Putting sustainable development into practice: hospital food procurement in Wales

Claire Bloomfield*

Department of Planning and Geography, Cardiff University, Cardiff, UK
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A case study of hospital food procurement demonstrates how change is being brought about to meet the seemingly conflicting aims of sustainability and low cost within the perceived constraints of European Union procurement regulations. The Welsh government, a pioneer in embedding sustainable development into its constitution, seeks to put those principles into practice by using public services to support the regional economy. Eschewing competition, it has structured the National Health Service (NHS) to remain in public ownership, devolving delivery to subordinate bodies to meet patients’ needs, whilst collaborating in the development of more integrated demand-side structures. A case study of the 2012 yoghurt contract demonstrates how the integration of the Nutritional Care Pathway (NCP), nutritional standards and an All Wales menu framework have enabled relocalization of the yoghurt supply chain, whilst enabling innovation further to support the local economy.

Introduction

Empirical studies of sustainable public food procurement highlight that ‘sustainability’ and European Union regulation are frequently cited as conflicting problems for policy implementation: the failure to meet economic, environmental and social objectives from public purchasing activities (Jochelson, 2005; Morgan & Sonnino, 2008; Rimmington, Carlton, & Hawkins, 2005). This is supported by more general public procurement research into practitioners’ perceptions of barriers to good practice in the public sector (Brammer & Walker, 2011; Preuss, 2007, 2009; Preuss & Walker, 2011; Walker & Brammer, 2009). These studies invariably explore policy agendas framed in terms of the relocalization of supply chains to strengthen economic, social and environmental ‘resilience’,1 the need to prioritize cost over qualitative measures in public purchasing and lack of clarity around the meaning of sustainable development.

Studies of sustainable public food procurement have been heavily biased towards school food and the local authority sector, whilst studies relating to the provision of hospital meals have tended to consider discrete parts, rather than adopt a holistic approach (Hartwell & Edwards, 2003; Hartwell, Edwards, & Beavis, 2007; Hartwell, Edwards, & Symonds, 2006; Jochelson, 2005; Mikkeslen et al., & Sylvest 2012; Morgan & Sonnino, 2008; Rimmington et al., 2005; Sonnino, 2009; Sonnino & McWilliam, 2011).

There is a lack of empirical research into the strategic view: how the structures and processes of governance for the provision of hospital food enable and constrain the
ability of actors to frame and put sustainability into practice across the complex institutional structures of the National Health Service (NHS).

This paper aims to demonstrate, through the use of a case study, how practitioners are meeting these conflicting challenges. By reducing systemic waste in organizational processes and physical waste in meal production, NHS Wales has been able to stimulate regional economic activity and supply chain innovation to support the regional dairy sector, within the perceived constraints of a European Union regulatory framework for public procurement.

Methods
The absence of an institutional view in the literature, the complexity of the structures of the NHS context and accumulated evidence from research over many years that public sector structures, competing conceptions of sustainability and European Union regulation are primary barriers to relocalizing supply chains (Brammer & Walker, 2011; Morgan & Sonnino, 2008; Rimmington et al., 2005; Walker & Brammer, 2009) guided the research towards a case study and in-depth qualitative methods.

As the study aimed to understand ‘why’ and ‘how’ good practice comes about, a process perspective was adopted to understand the mechanisms of change. The case study needed to accommodate both differentiation, in terms of the devolution of meal preparation and service to each of the seven local health boards (LHBs), and integration, in terms of the single body responsible for sourcing and contracting of food products. The NHS as the primary case study reflected this complexity, whilst an embedded case study of a particular dairy contract was selected for its relevance to regional primary production, dairy accounting for one-third of agricultural outputs in Wales (SDR 31/2015). This also enabled the research to follow a live contract to the point of award.

Research included documentary analysis of the context: European Union policy on public procurement; Welsh Government policy and strategy on public service delivery and sustainable development; the structures, policies and strategies of NHS Wales; the role of LHBs; and, critically in the case of hospital food procurement, the development of the specialist centralized procurement services (PS).

Analysis of this literature informed in-depth interviews with key informants within relevant Welsh government departments: the Wales Audit Office, NHS Wales, two LHBs selected for their different approaches to producing and serving meals, and PS. Twenty-three individuals were interviewed over a period of 12 months, key informants on more than one occasion. This was supplemented by observations of meal production and food service in hospitals within the two selected LHBs.

Interview data were transcribed and open coded using ATLAS.ti software. Timelines were constructed from documents, whilst narratives were constructed for individual and collective stories of experiences of change from the interview transcriptions. Heuristics were developed from these data to generate potential mechanisms that were tested through further collection and analysis of data.

The Nutritional Care Pathway (NCP)
Public services in Wales reflect a constitutional commitment to sustainable development as well-being, and are structured within an anti-competitive, citizen-centred framework, the aim of which is to keep economic activity, as far as possible, within the regional economy. The seven LHBs are spatially aligned with local administrative boundaries
but retain formal structural ties with Government. To promote the principles of lowest cost, shared services – such as procurement – are formally centralized into a body governed by the LHBs. These formal structures are supported by professional and inter-professional collaborative networks from which innovative changes have emerged to improve the quality and sustainability of hospital food.

Figure 1 illustrates the governance framework for the provision of hospital meals within NHS Wales.

The NCP is an example of political and cultural commitment to embedding nutrition as a priority across NHS Wales and has been a critical step in improving the effectiveness of nutritional care.

Its development followed an ‘All Wales’ collaborative approach between government and all NHS organizations that aimed to eliminate differences between standards of care, the quality of meals and the mealtime experience across NHS Wales. Most
importantly, the standard was set as best practice to embed quality, for effectiveness as a driver of demand for food products.

As part of a move to ensure effective leadership at ward level, the assessment and monitoring of patients’ nutritional status is mandated across NHS bodies, nurses having clear organizational and professional accountability. This is supported by standardized documentation and accountability mechanisms that focus upon action, not just compliance. Mealtimes are also protected from unnecessary medical interventions, and carers and relatives are encouraged to support those patients who need assistance. The primary intention is, however, to improve the patient experience rather than to save professional time or cost.

Devolution of leadership to ward level has enabled process innovation. One of the LHBs studied has standardized its entire menu across all hospitals, incurring significant short-term expenditure with expected longer-term efficiencies from centralizing production and using the latest technologies to regenerate the meals on the wards, overcoming some of the reported negative aspects of this model of meal provision. Interviewees reported the relocation of catering staff onto the wards as a positive experience for both staff and patients.

Interviews and observations in the second LHB case study revealed different ward-level changes. Patients’ nutritional vulnerability is constantly highlighted by using traffic light signage at the bedside. Staffing structures have been redesigned to prioritize food within daily routines and as part of the patient experience, not just as calorific intake. The organization off food service has been redesigned and shortened to free time to support those patients needing extra assistance. The head chef holds a managerial rather than technical role, freeing time to be available on wards at mealtimes.

Improvements in effectiveness have been demonstrated by increased patient and staff satisfaction in internally produced surveys. Efficiency savings have also been reported. Nurses interviewed reported a reduction in nutritional waste by ensuring that patients are provided with the right food, which remains hot and visually appetizing, and patients get sufficient support to eat. Caterers commented that physical waste is also being reduced by minimizing over-catered waste.

Institutional collaboration has resulted in technical nutritional standards for in-patient food and the development of the ‘All Wales’ menu framework of standardized recipes, which sets the range and quantity of ingredients to be purchased. Aligning recipes and menus with seasonal and locally produced ingredients also provides a legitimate basis for local sourcing and contracting within the perceived confines of European Union procurement regulation.

**Sustainability in the supply chain: sourcing and contracting of yoghurt**

Until recent NHS Wales restructuring, sourcing and purchasing had been an ad-hoc arrangement of hospital-based, LHB and centralized purchasing. This resulted in duplication of contracts and associated management costs. The Welsh government Food Purchasing Survey also revealed that only 42% of hospital food was purchased from the central contracts (Bloomfield, 2013).

Sourcing, contracting and payments were formally centralized within PS in 2012, creating opportunities for further efficiency savings. Simplified contract frameworks continue to be developed, reducing both risk to suppliers and waste within the supply chain. They also enable contracts to be planned to support the regional economy through shorter food chains that support rural communities and Welsh small and
medium-sized enterprises (SMEs) within European Union procurement regulations that prohibit origin as a criterion for awarding public contracts.

Changes to PS procurement standardized activities have included a review of sustainability in their procurement processes using the Sustainable Procurement Assessment Framework (SPAF). This contributed to generic changes, such as specifying the most economically advantageous, rather than lowest cost, in award criteria. Standard contract terms were reviewed to include a requirement to use recycled packaging, reducing landfill waste. Using sustainability risk assessment (SRA) also enabled the team to identify opportunities for local sourcing in individual contracts.

The SPAF provided a legitimate reason for challenging established practices, whilst the SRA highlighted an opportunity to support the regional dairy industry. The existing dairy contract was held by a UK-based, rather than a Welsh-based, wholesaler, resulting in leakage of public funds outside of the regional economy. Having identified the presence of SME yoghurt producers within Wales, PS wanted to develop a realistic opportunity for SMEs to bid successfully for the contract. Procurement staff secured development funding from outside of the NHS and worked with Forum for the Future, a non-governmental sustainability champion, to help them translate their initial ideas and aspirations into practice.

Forum for the Future provided case studies of good practice from the private sector and helped PS to review their own processes, research the regional dairy market and understand the SME supplier perspective. The conclusion reached by PS from this research was that additional value for money might be gained from a more networked, localized supply chain centred on regional SMEs. The requirement for a single supplier to deliver directly to over 100 sites was found to be a particular barrier to SME participation.

Their findings from the collaboration with Forum for the Future led PS to adopt a more flexible approach than previously. A single, rather than two-stage tender procedure was adopted. The nutritional standards set the technical qualification criteria, whilst adopting the most economically advantageous tender for evaluation enabled assessment of taste, flavour and texture to be included as qualitative elements of the tender assessment. A slightly more relaxed approach was taken to food safety accreditation, in line with the relatively low risk for yoghurt compared with, say, raw meat, and customer service and ability to set a fixed price were felt to be supportive to SME suppliers. Critically, the contract was designed to include flexible lots, aligned with the LHB boundaries and the existing Wales chilled distribution network was opened to the successful bidder at a fixed cost.

Four Welsh SMEs submitted bids. The successful regional SME producer operates collaboratively within an existing dairy business, uses locally produced milk and works in partnership with an existing NHS milk supply network to enable delivery direct to hospitals across the region. They are also working with LHBs in the development of a new line of yoghurt-based drinks to support nutritional care of more vulnerable patients.

In acknowledgement of good practice, the PS team were professionally commended for innovation in the sourcing and contracting element of this contract.

Conclusions

Achieving sustainable development and best value within the perceived confines of European Union regulation, it is argued in this paper, is not simply about adopting contract terms such as using recycled materials and reducing waste, although these remain
vital elements of a sustainable supply chain. Neither, as the evidence from this research suggests, is it about government directives that place sustainability, in this case relocalizing supply chains, within policy and strategy, devolving responsibility to others to deliver. Overcoming perceptions of conflicting priorities between sustainability and best value appears to be conditional upon developing and embedding qualitative values for effectiveness to drive cost-efficiency at the front line, but also collaborating widely to develop a shared vision that can be put into practice.

The underlying principles behind European Union procurement regulation are fair and open competition and the provision of hospital food cannot be isolated from market forces. Although some environmental and equality terms can be standardized within contract terms, others need to be tailored towards specific product-related markets in order to achieve policy priorities. This is interpreted in NHS Wales as supporting well-being and environmental objectives by supporting local economic activity and keeping regional public expenditure within the regional economy.

The aim of this paper was, however, to present more than the outcomes and rationale behind good practice in sustainable public food procurement, but to understand how such good practice comes into being. It suggests that sustainable public procurement needs to be placed in the institutional context to understand the connections between competing notions of sustainability or sustainable development as a political agenda for relocalization and best value as something more than merely lowest cost.

There needs to be an approach to public procurement that encourages leadership and learning through governance structures that guide and steer agency towards collaboration, enabling innovation rather than mandating models or systems of practice. The governance frameworks for nutritional care within NHS Wales demonstrate how a framework of technical standards to ensure fitness for purpose work alongside qualitative concerns that harness the needs of both user and supplier to be the preconditions of lowest cost.

Whilst the structures of NHS Wales facilitate leadership and learning, the NCP, nutritional standards, menu framework or yoghurt contract would not have come about without agency: both vertical and horizontal collaboration across the complex structures of healthcare governance.

This case study challenges perceptions that European Union regulation is a primary barrier to relocalization of supply chains. Although Morgan and Sonnino (2008) demonstrate that, in the case of school food, practitioners need to be creative and work within the perceived constraints of markets, this paper suggests that understanding and collaborating with local markets can foster the conditions for SMEs to bid successfully for public contracts.

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Notes
1. In this context ‘resilience’ is used by authors in a similar sense to ‘sustainability’: economic
development, social cohesion and environmental protection.
2. Framework contracts require the supplier to have the full range of products available but do
not guarantee a minimum spend. Reducing the risk is intended to secure a lower price. Some
products, such as yoghurt, are produced in pots of a particular size rather than a standard
retail size.
3. Larger distributors are less likely to be able to fix their costs due to more variable overheads.

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