Innovation procurement in action: methods and case examples

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Overview

• About EcoQUIP
• Case examples and outcomes
• Success factors and learning

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EcoQUIP Leaders Forum on PPI-Network

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**Context**

- Challenging times....need an innovative response
- Innovation is the key to the challenges facing the healthcare sector

- **Healthcare is an ideal lead market for innovation**
  - Should be scope for replication of good ideas
  - Not everyone has to lead...

- We need to create the market conditions where innovation can thrive:
  - stimulating supplier innovation
  - early adopt innovative goods and services
  - collaborating to create market demand
  - replicating good ideas

- **Yet** current procurement practices tend to stifle innovation and lock in old solutions
- Collaboration and replication seem to be the exception
Aims?

• To demonstrate that new approaches to procurement that drive innovation can deliver new solutions, better outcomes, and increase efficiency, quality and sustainability in the healthcare sector.

• Demonstrate the value of demand led, rather than technology or product led, procurement

• Work to create a leaders group of people aware and engaged in innovation procurement

• Focus on healthcare facilities rather than clinical

• **Demonstrate that innovation procurement works**
• **Efficiency, Quality AND Sustainability**
About EcoQUIP

Bologna University Authority – St. Orsola-Malpighi Polyclinic
Erasmus University Medical Centre
Nottingham University Hospitals NHS Trust
Sucha Beskidzka Hospital
Semmelweis University Health Services Management Training Centre
The Rotherham NHS Foundation Trust
Department for Business, Innovation and Skills
Optimat Ltd
JERA Consulting Ltd
Department of Health England
European Health Property Network
Health Care Without Harm Europe
The EcoQUiP Associates Programme helps your organisation to become an innovation leader by creating opportunities for information exchange, learning and collaboration:

- Activities
  - Extension and Replication
  - Pilot innovation procurement projects

The project aims to:
- Create an innovation leader
- Enhance innovation capability
- Facilitate information exchange

The programme is open to organisations from across Europe.

EcoQUiP Newsletter #4

- Partnership project updates:
  - University of Cambridge
  - People and Place
  - Transparency

- Leadership Programme for innovation procurement in healthcare
  - Autumn 2015 – Madingly Hall, Cambridge

EcoQUiP Innovation Procurement Workshop:
Towards a Better Patient Environment and Experience

3rd EcoQUiP Innovation Procurement Workshop:
8-9 October 2015, Budapest

Interested participants are invited to contact Hayley Welsh (hayley.welsh@optimat.co.uk) to reserve a place as soon as possible.
Innovation?

"Innovation can be viewed as the application of better solutions that meet new requirements, in articulated needs, or existing market needs."

The process of translating an idea or invention into a good or service that creates value or for which customers will pay.

An idea, service or product, new to the NHS or applied in a way that is new to the NHS, which significantly improves the quality of health and care wherever it is applied.
Innovation Procurement approach

EcoQUIP defines innovation procurement as:

“Buying goods and services in a way that stimulates the supply chain to invest in developing better and more innovative goods and services to meet the unmet needs of an organisation”
Forward Commitment Procurement (FCP)

1. Identification
   - Recognise problems, unmet needs & opportunities
   - Consult with stakeholders and set up team
   - Define an outcome based requirement
   - Prepare a FCP project outline/business case for sign off
   - Wider market demand

2. Market engagement
   - Market Sounding
   - Market Sounding review & analysis
   - Supply chain feedback
   - Market Consultation
   - Market Consultation Report

3. Pro-innovation procurement
   - Develop pro-innovation procurement strategy
   - Feedback to the supply chain & stakeholders
   - Implement procurement strategy
   - Negotiate Procurement Contract
Challenges?

- Change is difficult
- Resources are stretched
- Strategic role of procurement not understood
- Risk is not rewarded
- Innovation is worrying
- Annual budget cycles
- Regulatory challenges
- Practically matching timing of procurements with H2020 calls and with other buyers
- Simple lack of awareness and capacity
Pilot Projects

DOOSAN PURECELL 400

Flexible inputs enable reliable, renewable, and cost effective energy solutions
Future Ward Solution

The opportunity?
• Ward refurbishment over 8 years
• Vision of CEO – hospital of the future

Unmet need?
• A ‘step change in the patient experience’
• Ultra efficient lighting, future ready, progressive improvements
• Cost effective - whole life costs
• Efficiency, quality and sustainability
A future ready, ultra efficient integrated patient experience, improving the efficiency of lighting and energy use within the healthcare environment.
New Solution

IMI Future Ward Pod

Patient centred ward environment incorporating ultra-efficient biodynamic lighting
Rotherham NHS Foundation Trust, UK

Outcome FCP?
• New off-site built solution
• Future ready for LED / OLED
• Same price installed as traditional refurbishment
• Lower operational cost

Innovation?
• New product on the market
• Lighting technology: LED, and OLED Lighting design
• Off-site build
• And......new SME formed
• NOTE: demonstration in the context of procurement
• WINNER – Lux Lighting Award

The IMI Ward - Design Benefits
• Personal space and privacy
• Increased storage
• Bio-dynamic lighting
• Intuitive icon lighting control
• Modular and flexible solutions

The IMI Ward - Construction Benefits
• Off-site fabrication
• Factory made quality
• Quick installation
• Same cost as traditional
• Fewer suppliers and trades to coordinate

The IMI Ward - Operational Benefits
• Reduced patient anxiety
• Local linen storage
• Easy to clean and maintain
• Reduced energy consumption / cost
• Reduced maintenance time / cost
The unmet need and opportunity?
• New hospital being built
• Old bed washer end of life and resource intensive
  • No longer produced

Unmet need?
• Clean beds – 70,000 / year
• Resource efficiency
• Carbon reduction
• Cost effective
Collaboration and Replication

New Solution

EcoQUIP
Delivering Efficiency, Quality and Sustainability in Healthcare

Fully Automated Robotic Hospital Bed Washing Unit

Environmentally sustainable and auditable bed cleaning solution
Erasmus University Medical Centre, The Netherlands

Outcome?
• Auditable bed cleaning
• Resource efficiency
• Carbon reduction (-63%)
• Lower Total Cost of Ownership (-35%)

Innovation?
• Robotic bed washing solution
• Steam jets patented
• Cross fertilization across supply chains
• and....an SME, new opportunities can be applied to other cleaning needs
• **WINNER – PPI Award 2014**
The need and opportunity?
• Budget to replace uniforms
• Uniforms heavy and costly to launder
• User consultation showed uncomfortable, poor quality, not fit for purpose

Unmet need?
• Functional, attractive, and user friendly, easy to clean, durable, cost effective and environmentally sustainable.
Eco-Textiles for Hospital Uniforms

Low carbon, environmentally sustainable hospital uniforms for staff comfort

Rawicz Hospital, Poland

Outcome?

- New modern uniforms at lower whole life costs (-20%)
- Light, comfortable and durable uniforms
- Lower carbon life-cycle
- Moisture management and better hygiene
- Environmentally sustainable eco-textile (Eucalyptus fibre)
- When compared to cotton, they:
  Use fewer pesticides and less water in production
  Have higher fibre yields per hectare
- And...a local company....
Low Carbon Solution to Maintain the Thermal Comfort of Patients
Sucha Beskidzka Hospital, Poland

- The problem?
- South facing aspect
- High summer temperatures in hospital wards
- Legal requirements to protect against direct solar radiation
- Unmet need?
- ‘cost-effective and low carbon solution to maintain the thermal comfort of patients and staff in the County Hospital in Sucha Beskidzka’

- Outcome?
- Innovative retrofitted shading solution generating power from PV panels - cost-benefit of circa €15k annually
People Centered Low Carbon Catering

Driving progressive improvements in efficiency, quality and sustainability in hospital catering services

The Rotherham NHS Foundation Trust, UK

- An innovative integrated solution for the provision of high quality patient-appropriate meals that are enjoyable, attractive, support patient recovery and is delivered as an integral part of nursing care

- Shared vision across the team

- Transformation in the patient experience and service and supplier investment (5+5 year contract)

- Saving over the first 5 years of €1 million

- Soil Association Bronze, Silver and now Gold for sustainable catering
• The problem?
• Coal fired boiler coming to end of life
• Steam distribution system over large site in need of repair
• Lack of capital for major investment

• Market dialogue explored
• The adoption of Fuel Cell CHP
• Tri-generation for cost effective cooling
• Options for energy demand management
• Non-capital financing options
• Grants and demonstration funding
Ultra Low Carbon Energy Solutions for Hospitals
Nottingham University Hospitals NHS Trust, UK

Trust Objectives

Reduce Carbon Emissions
Improve Efficiency & Reduce Energy Costs
Improve Resilience & Future Proof
DOOSAN PURECELL 400

IN: Natural Gas, Bio Gas, Hydrogen*

CLEAN EXHAUST

STEAM

DC POWER

AC POWER

OUT: Electricity

OUT: Heat

Flexible inputs enable reliable, renewable, and cost effective energy solutions
II.4) Breve descrizione della natura e dell'entità oppure del valore delle forniture o dei servizi: (per ogni categoria di servizi)

The tender will concern a soft-service facility management system structured as an integrated, innovative, sustainable solution. It combines the following activities: cleaning and sanitizing, internal waste collection, laundry services, transport and logistics of goods (biological material, medical equipment, medicines, food, office supplies and administrative materials, surgical instruments, etc...), internal transport of patients.

The Hospital intends to:
- consider the needs of patients, the medical staff, all the operators and users of the Policlinico, ensuring the utmost respect for the dignity, welfare and safety of people;
- explore alternative methods of service delivery, with greater attention to the prevention of Hospital Acquired Infections (HAIs);
- implement fully traced service processes to get real-time feedbacks in support of decisions and daily practices;
- stimulate eco-innovation in the framework of a service-oriented energy efficiency, water conservation and the reduction of carbon emissions, arising from the planned activities;
- achieve the best results being a pioneer and experimenter in testing new methodologies, products, services and processes.

The S. Orsola University Hospital aims to select a proactive partner that shall be looking for continuous improvement with reliable methods in technical, scientific, managerial, organizational and economic aspects; that improvement shall also develop a cultural growth process.

(se noto, indicare solo in cifre) Valore stimato, IVA esclusa: [ ]

Valuta:

“"The purpose of the pre-consultation process of the market is to obtain feedback from the whole supply chain of providers with regard to feasible and sustainable solutions, and at the same time to achieve an innovative contract that allows us to respond effectively to both the identified and the unmet needs. The aim is to enhance a continuous improvement process for service quality and budget".

Marco Storchi, Director of SSP People-centered Soft Services.
Outcomes

• Quality - Operational improvements
• Efficiency - Cost saving, better value
• Sustainability - Environmental benefits
• New solutions to the market
• Markets for new technology
• SME engagement
• EcoQUIP Leadership Group
  • Mobilised customers – several follow on projects

Key success factor =

Most important success factor =

People who believe in better
Thank you

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