the future market as certain as possible (whilst retaining competition).

### Innovation from a customer's point of view

Buying innovative products is risky – they might not work, they might not be delivered on time and in any case they are unproven. But with the pace of change and scale of challenges facing the healthcare sector we will need innovative solutions to be available on the market. Increasingly we have no choice but to seek and buy innovative solutions because the old solutions don't fit anymore. If existing products and services cannot deliver what we need; if we continue to buy them we will fail. This means that the healthcare sector needs new skills and business practices to identify where innovation is needed, to stimulate suppliers to innovate, and to buy new goods and services in a way that manages risk.

<sup>2</sup> Eurostat, September 2012

<sup>3</sup> BDL 2003 The Power of Customers to Drive Innovation, Report to the European Commission, Brussels

### What do we mean by innovation procurement?

Innovation procurement is a way of buying goods and services in a way that stimulates the supply chain to invest in developing better and more innovative solutions to meet the unmet needs of an organisation.

## 10 messages from the LCB-HEALTHCARE Pilot Projects

1. Understand your unmet future needs
2. Be an ambitious customer
3. Use outcome-based specifications
4. Manage your supply chain
5. Involve users in the procurement process
6. Help suppliers to help you
7. Use minimum standards intelligently
8. It is about best value – not lowest price
9. Enable supply chain innovation
10. Use the power of healthcare spend

## Delivering Efficiency, Quality and Sustainability in Healthcare

### 10 messages from the LCB-HEALTHCARE pilot projects

The LCB-HEALTHCARE Pilot Projects have tried out innovation procurement as a means to deliver better, lower carbon and more sustainable goods and services. Here are the key messages from the pilot projects. We hope that they both inspire and offer practical help to other hospitals and those involved in designing and delivering the healthcare facilities of the future.

The LCB-HEALTHCARE Project Team set out to test innovation procurement methods in partnership with nine hospitals across Europe:

- Erasmus University Medical Centre Rotterdam (Erasmus MC), Netherlands
- Nottingham University Hospitals NHS Trust, The Rotherham NHS Foundation Trust (TRFT), Scarborough and North Tees NHS Trust, UK
- Rawicz Hospital, Poland
- Østfoldsykehuset, St. Olavs, Universitetssykehuset i Nord-Norge, Haukeland Universitetssykehus, Norway

All the projects experienced challenges and high points. But above all, they generated a wealth of insight into how innovation procurement can be put into practice in a healthcare environment in different national settings and new proponents of innovation procurement.

“The potential of innovation to solve problems, deliver step changes in quality, efficiency and environmental performance is considerable. But in pursuing our goal to maximum the benefit to patients it does mean questioning the status quo and change the way we plan and manage health care procurement.”

**David Whiteley**  
Chief Engineer, Department of Health, England

#### Common barriers to innovation<sup>4</sup>

- The failure to identify unmet needs until they become urgent problems.
- A lack of practical 'know how' in supply chain management and procurement of innovation.
- Solution led rather than outcome led specifications.
- A disconnect between those responsible for delivering policies and targets and those procuring goods and services.

More information about the pilot projects can be found on [www.lowcarbon-healthcare.eu](http://www.lowcarbon-healthcare.eu)

<sup>4</sup>Creating the conditions for innovation: Towards a good practice guide, LCB-HEALTHCARE, 2011

## Thinking Ahead – Front end planning for energy efficiency and carbon reduction in Norway

The pilot project in Norway focused on influencing the national 'front end' planning strategy for hospital construction, to better enable the procurement of energy effective, low carbon solutions. Front end planning is concerned with activities and the decision making that take place in advance of a building project getting underway and before any selection or purchases of goods and services. It concerns the process from initial conception through to the development of a comprehensive business plan, and then subsequent project programming, assessment and quality assurance.

The pilot project examined the use of front end planning to the delivery of better energy efficiency in hospitals. This followed a joint survey by the Norwegian LCB-HEALTHCARE team and the national 'Lavenergisyrkehuset' (Low Energy Hospitals) research group that showed that planners and decision-makers lacked focus and clear goals when trying to procure new, innovative and 'low-carbon' solutions. This survey, together with experience gathered from a number of strategic workshops, demonstrated that Norway's hospital sector needed better and more detailed guidelines and evidence concerning energy use both in individual buildings and in the functional areas within those buildings.

At the outset, none of the individual investments being planned by the partner hospitals had explicit goals for CO2 emissions or energy consumption, including for the procurement of the medical equipment that would be used in the completed infrastructure. The LCB-HEALTHCARE project was an opportunity to introduce rigour and a common methodology to this area, and to encourage decision makers to consider issues previously given little consideration, for example:

- **The location and form of the infrastructure:** alternatives were not being examined from the point of view of low carbon outcomes or energy efficiency.
- **The organisation of functions within the hospital:** this was generally considered only from an operational viewpoint, despite a clear impact on energy demand.
- **Evaluating alternatives and seeking innovative solutions:** although guidelines required procurers to consider alternative energy solutions, in practice this rarely happened or was superficial.
- **Increased investment:** the concept of 'invest to save', i.e. spending more now to save on future energy costs and carbon emissions, did not feature strongly in the decision making process, thus undermining life-cycle costing as a strategic tool.

The detailed work on evidence and data gathering, plus the development of a common methodology, has the capacity to influence not only the energy efficiency policy framework for hospital construction, but also the solutions sought from, and offered by, the supply chain.

"We continue to delay addressing tomorrows challenges until they become todays pressing problems and need urgent attention. All this does is limit our options and invariably means we pay more and get a less than perfect solution.

We need to be better at thinking ahead so we align supply chains to deliver what we need, when we need it at a price we can afford."

**Asmund Myrbostad,  
SINTEF, Norway**

# 1. Understand your unmet future needs

## Think ahead and identify future needs well in advance so that you can deliver services that are fit for the future

### Think ahead

The decisions we make today will determine the healthcare service we leave behind. It is increasingly clear that 'business as usual' options will not prepare hospitals and health facilities for the future.

We need to be better at thinking ahead. When looking at investments and contracts instead of assuming that we will be buying 'more of the same', we need to take a step back, question the status quo and consider future needs and the bigger picture.

### Identify unmet needs in time to do something about them

A key success factor for innovation is an accurate understanding of the problem that needs solving and the unmet need it is targeting. By identifying unmet needs early you give your organisation and the supply chain the time to find a sensible and cost effective solution. The longer unmet needs remain unrecognised the fewer options there are likely to be able to address them and the more a solution is likely to cost.

Each of the Pilot Projects considered purchases at least 2-3 years in advance. This gave the purchasers time to consult users and accurately determine their requirements and also gave suppliers time to develop innovative solutions.

Even where timeframes are shorter there are still opportunities to influence suppliers and encourage innovative solutions in time for future procurements by referencing future needs, such as lower energy consumption, in tender documents and Prior Information Notices.

"The longer unmet needs remain unrecognised the fewer options there are likely to be to address them and the more a solution is likely to cost."

**Marcin Kautsch,  
LCB-HEALTHCARE Co-ordinator, Poland**

"In the battle of competing demands, innovation gets put off as something to think about tomorrow. Of course tomorrow arrives; the problems remain and we are confronted by the same set of sub-optimal choices we had yesterday."

**Dr Jonathan Frost,  
Industry Chairman,  
LCB-HEALTHCARE Steering Group**

Innovation requires accurate information from customers about what they need

## Pilot Project

### An Ultra-low carbon energy solution for NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST

Nottingham University Hospital NHS Trust (NUH) has a 35-year-old coal fired boiler serving its City Campus that is approaching the end of its useful life. The boiler generates steam that is distributed over several miles of pipeline.

Rather than specifying a simple replacement, such as a centralised Combined Heat and Power plant, the project team widened the project's scope to look at energy use and demand as a whole.

The Trust's future needs were looked at in the light of anticipated increases in the cost of energy and carbon, long term requirements for carbon reduction, potential for new more energy efficient technologies, future business needs such increasing flexibility in the utilisation of the estate.

The project team looked beyond simple replacement costs to the full costs and business implications of a centralised versus decentralised solution.

The Trust would normally employ an energy consultant to specify the solution and then buy to this specification. This inevitably limits choices to low risk, tried and tested solutions which may meet the immediate needs but does not take into account the strategic business implications and wider needs. Instead, consultants were used to gather data and propose a base line solution against which other more innovative solutions could be measured. The team then developed an unmet needs briefing that was endorsed at Board level and enabled the project team to confidently consult the supply chain on their need for an integrated ultra low carbon energy solution.



The need to replace the coal fired boiler gave the project team an opportunity to fundamentally re-think the way energy is generated and used across the Trust as a whole and ensure that the Trust's energy provision is fit for the future. By communicating their requirement to the market ahead of time, the Trust gave the supply chain advance notice and an opportunity to develop an innovative response.

"With the energy market changing rapidly and prices increasing together with anticipated changes in healthcare provision we needed to fundamentally rethink our approach and take a more strategic, long term view that enables us to be flexible to business needs and changing energy profiles."

**Andrew Camina,**  
Assistant Head of Estates and Facilities, Nottingham University Hospitals NHS Trust, City Site

## Pilot Project

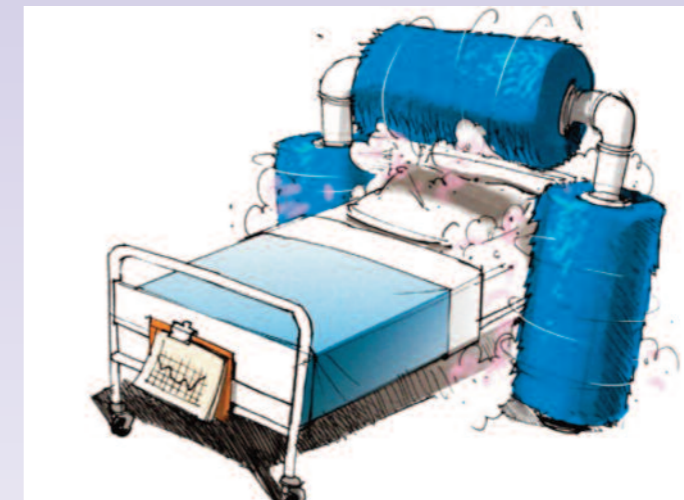
### ERASMUS MC identified a future need for a sustainable bed cleaning solution

In 2008 the Energy and Estates Manager at Erasmus MC in Rotterdam was tasked by the board of directors to cut down the energy usage for the entire hospital. As he looked into the hospital's energy use profile, he began to realise that there were only a few areas he could influence. The new hospital, currently being built on the same site, will be used as planned from 2017 onwards and all major design and technical decisions with regards to energy saving had already been taken. But he still has to deliver energy savings over the next few years. A campaign to change staffs' behaviour had some success, but the electrical equipment that was in use limited its impact.

He therefore shifted his focus to procurement of equipment. On a daily basis, he was busy adjusting energy and power needs to accommodate new equipment. Could he possibly help influencing procurement decisions to choose low-energy alternatives? Or perhaps even make energy demand an award criterion for new machines & equipment?

The procurement team recognised the opportunity and the need to make energy savings, and was open to collaborate. That opportunity came quickly as the old bed washing facility (Erasmus MC cleans its beds and mattresses with the use of a machine) was nearing the end of its life and a new solution was needed.

A project team that included decision makers from different areas in the hospital such as infection prevention, end users, facilities management and estates came together to discuss this opportunity. The project team identified an unmet for 'a sustainable and low carbon solution to deliver 70,000 clean beds and mattresses per year.



Erasmus University Medical Centre (Erasmus MC) is renewing its bed washing facility to provide enough clean and disinfected beds for its daily operational needs. This currently exceeds 70,000 beds per annum and is expected to increase. The existing machine is labour intensive and uses a large volume of water and energy to operate. In brief, it is expensive and out of step with the hospital's sustainability policies and objectives.

"Clean beds are essential for patients and the timely delivery of clean beds is seen as an important issue for the staff of Erasmus MC."

**Jeroen Veenendaal,**  
Strategic Procurement Officer, Erasmus MC



## Sustainable (or 'green') procurement versus innovation procurement?

Does a focus on sustainable procurement mean we are missing opportunities for innovation?

*"While there are some credit worthy initiatives at national level and in selected sectors, procurement of sustainable products and services needs to be much more ambitious and much more orientated towards eco-innovation."*<sup>5</sup>

This paper makes an interesting point. Although sustainable procurement has been around for some time, public sector customers do not yet systematically consider sustainability issues.

Procurement colleagues in an organisation can apply certain sustainability requirements, for example reducing packaging, increasing energy efficiency, perhaps applying whole life costing. But the decisions about the nature of the procurement is in the hands of the budget holder. Hence the result – a slightly more sustainable version of what we bought last time.

This is to be welcomed, but will it deliver the step change solutions we need, at the pace at which we need them? Innovation procurement by contrast has the potential to be a game changer and lead to step change solutions and progressive improvement.



The UEL Future Ward solution has been future proofed to enable adoption of new technology such as organic LEDs as they become available.

courtesy of Integrated Medical Interiors (IMI)

*"This approach gives companies the freedom to innovate and explore new technologies and design concepts rather than being constrained by what has gone before."*

**Andrew Bissell,  
Director, IMI Ltd**

<sup>5</sup>Closing the Procurement Gap, The University of Manchester Sustainable Consumption Institute

## 2. Be an ambitious customer

**Ask for what you really want, not just what you think you can get, or afford**

There is nothing to lose in asking for what you want. Suppliers only respond to customer demand.

Simply put, if you don't ask, you don't get.

In a survey of more than 1000 companies and federations the majority of responses indicated new requirements and demand are the main source of supplier innovation.<sup>6</sup>

Pilot Project

### Ultra Efficient Lighting for Future Wards - THE ROTHERHAM NHS FOUNDATION TRUST

When defining their unmet need, the project team were encouraged to be ambitious, forward thinking and to throw away the catalogues'. The resulting unmet needs statement specified a 'step change in the patient experience and demonstrable step change in energy efficiency'. The team also asked for the solution to be cost effective based on whole life costs and future ready i.e. able to be upgraded to take on board new lighting technology such as LEDs and Organic LEDs as they become available. Other aspects of the project teams wish list included a requirement for the solution to deliver a 'hotel like feel', be fully recyclable and be easy to maintain and clean.

Pilot Project

### ERASMUS MC needs 70,000 clean beds

The project team established early in the project that there are no guidelines that clearly describe how a bed or mattress should be cleaned and the guidance leaves room for interpretation (either clean it manually or by machine) and so there was room to develop an innovative solution.

As a large university medical centre, Erasmus MC has a history of innovation and the need to replace the bed washing facility was seen as an ideal opportunity to challenge the status quo and allow the supply chain propose how to deliver an optimal bed and mattress washing solution.

A 'challenge' to the supply chain and solution-providers was published and advertised: 'Erasmus MC needs 70,000 clean beds for patients each year and we need to clean them in a way that is environmentally sustainable.'

*"To get the most out of suppliers throw away the catalogues and focus on defining the outcomes you need to deliver."*

**John Cartwright,  
Director of Estates and Facilities, The Rotherham NHS Foundation Trust**

Innovation procurement can enable you to do new things or provide you with a step-change in effectiveness and efficiency.

<sup>6</sup>BDL, 2003 The Power of Customers to Drive Innovation, Report to the European Commission, Brussels



**Outcome Based Specifications** allow room for suppliers to present innovative solutions rather than being tied to supplying existing products and services.

**Outcome Based Specifications** create opportunities. Detailed specifications close them down.

### 3. Use outcome-based specifications

**Detailed specifications limit your options to more of the same. Outcome based specifications give suppliers room to innovate.**

When we are buying goods and services it is common practice to 'pick the answer' and give suppliers detailed specifications. This feels safe but it stifles innovation and limits your options. Procuring in this way leads to 'more of the same' and at best incremental improvements rather than step-change solutions that could deliver better cost effective alternatives. Detailed specifications do not give suppliers the opportunity or encouragement to offer alternatives. Indeed it feels risky for them to step outside the customer's specification.

The use of outcome-based specifications is becoming more common. But in many cases the outcomes are still based around current models and existing solutions rather than clearly defined unmet needs.

The Rotherham NHS Foundation Trust issued an outcome based tender specification that stimulated an innovative response from suppliers:

Innovative, value added, smart, ultra-efficient lighting systems that can deliver the Trust's vision for Future Ward lighting, meet the operational requirements and provide added value functionality, in a cost effective way.

The core requirement outcomes are:

- A step change in patient experience i.e. creating a pleasant, healing environment with patients being in control of bed zone lighting levels and ambience whilst providing the lighting to perform clinical requirements and incorporating measures to reduce the risk of hospital acquired infections;
- A demonstrable step change in energy efficiency with progressive improvements in energy efficiency and operational performance over the life of the project;
- A future-proofed service, for example to facilitate upgrading to more energy efficient products as they become available.

"Experience has shown us that the more we can simply present the results we are looking for in operational terms, the better suppliers will understand us. We've tried this once with coffee machines, simply saying that we wanted to have the best tasting coffee, as decided by our tasting panel. And it worked."

**Jeroen Veenendaal,**  
Strategic Procurement Officer, Erasmus MC

"The procurement officer at Rawicz Hospital discovered that 'even in Poland' you can develop procurement documentation based not on a detailed list of measurable parameters, but on the needs of users. The level of interest from other hospitals was really encouraging – what we were doing could really help to improve procurement in Polish hospitals, leading to better outcomes."

**Agata Grudzień**  
LCB-HEALTHCARE Project Assistant

"An outcome based specification sets out the end result to be achieved, not the means of delivering it: you effectively specify the problem and invite solutions. This gives the supply chain the opportunity to innovate."

**Gaynor Whyles,**  
LCB-HEALTHCARE Co-ordinator  
JERA Consulting

## NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST

### Site visit for potential suppliers of an integrated ultra-efficient energy solution

The market sounding was announced via a Prior Information Notice in the OJEU at the beginning of December 2011 and interested parties were invited to register their interest in the project and attend a site visit and information event in January 2012.

A pro-active communication campaign resulted in considerable interest from the supply chain and over 100 people attended the site visit to hear more about the project. Presentations from the CEO and the project team emphasised the Trusts commitment to an innovative approach and their ultra low carbon aspirations. The event gave potential suppliers an opportunity to look around the City hospital site and network with other companies and stakeholders.

The market sounding questionnaires were returned at the end of January with over 65 good quality and detailed responses. The results were analysed and presented to the Trusts governance committee with recommendations on the way forward informed by the supply chains response to the market sounding.

“The supplier day at Nottingham was an excellent idea and interesting to observe. Many UK SMEs have for too long felt curtailed in the NHS market by consultants who specify the same option time and again without considering or understanding the benefits of new and emerging products. Opening the discussions directly between the NHS and SMEs through market sounding allows us to fully explain the benefits of our products and expose buyers to alternative and innovative approaches.”

**Gordon Watt,  
Logan Energy**

## RAWICZ HOSPITAL

### Supply chain engagement – a new approach delivering excellent results

Rawicz Hospital contacted 32 potential suppliers of 'Effective and ecological working clothes for the personnel of Szpital Powiatowy w Rawiczu' hospital uniforms between February and March 2012. Eight potential suppliers participated in a market meeting in March 2012, where they had the opportunity to present their products and, more importantly, to understand the customer's needs. Seven of these companies were invited to participate in a competitive dialogue.

Over the course of the competitive dialogue the Project team at Rawicz learnt about possible solutions and suppliers welcomed the opportunity for dialogue. Two suppliers were invited to provide uniforms for testing among users. This testing phase demonstrated that the new uniforms outperformed the old uniforms in terms of the new outcome based requirements including user comfort and lower carbon.

## 4. Manage your supply chain

### Providing the market with accurate information on unmet needs and future sales opportunities enables suppliers to align their supply chains to meet your future needs

Information about a customer's needs is invaluable to potential suppliers, especially if it is presented in a way that enables them to respond innovatively (for example by not asking for more of the same, using outcome based specifications and allowing sufficient time). Yet the public sector is notoriously bad at communicating with its suppliers. This means that all that is available to us when we come to buy goods and services is at best a slightly better version of what we had before.

Early market engagement is considered good practice in procurement and it makes good sense for reasons we have discussed already. One question that come up repeatedly in the pilot projects was 'how do I engage with suppliers and is it legal to do so?'

There are some simple guidelines but essentially the point about supply chain engagement is that it should be carried out in a way that retains a fair and level playing field. This leaves the question of 'how'. The pilot projects tested a number of different approaches.

“The public sector is not always good at communicating long-term plans to the market. The start of the formal tender process is often the first indication a supplier receives of a complex requirement. Timescales are then too short for innovative solutions to be developed.”

**Asmund Myrbostad,  
SINTEF Health Research**

“Advance market engagement not only gives potential suppliers advance notice and time to innovate, it also stimulates a valuable exchange within and between supply chains which sparks innovation.”

**Dr Gareth Jones,  
Consultant for the Electronics,  
Sensors and Photonics Knowledge Transfer Network KTN**

The pilot projects used a number of different approaches to talk to the supply chain:

- Prior Information Notices (PINs) in the OJEU
- Market sounding
- Website and social media
- Site visits
- Market consultation workshops
- Press coverage
- Use of supply chain intermediaries
- Strategic workshops

Innovation requires positive and proactive supply chain management

## ERASMUS MC organised a market meeting day to stimulate innovation and cooperation among suppliers

The goal of this 'market meeting day' was to discuss in detail the challenge: how to efficiently clean beds in a sustainable way in the context of Erasmus MC. A large number of market parties from a wide range of backgrounds (around 60 persons) attended, as well as stakeholders and several other healthcare organisations.

The day focused on:

- providing parties with more insight in the challenge set by Erasmus MC
- demonstrating the commitment of Erasmus MC to buy innovative solutions. Furthermore, the attendance of other healthcare parties showed that there is a wider future market for innovative solutions.
- helping market parties find potential partners for developing better and more innovative solutions.
- discussing how Erasmus MC should organise the procurement process (e.g. tender procedure and awarding of contract) to enhance the chances for a successful outcome.

The day started with presentations and a guided tour. This was done to show the goal of the day, the importance of clean beds and to give a first-hand insight in the current process of cleaning beds. The current process will be one of the benchmarks for evaluating the solutions provided by the market. The afternoon session was highly interactive. In multiple discussion sessions people were invited to address questions like "how clean should hospital beds be?" and "how do we determine the most sustainable solution?"

In one of the most interesting sessions, each organisation was asked to write down their skills and competencies and highlight gaps in information, skills or techniques needed to develop an effective solution. This activity created a platform for suppliers to find potential partners to create a consortium.

The market parties responded very positively to this approach, despite it being very new to them. The Erasmus MC team emphasised that although any individual company in the room could create a 'good enough' solution for the challenge, the team felt that, through a joint effort that combined different ideas and techniques, could create the best possible solution.

Over the course of the day participation and open communication was encouraged and facilitated and as the day progressed the market parties became more and more open to each other and were able to share ideas and work on future collaborations.

"The market engagement not only gave potential suppliers advance notice and time to innovate, it also stimulated a valuable exchange within and between supply chain. This has resulted in more innovative and 'out of the box' solutions from consortia formed at the market meeting."

**Marieke van Putten,**  
Programme Manager Public Procurement of Innovation,  
Ministry of Economic Affairs, Agriculture and Innovation

"Market sounding was new to us, but gave us the opportunity to test and influence the market and highlight issues that the supply chain may not be aware of. For example, we tried completely new industrial sector that have no track record in health care. They responded enthusiastically to our challenge!"

**Joram Nauta,**  
Pilot Project Manager, TNO for Erasmus MC

## Prior Information Notices (PINs) in the OJEU

PINs are an ideal way to communicate your future procurements and unmet needs to a Europe-wide audience. They are also a helpful way to announce a market sounding.

## Market sounding

Market sounding is a way to get your message about unmet needs and requirements out to suppliers and get feedback from the supply chain. In the LCB-HEALTHCARE Pilots the teams used a Market Sounding Prospectus as the main communication tool. (Examples of PINs are included in the online CPD Tool).

## Website and social media

Create a web presence where the supply chain can follow the process and keep up to date with developments and use the press and social media to publicise your requirement.

The Nottingham University Hospitals NHS Foundation Trust created a webpage where all the information about the project could be accessed. It was used to keep suppliers up-to-date with developments and record frequently asked questions. Rawicz Hospital also created a web page in Polish and English. This widened the number of suppliers who could respond to their market sounding, including at least one of the short-listed companies.

## Site visits

Sometimes potential suppliers need to see what is involved by visiting your facility or buildings. The Nottingham University Hospitals NHS Foundation Trust invited suppliers to attend a site visit to hear more about their requirement for an Integrated Ultra Low Carbon Energy Solution and see the City Campus. Over 100 people attended the event in January 2012.

## Market consultation workshops

The Erasmus MC project team worked with a facilitator to stimulate cross fertilisation of ideas between suppliers at their workshop in January 2012. The event stimulated cross supply chain communication and exchange.

## Use supply chain intermediaries

Engage and support supply chain intermediaries to stimulate their members, subscribers and audience to respond. Supply chain intermediaries provide you with easy access to potential suppliers. They have links and networks already in place to communicate to the supply chain(s) in question. For example, trade organisations, innovation networks, SME and business support organisations.

Market sounding helps you assess the capacity and capability of the supply chain to deliver a solution. (Remember that it is not an assessment of individual suppliers).

1. **Maturity:** Is the market ready to deliver what's required?
2. **Feasibility:** Will the market be technically capable of meeting the requirement?
3. **Competition:** How many suppliers provide what is required, will procurement be sufficiently competitive?
4. **Capacity:** Are there enough suppliers, with sufficient capacity, to meet the requirement?
5. **Working together:** Will the requirement bring suppliers from different sub-sectors to work together in a new way? How will this work?
6. **Traditions and prevailing attitudes:** What are they in this market? How will they affect the project?

## Creating a Decision Making Unit for clarity and transparency at ERASMUS MC

The pilot project at Erasmus MC was managed by a 'decision making unit' (DMU).

As the project got underway, the project team identified that procurement was usually dealt with at the level of a budget holder (usually a head of department) assisted by procurement staff, with staff from the relevant department occasionally involved. The team soon realised that for this project a wider perspective was needed. This meant involving more stakeholders within the organisation from the start.

A DMU is a group of employees made responsible for finalising major decisions, usually involving a purchase. Major purchases typically require input from various parts of the organisation. Highly technical purchases, such as medical equipment, also require the expertise of technical specialists. In some cases the DMU is an informal ad hoc group, but in this case, it was created as a formally sanctioned group with specific mandates.

There are typically six roles within a DMU:

1. Initiator who suggests purchasing a product or service.
2. Influencers who try to affect the outcome decision with their opinions.
3. Deciders who have the final decision.
4. Buyers who are responsible for the contract.
5. End users of the item being purchased.
6. Gatekeepers who control the flow of information.

These six roles are formal roles. As external project team member TNO played a key role by acting as innovation procurement coach and as project facilitator, helping coordinate the project, assist team members and question the seemingly obvious.

As soon as the outline of the procurement was agreed and all the important stakeholders represented, the team approached senior management for approval to proceed (in this case it was one of the Board members and the Tender Board that governs all procurement projects at the hospital procurement projects at the hospital). This not only gave the project team formal status, but also ensured that future activities would not be surprised by last minute changes, shifting priorities, extra bureaucracy or steps in the procurement process. Important lessons from the pilot project included:

- Identify the decision making group as early as possible.
- Make clear the role and influence they play during the procurement process and the priorities each of the involved persons has (this can differ significantly!).
- Remind them of this during the process.
- Make sure the team is complete (have we forgotten an important influencer?)
- A final but vital issue is to get the team recognized and enabled by senior management.

“The DMU was created in order to give all stakeholders a voice and made sure that they were represented and/or informed. From the start it was made clear that members of the DMU all play their own role.”

**Joram Nauta,**  
Pilot Project Manager, TNO for Erasmus MC

## 5. Involve users in the procurement process

**The end users of a product or a service hold a wealth of information. They know most about their unmet needs and problems with existing products and services. But they are rarely asked.**

Involving users need not be difficult or time consuming and the information that you get in return will ensure that the goods and services you buy really do meet the needs of the organisation, patients and staff. Consulting end users also helps to reinforce cross-departmental relationships.

In healthcare there will always be a number of different stakeholders that all have their own perspective on the 'right' solution in terms of design, operation and performance. Active stakeholder participation and consultation early in the project is therefore essential where innovation has implications on the use or operation of buildings and facilities.

In order to determine unmet needs and requirements accurately, consultation and communication needs to be open and honest, respecting the perspectives, needs and concerns of each stakeholder.

### Pilot Projects

#### RAWICZ HOSPITAL involved nurses in the purchase of uniforms

In Poland the innovation procurement methods were first tried out in a relatively simple project – the purchase of uniforms. This enabled the Procurement Officer to build confidence in the new methods.

The Project Assistant and the Procurement Officer visited hospital staff to find out what they liked or didn't like about their uniforms and to invite suggestions for improvement. The response from staff was extremely positive and helped to formulate the outcome-based specification that was then advertised. The approach attracted much interest from many other hospitals.

“It makes sense that those that use or experience the goods and services you buy will have a good understanding of what works and what doesn't. Sharing this information with suppliers helps them improve their products, which benefits everyone.”

**Marcin Kautsch,**  
LCB-HEALTHCARE Co-ordinator, Poland

#### THE ROTHERHAM NHS FOUNDATION TRUST invited users to view and comment on a mock-up of the Ultra Efficient Lighting (UEL) Pod

A demonstration 'mock-up' of the UEL Pod was set up at Rotherham Hospital and staff were invited to give their feedback and suggestions. The supplier IMI Ltd. developed information boards and received feedback from stakeholders from across the Trust which was easy and straightforward.

Further consultation, specifically with the Infection Control Matron, at the prototype stage helped the supplier to make further improvements.

“The feedback we received from the Rotherham Hospital staff helped us to understand the practicalities of the ward environment and enabled us to make a myriad of improvements even before the prototype stage.”

**Andrew Bissell,**  
IMI Ltd

Keep key stakeholders informed and engaged

## CASE EXAMPLE

St Olav's Hospital, Norway, building a cooperative relationship with suppliers that led to energy reduction targets that initially seemed unachievable.

The re-building of St Olav's is a decade-long, NOK 12.5 billion (€1.7) project to completely reconfigure the secondary and tertiary hospital campus that serves Trondheim and the mid-Norway region.

The construction team were aware at the start of the project that they had an opportunity to set a very high standard for a low carbon building and energy efficiency, but realised that traditional project management and procurement practices could potentially stand in the way of their ambitions.

The construction team leadership therefore started with a premise that they were going to change the culture of procurement from 'antagonism and distrust to collaboration and trust'. They implemented a philosophy of open information management (data shared and discussed between hospital engineers and designers, procurement experts and contractors), and decided at a very early stage to give the contractors real freedom to offer their own innovative input to the process.

As a result, the initial targets for energy efficiency were abandoned, and the hospital aimed to be a 'passive house' – a facility with almost no need for (active) heating.

This project is a clear example of how inspirational leadership can lift the horizon. Instead of thinking only about energy reduction, the integrated team of commissioners, procurers and contractors was encouraged to look further, from energy reduction to energy recovery and control and onwards to renewable energy and even energy supply. The contractor organisations responded positively to the new environment, to such an extent that they set the new targets and persuaded St Olav's that they were achievable.

"Everyone said it was impossible to achieve class A with a 10 year pay back."

"When asked, consultants only presented expensive solutions. The passive house ambition came out of a culture of collaboration."

"The architects focussed on design not energy efficiency. You need to introduce energy efficiency early in the design phase."

## 6. Help suppliers to help you

**Understand the supplier's point of view and develop a cooperative rather than antagonistic relationship.**

It is possible to be both a demanding procurer and a responsible customer. It is in no one's interest to undermine a suppliers' business by driving down prices to a point where they cannot make a reasonable profit and go out of business.

"The way in which a procurement is conducted sets the tone for future relationships with our supply chain and contractors. We will conduct the procurement that respects the suppliers need to control bid costs and make a fair profit and their right to confidentiality on commercially sensitive information."<sup>7</sup>

Business innovates to stay ahead – it looks for opportunities to create value and applies know how to find new solutions that meet customer needs in better and better ways. To do this effectively and get value from their investment in improvement and innovation, suppliers need good and accurate information about their customers' needs.

"Fundamentally, if companies are to develop new goods and services, they need to be sure that there is a market. New technologies come on stream fast when there is enough confidence and clarity within a supply chain about the direction of developments – which makes it worthwhile for a supplier to make the investments to achieve new performance standards."

**Dr Jonathan Frost,  
Industry Chairman,  
LCB-HEALTHCARE Steering Group**

"Finding an innovative fabric for our uniforms was a big success. And, against all appearances, was not actually that difficult. You just have to be clear about the outcomes you need by talking to the end users and then let suppliers know."

**Renata Pazoła,  
Procurement Officer,  
Rawicz Hospital**



**Aim for a win-win between customer and supplier**

<sup>7</sup> Extract from the Rotherham NHS Foundation Trust's Pilot Project Procurement Strategy

### Stimulating supply chain innovation

#### Give the supply chain time to innovate

Think ahead; signal your long and medium term 'direction of travel' to the market. Communicate your forthcoming needs and procurement plans in advance

#### Allow room for innovation

Communicate your needs in outcome terms. State what you want, not what you think is available or affordable. Look for progressive improvements and future proofing.

#### Invite feedback from the supply chain

Market sounding and market consultation allow you to test out your requirements and iron out problems in advance of the invitation to tender.

#### Facilitate communication between suppliers

You can help to stimulate exchange between suppliers and innovation in and between supply chains for example through networking events, consultation workshops, site visits and by publishing a directory of companies that have expressed interest in your project.

#### Involve SMEs

Ensure that smaller companies are aware of the opportunity.



Innovation Procurement is a new concept for most, but there is increasing recognition of its value.

For example in the UK, the NHS Standards of Procurement includes an assessment of a Trust's ability to adopt and evaluate innovative technologies and processes, and highlights Forward Commitment Procurement (FCP) as a tool to increase efficiency of resources, undertake effective stakeholder engagement, and deliver solutions that are fit for purpose.

## 7. Use minimum standards intelligently

### Reward suppliers that exceed minimum standards and incentivise progressive improvements.

The use of minimum standards in procurement specifications is not unusual. On the one hand it is a helpful way to encourage suppliers and ensure that a certain standard is reached. But on the other hand minimum standards can inhibit suppliers investing to exceed these standards unless there is a clear competitive advantage. You can create this competitive advantage by rewarding those suppliers that exceed the minimum standard and by putting in place progressively higher standards.

Over longer terms projects ask for progressive improvements in for example energy efficiency, or reductions in embedded carbon, and ask suppliers to ensure that their solutions are 'future ready'.



“Many new build and modernisation projects only aim for minimum performance thresholds for energy and sustainability. This is therefore what they achieve. Yet energy and sustainability standards will need to improve dramatically over the coming years. Not only will energy costs rise but also regulation will force improvements. In the UK, new non-domestic buildings need to be zero-carbon by 2018.

Innovation will have a key role in delivering the step-change in energy and sustainability performance required for healthcare buildings. This means we need to change procurement practices and follow examples like the LCB-HEALTHCARE pilot projects if we are to succeed.”

**Sonia Roschnik,**  
Operations Director,  
NHS Sustainable Development Unit, UK

#### Pilot Projects

### THE ROTHERHAM NHS FOUNDATION TRUST

The outcome specification took into account that over the coming years organic LEDs would be replacing LED and florescent lamp fittings and the tender explicitly asked for the solution to be 'future ready' i.e. be able to incorporate new technology as it became available.

It also required suppliers to explain how they would make progressive improvements over the 8 year ward modernisation and how they would ensure that new technology was incorporated as it become available and cost effective.

Incentivise suppliers by asking for progressive improvements

## THE ROTHERHAM NHS FOUNDATION TRUST

From the outset, as part of an outcome-based requirement, the Trust required any solution for its Ultra Efficient Lighting for Future Wards solution to be 'affordable on the basis of whole-life costs'. They provided information on the costs of operation and maintenance of the existing ward lighting to the supply chain in the market sounding prospectus.

The solution to be used the modernisation programme, the IMI Future Ward Pod, will deliver an energy consumption saving of 30% or more than €5,000 per 40 beds over 10 years and maintenance saving of 80% or more than €12,000 per 40 beds over 10 years. The purchase cost is comparable to traditional ward refurbishment and will deliver additional benefits.

## RAWICZ HOSPITAL

Becoming a member of the LCB-HEALTHCRE project induced the need for major change in the approach to procurement. In the past all procurements were carried out in the same way and in common with all other healthcare units in Poland. That is detailed specifications were drawn up and selection based mainly on lowest price. The concepts of outcome based specifications and whole-life cost were not known. In the pilot project evaluation criteria looked first of all at factors other than price and at the whole life benefits and links with the hospitals environmental objectives.

It is anticipated that the new 'user-friendly, low carbon and sustainable' staff uniforms will cost 10-15% more but deliver a whole life cost saving of more than 20%, and, importantly, are preferred by the users.

## ERASMUS MC

Hospitals are still often regarded as 'cost-centres' with annual budgets to spend on materials, staff, medication, energy and equipment. Buying new equipment on the basis of whole-life costs instead of the economically most advantageous offer (often based on lowest (investment) costs), brings a new way of thinking into the hospital.

As soon as discounting of future cash flows for example energy cost in future years or maintenance costs in year 5 are taken into account, a whole new way of thinking is needed. The ability to make a business case with assumptions that the hospital is comfortable with needs time to develop.

A shadow-calculation was carried out for a normal European procurement of an ultrasound machine and it was discovered that one of un-successful bids had a lower cost when you looked at the machines total cost of ownership.

## NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST

In preparing an outline business case for a new integrated energy solution the project team realised that in order to make a fair comparison of options, they needed to consider the real financial and strategic cost of simply replacing the coal fired boiler with a combined heat and power plant.

This included, among other things, the value of flexibility in the light of anticipated changes in the nature of healthcare provision, the cost of replacing the distribution network; the value of freeing up highly valued estate, and the cost of connecting new buildings to a central system.

# 8. It is about best value – not lowest price

## Uncover the real costs and think in terms of whole life-cycle costs

The purchase cost of goods and services is often only a small proportion of the costs of operation and ownership. Value for money is the optimum combination of whole-life cost and quality to meet the user's requirements.

Yet, the selection of goods based on purchase price rather than whole-life costs is, surprisingly, still widespread in practice. This means the real value of, for example, an innovative or more energy efficient option, is invisible to the buyer.

Whole-life cost, or life-cycle cost (LCC), commonly referred to as "cradle to grave" costs, refers to the total cost of ownership over the life of an asset. It includes the whole-life financial cost, which is relatively simple to calculate, and the environmental and social costs and benefits which can be more difficult to quantify. Expenditure included in calculating the whole-life financial cost include, planning, design, construction and acquisition, operations, maintenance, renewal and rehabilitation, depreciation and cost of finance and replacement or disposal.

Innovative solutions may (but not always) cost more initially but deliver whole-life savings and increased benefits. These need to be taken into account when evaluating tenders.

### The cost of carbon is part of the whole-life cost

Taking into consideration the cost of operational carbon as part of whole life costing is becoming more common. But this is only a fraction of the carbon emitted in the life of a product. Embodied carbon is the carbon released during resource extraction, transportation, manufacturing, fabrication and disposal of a product. Operational carbon is the carbon emitted during a products operational life.

Consideration of a products embedded carbon in the procurement process is rare. But things are changing: The Rotherham Hospital NHS Foundation Trust, in an FCP project for catering services, is asking their catering supply chain to reduce embedded carbon in their supply chain. The consideration of embedded carbon arose following the Trust's involvement in the Down to Zero<sup>8</sup> initiative.

"When we looked at the total cost of ownership of an imaging machine, we discovered that, based on the information provided from the industry and the assumptions we made, we could have made a different choice that would have had a lower whole life cost."

**Jan van Velzen,**  
Energy & Estates Manager, Erasmus MC

"There remains an underlying belief that 'low carbon and sustainable' cost more and are less effective; this leads to a nervousness amongst customers in asking for them."

**Asmund Myrbostad,**  
SINTEF, Norway

<sup>8</sup>Down to Zero is a joint public-private initiative by the Department for Business Innovation and Skills and the Prince of Wales UK Corporate Leaders Group on Climate change that has launched a number of 'low carbon procurement compacts' to demonstrate demand for low carbon goods and services.  
<http://www.cpsl.cam.ac.uk/Business-Platforms/The-Prince-of-Wales-Corporate-Leaders-Group-on-Climate-Change/UK-Procurement.aspx>



## Pilot Projects

### ERASMUS MC

Hospitals are still often regarded as 'cost-centres' with annual budgets to spend on materials, staff, medication, energy and equipment. Buying new equipment on the basis of whole-life costs instead of economically most advantageous offer (often based on lowest (investment) costs), brings a new way of thinking into the hospital.

As soon as discounting of future cash flows for example energy cost in future years or maintenance costs in year 5 are taken into account, a whole new way of thinking is needed. The ability to make a business case with assumptions that the hospital is comfortable with needs time to develop.

Therefore, Erasmus MC carried out a shadow-calculation for a normal European procurement of an ultrasound machine.

**“We discovered that, based on the information provided from the industry and the assumptions we made, we could have made a different choice that would have had a lower whole life cost.”**

**Jan van Velzen,  
Energy & Estates Manager  
Erasmus MC**

### RAWICZ HOSPITAL

Becoming a member of the LCB-HEALTHCARE project induced the need for major change in the approach to procurement. In the past all procurements were carried out in the same way and in common with all other healthcare units in Poland. That is detailed specifications were drawn up and selection based mainly on lowest price. The concepts of outcome based specifications and whole-life cost were not known. In the pilot project evaluation criteria looked first of all at factors other than price and at the whole life benefits and links with the hospitals environmental objectives.

### THE ROTHERHAM NHS FOUNDATION TRUST

The project team developed a pro-innovation procurement strategy for the purchase of an Ultra Efficient Light Solution for a ward refurbishment programme. The strategy placed a strong emphasis on innovation throughout the procurement process and included the following elements:

- Outcome based specification
- Competitive dialogue
- Pro-innovation Pre Qualification Questionnaire
- Demanding and committed customers
- Respecting need of suppliers to make a reasonable profit
- Forward commitment over the 8 year programme
- Progressive improvement over the life of the contract
- Balanced evaluation criteria
- Whole life costing
- Stimulating wider demand in the NHS

**“In designing a pro-innovation procurement strategy ask yourself ‘what do we need to do differently to encourage and support innovation in the supply chain?’”**

**Gaynor Whyles,  
LCB-HEALTHCARE Co-ordinator  
JERA Consulting**

## 9. Encourage and support supply chain innovation

### Enable supply chain innovation at all stages of the procurement process

It is surprisingly easy to close down creativity and stifle innovation in the supply chain. The pilot projects looked at ways of stimulating and maintaining the drive for innovation at all stages of the procurement process.

The use of defining your requirement in outcome terms has already been discussed but this needs to be maintained through to the specification and tender phase.

#### The role of a pro-innovation procurement strategy

A 'pro-innovation' strategy is one designed to allow suppliers scope to bring innovative solutions to the table and an opportunity to distinguish their products and services on factors other than price alone. When pro-innovation procurement is new for those involved in the evaluation process a formal document, agreed by the project team and signed off at Board level or equivalent, provides a 'touch stone' and common point of reference for the evaluation committee.

#### The role of a Pre-Qualification Questionnaire (PQQ)

The purpose of the Pre-Qualification Questionnaire is to help the contracting authority to evaluate the expertise and suitability of potential suppliers to meet the advertised requirement and determines which potential suppliers will be invited to tender. PQQs are (surprisingly) where many opportunities for innovation can be lost. Surprisingly because pilot project teams noted that little attention was paid to them and standard PQQs are the norm. In the TRFT and Erasmus MC pilots the teams took a critical look at the PQQs and adjusted them to support the drive for innovation.

**“It is easy to lose focus on innovation during a tendering process. The UEL for Future Ward pro-innovation procurement strategy helped to keep the project team aligned and focussed.”**

**Philip Ashcroft,  
Department of Health**

**“Since one of the requirements of the CEO was for the new wards to have a ‘hotel like feel’ we needed to attract suppliers familiar with high specification environments such as offices and hotels. The standard PQQ was set up to favour those suppliers with experience in the healthcare sector alone. By changing the PQQ we opened up the tender to suppliers with the expertise needed in this project.”**

**Steph Holmes,  
Head of Procurement,  
The Rotherham NHS Foundation Trust**

## ERASMUS MC - A new approach to evaluating tenders

Erasmus MC developed three award criteria for its new bed cleaning facility:

1. Total Cost of Ownership/Service,
2. Carbon Footprint, and
3. Fit with strategy of Erasmus MC organisation.

This is a radical change from normal procurement practice (with an emphasis on qualitative criteria) as these criteria would not normally play any significant role and it doesn't signal any weighing between criteria yet; all options are kept open and solutions have no predefined form!

Providers of solutions were stimulated from the first official communication to look at the whole life-cycle impact of the offered solution and look beyond the point of what they offer themselves.

By making carbon footprint an award criteria Erasmus MC sent a strong signal to the market that suppliers have an important role to play in reducing embedded carbon, both in their products and their supply chain. This was signalled at the earliest stage possible, i.e. in the market consultation document and it was constantly repeated, ultimately becoming one of the three foundations of the procurement strategy. As Erasmus MC did not have any prior experience of using embedded carbon as an award criteria, nor did the supply chain (that emerged from the market meeting day), the help of external advisors (TNO) was invaluable.

The third criteria helps to determine the impact of the proposed solution (can it be managed and is it aligned with other operations in the hospital?), its strategic fit with for example carbon reduction schemes and resource efficiency policies, and whether it will be delivered when needed and up to the required quality standards.

## Evaluation criteria

Giving the opportunity for suppliers to differentiate their offering on factors other than price is key. Price based tendering does not encourage innovation.

Sometimes innovative offers can look more expensive in the short term, but will be a better offer in the long term. Although not listed explicitly in the Procurement Regulations, criteria involving innovative solutions may be used to determine the most economically advantageous tender, where they provide an economic advantage for the contracting authority that is linked to the product or service which is the subject matter of the contract.

## Competitive Dialogue

The Competitive Dialogue procedure provides scope for client / supplier dialogue and this is invaluable when innovative solutions are being sought. It allows discussion with suppliers and innovators to determine how their solution meets the need expressed and how it can be developed to the point of supply.

“Competitive Dialogue is a procurement process that permits discussion of options with suppliers before inviting best and final offers. This supports and enables innovative thinking. You don't need to know the answer before you begin to tender. This was the first time we used this method. On the results we have seen in our pilot, I would recommend it!”

**Jeroen Veenendaal,**  
Strategic Procurement Officer  
Erasmus MC

“Competitive Dialogue was new for us but was essential in allowing innovative solutions to come forward through a well documented dialogue with suppliers. The pre-market engagement and preparation and the use of written as well as dialogue stages meant that it was not much less time-consuming than I had expected. It was a positive and highly effective process.”

**Steph Holmes,**  
Head of Procurement,  
The Rotherham NHS Foundation Trust

There are numerous sources of advice and guidance on the use of Competitive Dialogue.

The Competitive Dialogue differs fundamentally from the 'ordinary' public and restricted tenders: the greatest difference lies in the manner in which the request is made. The Competitive Dialogue begins with a question for which there is no (unequivocal) answer. The contracting authority uses the solutions submitted by the candidates to conduct a dialogue that results in an optimisation of the request and offer. When the dialogue is conducted in the appropriate manner the contracting authority receives tenders offering an optimum solution at a reasonable price and the party submitting the tender is offered an attractive contract with sufficient economic prospects.

Published by Rijksoverheid

### Creating an 'Innovation Procurement Leaders Group' in the healthcare sector

Healthcare organisations are for the most part unaware of the benefits that a proactive approach to procurement of innovative new solutions can bring. This means that opportunities for innovation are missed and problems remain unsolved in a sector that has around 15,000 hospitals in Europe, accounts for some 5% of CO<sub>2</sub> emissions and represents a huge slice of public procurement budgets.

Collaboration in procurement at national and regional level is relatively common in the healthcare sector but the objective has been to achieve economies of scale for mainly commodity items. There is limited evidence of such centralised procurement being used to create a critical mass of demand for innovation. Moreover, collaboration in procurement has rarely crossed national borders. Yet there is considerable scope for collaboration that can yield real benefits due to the underlying commonality of healthcare requirements.

EcoQUIP, launched in April 2012, is a European leadership project supported by the European Commission Lead Market Initiative.

The aim of the EcoQUIP project is to improve the efficiency, quality and environmental sustainability of healthcare through innovation procurement. The project will make progress towards this aim by creating an 'Innovation Procurement Leaders Group' of hospitals that have competence in innovation procurement and the capacity to pioneer new approaches to collaborative procurement.

You can find out more about EcoQUIP innovation procurement and collaborative procurement and register for the EcoQUIP Associates Group at: [www.ecoquip.eu](http://www.ecoquip.eu)

## 10. Use the power of healthcare spend

### The scale of the healthcare market in Europe has the capacity to stimulate real innovation in the supply chain

Don't underestimate the power of the healthcare market. The 15,000 hospitals across Europe represent a huge market in goods and services. In England alone, the national healthcare delivery organisations (NHS) will spend over €20 billion per annum on the procurement of goods and services.

The supply chain understands that what one hospital needs, other hospitals are also very likely to need. This means that if they can deliver the innovative solution that you are looking for, there will be many more potential customers. This gives them a strong business case to invest in developing new goods and services.

This business case is further helped by actively developing the wider market by collaborating with other hospitals. For example, you can reference the wider demand in your conversations with the supply chain.

#### Pilot Projects

**RAWICZ HOSPITAL** advertised its innovation oriented approach and demand for more sustainable uniforms to colleagues in other hospitals. 13 other hospitals expressed interest in the project, which represents a market demand for over 8,000 uniforms.

**ROTHERHAM HOSPITAL** approached colleagues in 5 other hospitals regarding their need for ultra efficient lighting. All of them expressed their interest and these forthcoming procurement opportunities were highlighted in the market sounding prospectus.

**ERASMUS MC** identified 7 other hospitals in the Netherlands that had a more or less identical future need. They were mentioned in the market consultation document, but more importantly, present during the market meeting day. They emphasised the need and are able to publicly sound out that a more generic solution should be developed. The supply chain responded very positively to these other echo's of the unmet need of the Erasmus MC.

The scale of the healthcare sector has the potential to drive innovation in the supply chain.

## “Communication, communication, communication”

This was one of the main recommendations that emerged from the Good Practice Workshop organised by the LCB-HEALTHCARE team in April 2012.

Participants agreed that proactive communication and a collaborative approach between suppliers, customer and the supply chain, and between customer stakeholders and departments is a key ingredient in innovation-based procurement.

“The pilot projects helped us to understand how important communication was to the success of innovation procurement projects. We now recommend that project teams for strategic procurements include a representative from the communications team, and a comprehensive communication plan is developed.”

**Steph Holmes,**  
Head of Procurement,  
The Rotherham NHS Foundation Trust

### Comments made during ‘Towards Good Practice Workshop, April 2012’

STANDARD PRACTICE	GOOD PRACTICE
No prior publication	Engage supply chain early
Short term contracts	Commitment
Buying what is affordable and available	Outcome based specifications
Renew existing contracts	Review Business Needs
Risk averse PQQ	PQQ reflects needs ie innovation
Restricted Procedure	Competitive Dialogue
Standard Terms and Conditions	Contracts reflect the solution
Months before needed	Begin early (years before)
In reality? Rare.	Whole Life costing
Adversarial relationship	Support suppliers – help them help you
Detailed specifications	Allow scope for good design
Not done	Support wider market development
Follow standard procedures without questioning	Be creative and flexible (e.g. memorandum of understanding)

Extract from presentation by Steph Holmes and Gaynor Whytes at the LCB-HEALTHCARE Good Practice Workshop, April 2012 comparing normal practice in the NHS with innovation procurement methods

## Messages from the front line

Some final thoughts from the LCB-HEALTHCARE team and our partners:

Innovation requires **EFFECTIVE LEADERSHIP** and involves a close working partnership between an organisation’s procurement team and those responsible for setting and delivering policies, targets and operations.

Provide a credible sales opportunity, in a defined timeframe, and critically allow **SUFFICIENT TIME** for the supply chain to innovate.

**LISTEN** to what the business and staff are telling you and you will begin to see where innovation is needed.

It is inevitable that there will be hurdles and difficulties in adopting new methods and in adoption of innovation, there must be a determination to overcome these and explore all opportunities. Above all – **KEEP COMMUNICATING!**

Define your requirements in terms of **OUTCOMES** to give suppliers the opportunity to innovate and put forward new ideas and approaches.

Give potential suppliers advance warning. Plan your procurements years, rather than months, in advance. Innovation takes time - **THINK AHEAD** and in procurement cycles rather than single procurements.

We need to take a **FRESH APPROACH** to innovation, planning and procurement and do all we can to support the supply chain to deliver better, future-proofed, cost-effective solutions.

**HAVE FUN!** Being positive and enthusiastic helps the process of change and supports innovation. It is hard to be an unenthusiastic innovator...

To enable innovation to be adopted successfully there must be **SUPPORT** from your CEO and Directors, and commitment from the whole project team. Be prepared for some scepticism at first and concerns about the impact on day-to-day operations.

Innovation procurement can deliver innovative ideas and **COST SAVINGS**. It all depends how you go about managing your purchasing.

Our FCP projects have opened my eyes to what is possible with a **STRATEGIC APPROACH** to procurement that questions what has gone before and enables suppliers to offer innovative solutions.

## LCB-HEALTHCARE Continuing Professional Development (CPD)

The LCB-HEALTHCARE project developed and tested a number of peer learning approaches.

These included:

- Workshops and master classes on innovation procurement in the UK, Poland, Netherlands and Norway
- Submission and delivery of conference papers
- Communities of learning exchanges
- Publication of case studies
- Testing of a guided 'learning by doing' innovation procurement programme
- Development of on-line Continuing Professional Development resources

### Communities of Learning

The LCB-HEALTHCARE Project arranged a number of exchange visits among hospitals and practitioners which proved extremely informative and inspiring, enabling exchange of information and development of frameworks for future collaboration and exchange. This approach will be developed and built upon under EcoQUIP.

The LCB-HEALTHCARE Continuing Professional (LCB-H CPD) online training tools aim to:

- Collate and embed existing and developing know-how from the LCB-HEALTHCARE pilot projects to support competence building across the European healthcare procurement network
- Enable innovation leaders to disseminate and replicate lead market procurement approaches

## LCB-HEALTHCARE Continuing Professional Development (CPD) Online Training Tools

There are two CPD Tools available:

### 1. Delivering Efficiency, Quality and Sustainability Through Innovation Procurement

- This resource draws on the experience of the LCB-HEALTHCARE pilot projects to introduce key innovation procurement concepts
- CPD Hours: qualifies for 3 CPD hours

### 2. An Introduction to Forward Commitment Procurement

- This resource provides a step-by-step summary of the FCP process.
- CPD Hours: qualifies for 3 CPD hours



Both resources are available to download from the project website: [www.lowcarbon-healthcare.eu](http://www.lowcarbon-healthcare.eu)

There is also a wealth of additional materials in our library which can also be found on the project website.

“Our 'Communities of Learning' visits broke down barriers and showed what innovation procurement can achieve.”

**Joram Nauta,**  
Pilot Project Manager, TNO for Erasmus MC

“The Peer Learning visits to the UK and the Netherlands were extremely helpful. They showed first hand the benefits of innovation procurement and inspired the Rawicz team to try new approaches which they previously felt were impossible to adopt in Poland.”

**Marcin Kautsch,**  
LCB-HEALTHCARE Co-ordinator, Poland



“We need case studies and examples to expose people to the value of pro-innovation procurement.”

**participant in the 'Creating Conditions for Innovation' workshop, May 2011, Oslo**

“Peer-to-peer exchange is invaluable.”

**participant in the 'Creating Conditions for Innovation' workshop, May 2011, Oslo**

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A second Towards Good Practice workshop was held in London in April 2012 to further the discussion and inform this publication which was launched at the EuHPN Workshop Copenhagen in October 2012.

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You can access LCB-HEALTHCARE resources and case studies at:  
[www.lowcarbon-healthcare.eu](http://www.lowcarbon-healthcare.eu)



You can join the EcoQUIP Associates Group by completing the online Continuing Professional Development module at:  
[www.ecoquip.eu](http://www.ecoquip.eu)

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