

# Values-based food procurement in hospitals: the role of health care group purchasing organizations

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**Abstract** In alignment with stated social, health, and environmental values, hundreds of hospitals in the United States are purchasing local, organic, and other alternative foods. Due to the logistical and economic constraints associated with feeding hundreds to thousands of people every day, new food procurement initiatives in hospitals grapple with integrating conventional supply chain norms of efficiency, standardization, and affordability while meeting the diverse values driving them such as mutual benefit between supply chain members, environmental stewardship, and social equity. This paper provides empirical data and analysis on emerging *values-based supply chains* in hospitals that attempt to meet both the scale-based requirements and values-based goals of alternative food procurement initiatives. In particular, it examines tensions among industrial, economic, and alternative agrifood values in relation to a particular set of hospital supply chain players called Group Purchasing Organizations (GPOs). Hospital membership in GPOs in the United States is ubiquitous, and 80–90 % of a hospital's foodservice procurement comes through GPO channels in keeping with contract terms. GPO-governed supply chains are deeply rooted in industrial and commercial norms, in other words, price competition, economic efficiency, and forces of standardization through adherence to technical and quality standards. The bulk of alternative food procurement initiatives in the health care sector currently occur outside of the GPO–hospital relationship, however, over 90 % of hospital foodservice directors interviewed for this research expressed a desire to increase

sustainable food procurement through their GPO. This study finds that, if alternative agrifood efforts in the health care sector are to integrate with GPO-governed supply chains without losing the robustness of the original values and goals that brought them into being, concerns related to supply chain structure, transparency and traceability of alternative food attributes, and alignment of definitions of *local* and *sustainable* food between all supply chain members will need to be addressed. This study also details points of flexibility in health care food supply chains and the potential for hospitals to create purchasing and informational alliances around common food goals in order to create new, values-based supply chain relationships both within and beyond GPO procurement channels.

**Keywords** Farm to institution · Farm to hospital · Alternative agrifood movements · Values-based supply chains · Conventionalization

## Abbreviations

GPO	Group Purchasing Organization
HCWH	Health Care Without Harm
HFHC	Healthy Food in Health Care
RFI	Request for information
RFP	Request for proposals
US	United States

## Introduction

Thousands of schools, colleges, and hospitals across the country have begun to prioritize the procurement of sustainably-produced food and to align their definitions of healthy and good food with alternative agrifood movement

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principles. *Sustainable* and *alternative* in this context refer to the wide variety of food initiatives that institutions have undertaken in association with stated health, community, and environmental goals; they are used to distinguish new values-based procurement strategies from business-as-usual procurement (HCWH n.d.a.).

The Farm to School Network reports involvement from approximately 40,000 school districts across all fifty states (NFSN n.d.), and the Real Food Challenge reports influencing \$60 million worth of college food spending on “local, fair, sustainable, and humane food” (RFC n.d.). Since 2005, nearly 550 hospitals have signed the *Healthy Food in Health Care Pledge* which states that “for the consumers who eat it, the workers who produce it, and the ecosystems that sustain us, healthy food must be defined not only by nutritional quality, but equally by a food system that is economically viable, environmentally sustainable, and supportive of human dignity and justice” (HFHC n.d.). In 2011, thirteen of the largest health systems in the country collaborated in the development of the Healthier Hospitals Initiative *Healthier Food Challenge* based on the same environmental nutrition approach to healthy food (HHI n.d.). Over 1,000 hospitals participate in these two campaigns, representing approximately 17 % of the nation’s more than 5,700 hospitals (AHA n.d.).

To date, the *farm-to-institution* literature examining this phenomenon has focused on K-12 schools and colleges (Strohbehn and Gregoire 2003; Friedmann 2007; Vogt and Kaiser 2008; Clark et al. 2011; Conner et al. 2011; Diamond and Barham 2011; Feenstra et al. 2011). With the exception of an initial inquiry by Sachs and Feenstra (2008), the research reported here is the first scholarship focused specifically on alternative agrifood purchasing in the health care sector.

#### Values-based supply chains

Due to the logistical and economic constraints associated with feeding hundreds to thousands of people every day, farm-to-institution models grapple with integrating conventional supply chain norms of efficiency, standardization, and affordability while meeting the diverse values driving them such as mutual benefit between supply chain members, environmental stewardship, and social equity (Feenstra et al. 2011; Klein 2012). An emerging *values-based supply chain* literature explores opportunities and constraints associated with attempting to meet both the scale-based requirements and values-based goals of farm-to-institution initiatives (Stevenson and Pirog 2008; Diamond and Barham 2011; Lerman 2012).

Examination of new values-based procurement in institutions necessarily moves the alternative agrifood conversation beyond its historical focus on small-scale

networks such as farmers’ markets and Community Supported Agriculture. The leap in scale from an individual buying three onions at a farmers’ market to a hospital buying three hundred cases of local onions presents an entirely different set of challenges and relationships. Here, a developing literature on the *agriculture of the middle*—meaning mid-scale farmers and mid-level food system infrastructure—details the importance of engaging supply chain intermediaries such as distributors and processors in the alternative agrifood movement in order to meet the needs of large-scale buyers like hospitals and schools (Kirschenmann et al. 2008; Lyson et al. 2008).

Yet, analysis has focused on the development of parallel or alternative procurement pathways, such as *food hubs* that have purposefully designed their operations to incorporate alternative agrifood values (Barham et al. 2012). Can values-based procurement initiatives in institutions integrate with conventional supply chains while maintaining the robustness of the values and goals that motivate them?

The scholarship that provides the greatest insight on this question has focused not on institutional purchasers, but on retailers. Various authors indicate an inverse relationship between the level of integration of alternative products with conventional supply chains and the maintenance of alternative agrifood values within those networks. For example, DeLind (2011) argues that as corporations like Wal-Mart, Meijers, and McDonalds seek to capitalize on consumer interest in local food, they recreate the conditions the movement was designed to overcome, dictating standards, varieties, quantities, growing conditions, and ultimately purchase price to farmers. In her analysis of the globalization of organic agrifood networks, Reynolds (2004) argues that the growth of organic markets has fostered the rise of conventional agro-industrial norms, practices, and market relations. In particular, she notes the power of supermarkets like Tesco in the United Kingdom and agrifood corporations like Heinz, Gerber, and General Mills in the United States (US) to dictate terms for food suppliers and to pull product through conventional distribution chains that uphold industrial and commercial relations rooted in efficiency, standardization, and price competitiveness.

Likewise, Guthman (2004) notes the paradoxes that the organic food movement encountered as it expanded into industrial capitalist systems of production, replicating the practices that it set out to oppose. She is joined by a number of scholars who argue that formal, legally-sanctioned organic certifications that have facilitated the uptake of organic products into large-scale markets have opened the door for the *conventionalization* of organic agriculture, undermining the original holistic norms and principles of the movement (Lockeretz and Lund 2003; Courville 2006).

In contrast, Lerman (2013) finds a mix of values-based and market-based factors shaping supply chain relationships between grocers, distributors, and small-scale farmers supplying farm-identified produce in Northern California. While the power of grocers and distributors to determine price and quality standards often serves as the strongest governing force, all members reported feeling trust, transparency, and equity among supply chain members, albeit to varied levels.

This paper bridges the scholarship on retailers with the farm-to-institution and values-based supply chain literatures. At the heart of redefining *value* in values-based supply chains is the incorporation of factors other than price in supply chain coordination, including social, health, and environmental values (Stevenson and Pirog 2008; Diamond and Barham 2011; Feenstra et al. 2011). The research reported here indicates that hospital food procurement systems, like those of major retailers, undermine the underlying values and goals of alternative agrifood initiatives. At the same time, while price and efficiency remain strong coordinating factors that can override other values, this research demonstrates instances where they have become just two in a set of decision-making criteria that include evaluation of health, social, or environmental benefits.

Unlike retailers, the majority of hospitals in the US are public or nonprofit, mission-driven organizations (AHA n.d.). Time and again, foodservice directors interviewed for this research called on their facility's healing mission as the rationale for new food procurement initiatives, demonstrating a cultural belief within the health care sector that hospitals can and should act as advocates for positive change. As the American Medical Association asserts, "It is essential that health care organizations become both models and advocates of healthy, sustainable food systems that promote wellness and that 'first do no harm'" (AMA 2008, p. 1). Thus, hospitals may provide an opportunity to combine the market power of large-scale purchasing with the moral concerns of alternative consumers.

Finally, analysis of the challenges facing values-based procurement in institutions has largely focused on in-house foodservice constraints such as lack of kitchen space and cooking skills, limited budgets, the need for large and consistent product volumes, logistical issues related to preparing and serving mass quantities of food, and the need to adhere to public policies related to food safety and nutrition (e.g. Strohbehn and Gregoire 2003; Vogt and Kaiser 2008). This work looks beyond hospital walls. Specifically, it examines the relationship between hospitals and Group Purchasing Organizations (GPOs). GPOs are among the most powerful actors in health care supply chains, yet they've received little to no attention in the academic or activist literature. This work is the first to

examine the opportunities and obstacles that health care GPOs pose to alternative agrifood initiatives.

### Group purchasing organizations

GPOs act as gatekeepers to the health care market by negotiating transactions with the manufacturers, wholesalers and distributors that supply the products a hospital needs to function, from medical equipment like catheters and computed tomography scan machines to bulk supplies like cotton swabs and latex gloves, to food and foodservice supplies. GPOs aim to aggregate member hospitals' purchasing power to obtain lower prices and to eliminate duplicative transaction costs.<sup>1</sup> Figure 1 illustrates the role GPOs play in hospital food supply chains. While hospitals may negotiate purchases directly with other supply chain members such as producers, distributors, or manufacturers, according to foodservice directors interviewed, 80–90 % of their procurement comes through GPO channels in keeping with contract terms.

Hospital membership in GPOs in the US is ubiquitous; according to industry data, 96 % of all acute-care hospitals and 98 % of all community hospitals hold at least one GPO membership (HSCA n.d.). Procurement through GPOs represented 73 % of all non-labor hospital purchases in 2008 in the US, totaling over \$108 billion (GAO 2010).

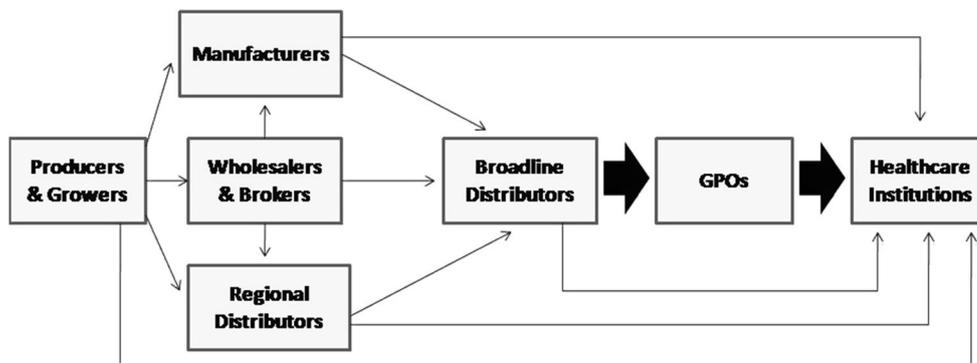
As discussed in more detail below, GPO-governed supply chains are deeply rooted in industrial and commercial norms, in other words, price competition, efficiency, and forces of standardization through adherence to technical and quality standards such as Good Agriculture Practices.<sup>2</sup> They are highly consolidated and dominated by national food distributors like Sysco and major corporate food manufactures such as Tyson, Nestle, Kraft, and Dole.

The relationship between hospitals and GPOs highlights the tensions that arise between hospitals' new food goals rooted in social, health, and environmental values and their reliance on the efficiency, affordability, and standardization provided by an industrialized food system. By examining this tension, this paper provides insight about the potential for the alternative agrifood movement to scale up to meet institutional buyers' needs while maintaining the robustness of the original values and goals that brought it into being.

<sup>1</sup> The GPO industry reports saving the health care sector billions annually (Goldenberg and King 2009). However, the cost-savings benefit of GPOs is controversial (GAO 2002; Werner 2002; Litan and Singer 2010).

<sup>2</sup> There are numerous competing GAP standards; however all put forward a set of procedures and criteria by which farms can be certified "safe." They are typically voluntary programs utilized by growers and packers to satisfy contractual requirements with retail and foodservice buyers.

**Fig. 1** Generic outline of hospital food supply chain. Arrows indicate product flow



This research identifies challenges related to supply chain structure, transparency and traceability of alternative food attributes, and alignment of definitions of *local* and *sustainable* food between hospitals, GPOs, and their corresponding distributors. Furthermore, this inquiry demonstrates that local and regional procurement raise some of the deepest tensions within hospital supply chains since the local food movement aims to change the *structure* of the food system to create shorter, more direct supply chains rather than substitute sustainable for conventional products, therefore clashing with institutional foodservice norms of standardization and efficiency.

At the same time, this research also demonstrates points of flexibility in health care food supply chains and the potential for hospitals to create purchasing and informational alliances around common food goals in order to create new, values-based supply chain relationships, both within and beyond GPO procurement channels. The experience of leading hospitals provides models that incorporate both industrial values of efficiency and standardization with environmental, health, and social values.

## Methods

This paper is based on 3 years of research comprised of semi-structured interviews, participant observation, a hospital survey, and literature analysis. The overarching question this research sought to address is whether it is possible for alternative food procurement initiatives in the health care sector to integrate with a supply chain governed strongly by industrial and market norms and operational structures without losing the robustness of the underlying social and environmental values and goals that brought those initiatives into being. More specifically, I examined structures and processes governing the hospital–GPO relationship related to communication, economic incentives, contracts, and the broader food supply chain.

I determined that semi-structured interviews with representatives from across the food supply chain, with a focus

on hospital representatives, was the best method to gather nuanced insight about the hospital–GPO relationship not found in official documents and analyses and to ascertain the challenges and successes of hospitals' attempts to shift to alternative food procurement as they were playing out on the ground. I conducted 80 interviews with individuals representing various aspects of hospital food supply chains: 36 interviews with hospital staff related to foodservice including foodservice directors, purchasing directors, executive chefs, and dietitians; 22 with non-governmental organizations working on alternative food procurement in the health care sector; 15 with supply chain intermediaries including GPOs, national broadline distributors, regional distributors, and alternative food hubs; 3 with state and national government agencies; and 4 with producers. Interviews represent the national scope of the movement, but were weighted toward the West Coast: 36 in California, 13 in Oregon/Washington, 19 in the Midwest, 7 on the East Coast, and 5 of national representatives.

Literature analysis included examination of the trade journals *Food Management* and *FoodService Director*, as well as publications and websites produced by hospitals, supply chain intermediaries, health professional associations, and non-governmental organizations. I also designed and disseminated a survey of 112 California hospitals participating in the non-profit coalition Health Care Without Harm's (HCWH) *Healthy Food in Health Care Program*; 85 hospitals responded representing a 75.8 % response rate. Participant observation included involvement in over 70 conference calls, tracking of 2 related listservs, and attendance at 1 national and 6 regional *Healthy Food in Health Care* conferences.<sup>3</sup>

<sup>3</sup> I have been directly involved with the Health Care Without Harm coalition through a member organization, San Francisco Bay Area Physicians for Social Responsibility. I was hired as an independent consultant and then Senior Program Associate in 2011 and 2013 respectively. Participatory research theory has provided the necessary framework to guide a self-reflexive relationship to my engagement in the subject of my research (Minkler and Wallerstein 2003; Greenwood and Levin 2007).

## Background

The alternative food movement goes to the hospital

An emerging network of hospitals, health care professionals, foodservice directors, chefs, health professional associations, and nonprofit organizations has coalesced in what can be called the *Healthy Food in Health Care* (HFHC) movement.<sup>4</sup> These actors are drawing on a growing body of scientific data on the public health impacts of conventional, industrial food production, distribution, processing, and consumption to make both moral and economic claims for the involvement of the health care sector in food system change. As just one example, they assert that the health care sector treats the downstream health burden of agricultural pesticide use in the form of rising rates of cancers, neurodevelopmental and reproductive disorders, asthma, and Parkinson's (Sutton et al. 2011). HFHC advocates argue that the industrial food system, driven, in their words, by "efficiency, durability, and marketability," has resulted in negative health, social and environmental outcomes, including the proliferation of antibiotic resistant bacteria; neurodegenerative diseases, cancers, asthma, and water contamination associated with pesticides; and the loss of small and mid-size family farmers (Schettler 2004), as well as greenhouse gas emissions, rising rates of chronic diseases like obesity and diabetes, and increased incidence of foodborne pathogens (Harvie et al. 2009).

HFHC advocates are leveraging this data to inspire and legitimize new health care food procurement initiatives aligned with alternative agrifood values. In putting their ideals into action, hospitals are seeking out food that is local, organic, fair trade, whole rather than processed, produced by family farmers, and free of a host of agricultural technologies such as antibiotics, growth hormones, and genetic modification. They are also hosting farmers' markets on hospital grounds and building relationships with farmer cooperatives, food hubs, and regional distributors and processors (Harvie 2006; Sachs and Feenstra 2008; Sirois et al. 2013).

HFHC actors are redefining healthy food to include social and environmental factors of production, processing, and distribution. The systems-based framing of the *Healthy Food in Health Care Pledge* generated by HCWH has spread dramatically within the health care sector (HFHC n.d.). It has been endorsed in policy statements issued by the American Medical Association, American Public

Health Association, American Academy of Nutrition and Dietetics, and American Nurses Association, among others, and it forms the basis of the *Healthy Food Challenge* of the Healthier Hospitals Initiative developed in 2011 by thirteen of the most influential health systems in the country (HHI n.d.). This turn toward food that embodies social, health, and environmental values represents a movement from the *industrial* world, with its focus on standardization and the logic of mass commodity production, to *domestic* and *civic* worlds, where "trust, tradition and place support more differentiated, localized and ecological products and forms of economic organization" (Goodman 2003, p. 1; see also Morgan et al. 2006). My survey of 85 California hospitals participating in the *Healthy Food in Health Care Program* found that 91 % purchase some local and/or sustainable food, including, *inter alia*, organic (62 %), rBGH-free dairy (73 %), and animal products raised without antibiotics (48 %). A 2012 trade journal survey of hospital foodservice directors demonstrates that these trends are sector-wide; of fifty hospitals surveyed, 30 % report purchasing some organic products in the previous year, and all report purchasing local foods (FSD 2012).

## GPOs and alternative food procurement

There are indications that GPOs are responding to market trends and to their customers' interest in sustainable and local foods. For example, the GPO FoodBuy (a division of Compass Group, the largest foodservice contract company in the world) has developed purchasing standards for sustainably-farmed shrimp in collaboration with the Monterey Bay Aquarium's Seafood Watch program, and the GPO MedAssets offers organic options through a collaboration with independent distributor United Natural Foods, Inc. In 2006, *FoodService Director Magazine* noted that organic food purchasing "appeared on GPOs' radar screens" as a result of members' requests, prompting two of the top firms to compile portfolios of organic product lines. They further noted that one of the largest GPOs, Novation, was exploring ways to identify and create purchasing agreements with local farmers (FSD 2006).

The highly consolidated structure of GPO-governed food supply chains points to the potential industrializing effects of their shifts toward alternative food procurement. The industry is highly oligopolistic; although over six hundred GPOs are in operation, the six largest account for almost 90 % of all GPO-negotiated hospital purchases (GAO 2010). The largest GPOs represent thousands of hospitals and health care sites. The two largest by number of covered hospitals and purchasing volumes, Novation and Premier, account for 60 % of the market. Other market-dominant GPOs include MedAssets, HealthTrust, AmeriNet and InSource. Critics claim that GPOs hold

<sup>4</sup> I identify the phenomenon of alternative food efforts in the health care sector as the *healthy food in health care* movement in keeping with HVWH, which has seven organizations are leading the movement in various regions of the country.

disproportionate influence over both buyers and sellers, serving to consolidate their own market power and generate excessive profits (Sethi 2009). According to a 2002 article in *Healthcare Purchasing News*, GPOs are the “strongest, the most profitable, and in the best position regardless of the state of the market” among all health care food supply chain players (Werner 2002).

Although the first health care GPOs emerged in the early 1900s, their status as market dominant entities dates to the 1980s when changes in Medicare, Medicaid and insurance company reimbursement structures led to increased cost containment pressures on hospitals and health systems (Pritchard 2012). In 1987, GPOs were granted exemption from federal anti-kickback and antitrust legislation with the intended goal of promoting their ability to assist hospitals in negotiating with suppliers, leading to rapid industry growth (Sethi 2009).<sup>5</sup>

GPOs negotiate product prices and procurement. They contract with *broadline distributors* which provide services such as product sourcing, storage, and distribution. Broadline distributors service a wide variety of accounts with a wide variety of products as opposed to distributors that focus on specific categories, like produce, or on specific markets, like restaurants. Broadline distributors’ online catalogues offer the ultimate in one-stop-shopping with an enormous range of products from frozen peas and pre-made pies to table linens and microwaves. There may be a high degree of choice within individual product categories, for example, ten different types of hamburger patties may be offered or onions may be available diced by the quarter-, half-, and three quarters-inch.

Broadline distributors source both food and foodservice supplies from producers, manufacturers, wholesalers, and other distributors, store these products in regional warehouses and deliver them to institutions in bulk loads (Sachs and Feenstra 2008). Hospitals typically receive shipments from their broadline distributor three to 5 days per week, and the majority of items can arrive at the hospital within 24 h of ordering. Most products are pre-processed and ready to serve, for example, pre-washed lettuce mixes or heat-and-serve lasagna trays.

Exemptions from anti-trust regulations have allowed GPOs to create sole-source contracts with broadline distributors, leading to consolidation in the supply chain. In foodservice, the largest GPOs have moved to two to 3-year sole-source contracts with two national broadline distributors, US Foods and Sysco. In December 2013, Sysco announced acquisition of US Foods; after the merger, it will account for a quarter of the American market (The Economist 2013). Thus, in accordance with GPO contracts,

most hospitals spend the majority of their food budget through a single distributor. However, some GPOs such as Amerinet and MedAssets maintain a more flexible sourcing model, contracting with multiple distributors.

As a result of exemptions from anti-kickback legislation, GPOs are allowed to charge administrative fees to producers and manufacturers. These fees, which can be considered a kickback, represent the bulk of a GPO’s revenue. After covering operating costs, a portion of administrative fees charged to vendors are typically distributed to hospitals in the form of a rebate check or a credit on their account. These rebates act as financial incentives to hospitals to “stay on contract,” in other words, to purchase as much product as possible through the GPO supply stream as possible. The categories and tiers of a rebate system can be very complicated and are marked with some degree of opaqueness; no hospital representative interviewed for this research was able to explain exactly how their rebates were calculated, and GPO representatives interviewed did not offer clarification. In general, the greater the volume of GPO-contracted items hospitals buy, the higher the rebates (Johnston and Rooney 2011; Pritchard 2012). GPO contracts also typically offer bundled discounts that allow hospitals to pay a lower price for several products purchased together from the same supplier than when purchased separately.

The exemptions have come under a great deal of public scrutiny in the past decade. Critics point out that the administrative fees could create conflicts of interest that impede GPOs’ ability to choose the best, least-cost products for health care institutions, since the groups are being funded by the companies that they are supposed to evaluate objectively and their profits are tied to the volume of sales generated (Bogdanich et al. 2002; Sethi 2009). A series of Congressional hearings resulted in a voluntary, industry-defined Code of Conduct, while three bills seeking to regulate potential antitrust behavior in the industry have not come to fruition (GAO 2010).

The structure of GPO-governed health care supply chains raises a number of important questions that are explored below. Is it possible for alternative food procurement initiatives to integrate with a supply chain governed so strongly by industrial and market norms and operational structures without losing the robustness of their underlying social and environmental values and goals? Given that the HFHC movement and conventional hospital food procurement systems are guided by divergent underlying values which shape different modes of speaking about, understanding, and defining what constitutes *good* food, how do advocates ensure that GPOs and their corresponding distributors are speaking the same language when they respond to hospital demand by offering *local* and *sustainable* products? What types of greenwashing

<sup>5</sup> Amendments to the Medicare and Medicaid Patient Program Protection Act (Public Law 100-93, Sect. 14).

threats arise, whereby companies market and promote *green* or *sustainable* products without a substantial commitment to positive environmental change?

## Analysis

Hospital foodservice directors interviewed for this research report that the sustainable food options available to them through their GPOs are extremely limited, thus, the vast majority of local and sustainable food procurement is occurring outside of the GPO–hospital relationship. Currently, most local and sustainable food procurement is part of the allowed 10–20 % off-contract purchasing. Often, these efforts are dependent on hospitals seeking out and developing contracts directly with local and regional producers and distributors. As one hospital nutrition director notes, “[GPOs] are starting to take heed. But quite honestly, they are really slow and there isn’t enough. That’s why we are going off the trail to suit our needs” (Ramsey and Schilling 2011).

Yet, the majority of foodservice and purchasing directors I interviewed stated that they would eventually like local and sustainable items to come through GPO channels due to the preferred pricing and efficiency of the procurement process. Of thirty-six interviewees, only three envisioned greatly reducing their reliance on their GPO or removing foodservice from the hospital’s overall contract in order to achieve their new food goals.

Hospitals seeking to source sustainable and alternative foods through GPO-governed supply chains face a variety of obstacles and opportunities. Four main issues are discussed in detail below: the role of foodservice in relation to the overall GPO contract; supply chain members’ conflicting definitions of local and sustainable food; transparency, or lack thereof, in hospital food supply chains; and food procurement pathways from farm to hospital.

### GPOs and hospital foodservice

In relation to other hospital supplies, food is a relatively minor part of the overall GPO contract. Foodservice typically represents less than 6 % of an acute care facility’s contracted expenditures (Lawn 2005) as opposed to categories such as pharmaceuticals and medical supplies.<sup>6</sup> This presents both drawbacks and benefits for hospitals with alternative food procurement goals.

<sup>6</sup> For example, Novation reports *dietary/foodservice/nutrition* as only 2 % of its overall contracting, in relation to other categories including pharmaceuticals (37 %), medical/surgery, (22 %), and physician preference items (cardiology and orthopedics) (16 %) (HPN 2011).

One drawback is that GPOs may not have a great deal of economic incentive to devote time and resources to developing new sustainable food options. As one Hospitality Services Director states, “the GPO doesn’t truly care about food because it’s not the bulk of their volume. For the amount of time they have to spend on it, they don’t want to be involved. That’s the feeling they give and that’s reality.”<sup>7</sup>

A potential benefit of the minor status of foodservice in relation to the overall GPO contract is the possibility for increased purchasing flexibility given that the foodservice department is under less scrutiny from hospital administration as a cost center. For example, the above Hospitality Services Director went on to explain that a *philosophy* of compliance with GPO contracts may pose more of a barrier to shifting food purchasing than actual cost considerations:

It’s always a philosophical point of difference, meaning [the hospital administration] doesn’t want anyone to deviate from the system because if they let me buy local eggs, why not let surgery buy local medical equipment, even though my eggs are \$10,000 a year and their equipment is \$10,000,000 a year. It’s a... philosophical stance—we will be compliant. That’s the main barrier.<sup>8</sup>

In hospitals with greater administrative buy-into the goals of HFHC initiatives, foodservice directors I interviewed report a higher degree of flexibility in negotiating the terms and details of their GPO contract. One Foodservice Director at a hospital leading the charge on local and sustainable purchasing urges hospitals to remember that they are the GPO’s customer, not vice versa. GPO contracts are a guideline for purchasing, not a legally binding quota. A GPO’s main recourse to addressing non-compliance is simply notifying a hospital about unrealized rebate opportunities; therefore, a hospital willing to place sustainability attributes above cost and contract considerations has some latitude to create change. Moreover, while hospitals typically sign a GPO contract based on 3-year term durations, they may be terminated at any time, typically with 60–90 days’ notice (Johnston and Rooney 2011).

The above Director reports renegotiating her contract by decreasing the overall spending expected through the GPO in order to allow a greater percentage of purchasing outside of the GPO relationship:

You determine as a foodservice director how much you’re able to spend in each category, not the other way around. I think there’s language [in the GPO contract] that you have to meet around 85 percent of

<sup>7</sup> Interview #32. 2011. Phone call with hospital Food and Nutrition Services Director. February 16.

<sup>8</sup> Interview #32. 2011. Phone call with hospital Food and Nutrition Services Director. February 16.

your total food spend through the contracted distributor, but that's 85 percent of what you're able to buy through US Foods. So it's really fluid. And that's where I get kind of irritated with my peers...it's your 85 percent, you decide what it is. This is where it all comes down to those compliance reports that says either you're compliant or not in your spend. That's really what a CFO [chief financial officer] would look at. If you're setting your own numbers, you should be able to be compliant. And so, if you're compliant, you'd get your rebate check.<sup>9</sup>

Demonstrating the possibility for purchasing flexibility, when this director's contract came up for renewal, she chose to decrease the targeted overall spend of on-contract items by, for example, removing the cost for certain product categories like dairy, bakery and produce from the contract commitment altogether.

### *Perishable foods*

The majority of HFHC efforts to date have focused on perishable product categories like dairy, bakery, and produce. The perishability of these foods presents a challenge to the highly centralized model of distribution preferred by GPOs' contracted broadline distributors because they cannot be easily aggregated, stored, and distributed (Pritchard 2012). As other scholars have noted, the biological nature of food and the ecological nature of its production have historically posed barriers to industrialization (Mann 1990; Boyd et al. 2001). This introduces another point of flexibility in relation to GPO contracts. Perishable categories represent only 4–9 % of total GPO food spending while storable foods like frozen meat and dry/canned goods represent up to 39–73 % (FSD 2006). The supply chains for perishable goods have remained more regionalized (Kaufman 2000), allowing hospitals greater potential to contract with local or regional suppliers and distributors. Hospitals participating in HFHC efforts report a great deal more difficulty accessing local or sustainable meat, poultry, and grains; these categories are marked by a much higher degree of supply chain concentration (Hendrickson and Heffernan 2007).

### Defining local and sustainable

Given the divergence of underlying values between the HFHC movement and conventional hospital food procurement systems, discrepancies between GPOs, distributors, and movement advocates in relation to evaluating what constitutes a good or satisfactory product are to be

expected. If definitions of what counts as local and sustainable are not aligned among all players, the environmental and social goals of participating hospitals are less likely to be met and threats of greenwashing on the part of GPOs and distributors are raised.

Typically, according to vendor specifications, an apple is just an apple. For example, most of Sysco's 185 regional operating units in the United States offer only two varieties, Red Delicious and Golden Delicious (Cantrell 2010). Participants of the HFHC movement, however, argue that not all apples are created equal—that a product's path through the food system results in particular health and environmental benefits or costs. According to this perspective, an *organic* apple or a *local* apple may be a distinctly different and more satisfactory product. One way this comes into play is in relation to GPO contract waiver provisions. The provisions state that if a GPO is not able to supply a given product, hospitals are granted waivers to source a non-contract item. "You can get really creative," notes a Foodservice Director in a mid-sized hospital, "because the supplier generally doesn't supply organic or local [foods]."<sup>10</sup> By stating that a local gala apple is different from a conventional gala apple, a hospital may be granted a waiver to purchase that product off contract.

### *Defining "sustainable"*

The nonprofit organizations coordinating the HFHC movement have largely defined sustainable food according to a vetted list of third-party certified foods such as *organic* and *fair trade* and those with federally regulated label claims such as *produced without the use of rBGH* or *produced without the use of added hormones* (HCWH n.d.b.). Many hospitals report relying on these definitions as their criteria for sustainable food. In these cases, there is no need for GPOs, distributors, and hospitals to work to come to agreement on definitions of sustainable products since the process of determining what constitutes, e.g., *organic*, has already been set by regulatory authorities.

There are tensions and trade-offs involved in using certifications and label claims as a measure of what counts as sustainable. It is debatable the extent to which national and international certifications uphold the diverse social, environmental, community, and health ideals hospitals are aiming for in their sustainable food efforts. In an attempt to coordinate national efforts, however, advocates recognize both their own and hospitals' resource limitations in terms of sourcing and verifying food according to a more complex set of criteria. In other words, industrial norms of efficiency, standardization, and reliability have, in part,

<sup>9</sup> Interview #31. 2011. Phone call with hospital Director of Nutrition Services. February 14.

<sup>10</sup> Interview #31. 2011. Phone call with hospital Director of Nutrition Services. February 14.

shaped HFHC definitions of what counts as sustainable food.

The case of organic food is one example. Some argue that the standardization inherent in the certification process, whereby a narrow set of measurable and verifiable criteria come to stand for *organic*, leads to a shallow sustainability where producers can be certified organic to the letter of the law, yet practice an input-driven, monoculture-based agriculture that mimics industrial agricultural norms of efficiency, standardization, bureaucratization, and price competitiveness (Raynolds 2004; Guthman 2004). However, HFHC advocates assert that organic agriculture offers public health and social justice benefits through decreasing or eliminating consumers' and farm workers' exposure to toxic pesticides (Harvie et al. 2009; Sutton et al. 2011).

As another example, the national *Healthy Food in Health Care* guidelines created by HCWH cite Marine Stewardship Council as a sustainable seafood certification (HCWH n.d.b.), yet it has been critiqued in terms of the transparency and accountability of its certification process (e.g., Iles 2007). However, HFHC hospitals and advocates are often involved in more robust sustainability efforts on the regional level. For example, New England actors have partnered with the Northwest Atlantic Marine Alliance which has an evolving definition of *ecologically appropriate seafood* that takes into account a range of conditions that a set certification can't capture, such as the scale of demand and the state of the ecosystem. As one nonprofit advocate remarks, "Obviously these criteria are not easy to put into a Request for Proposals [from vendors]."<sup>11</sup>

### Defining "local"

Defining what constitutes local food raises even more vexing questions both within hospitals and between hospitals and other supply chain players. *Local* is a contested construct with no regulated definitions. Aligned with the popular concept of *food miles*, hospitals tend to define local in terms of geographic distance, for example *produced within 200 miles of the hospital* or *produced within the state*. This focus on proximity is the flattest reading of what constitutes local foods, as it does not take into consideration ownership structure of farms or agricultural production methods. While participating foodservice directors may envision supporting small-scale family farmers and local economies,<sup>12</sup> ascertaining the distance between a

producer and a hospital is no guarantee that it embodies those values. However, my research found that hospital efforts tend to align more with alternative agrifood goals, either through direct sourcing from independent farmers, working with food hubs or other supply chain intermediaries that incorporate social and environmental values in their mission and practices, or partnering with family-farm-based organizations.

### Aligning definitions

A further concern is aligning definitions of local food throughout the supply chain. Broadline distributors are increasingly responding to customers' demands for local food, but hospitals have found major discrepancies between movement and distributor definitions. In Table 1, for example, US Foods denotes products from companies including Pepsi-Cola and Unilever as local because they come from nearby processing plants or distribution warehouses. The discordance between distributor and hospital definitions of *local* in this case and *sustainability* more broadly was noted by several hospital and non-profit representatives as evidence of greenwashing, in other words, companies capitalizing on sustainability as a marketing tool without a substantial commitment to changing their sourcing practices.

Two advocate organizations involved in the HFHC movement, Practice Greenhealth and HCWH, have recognized the importance of aligning definitions between hospitals and GPOs. To that end, they have developed a set of suggested sustainability contract conditions for GPOs. These Environmentally Preferable Purchasing Food Guides detail environmental disclosure questions that can be included in RFIs (request for information) and RFPs (request for proposals) to vendors in order to help inform purchasing decisions.<sup>13</sup>

There are also indications that GPOs are seeking out movement-based definitions of sustainability. For example, foodservice directors active in the HFHC movement have been invited to present to GPO and distributor representatives, and many of the major GPOs are members of Practice Greenhealth, a membership based nonprofit organization focused on environmental solutions in the health care sector.<sup>14</sup>

<sup>11</sup> Personal email with Health Care Without Harm Healthy Food in Health Care organizer. January 28.

<sup>12</sup> Taste, quality, and supporting local economies tend to rise to the top of stated motivations for prioritizing local procurement in schools and hospitals (Vogt and Kaiser 2008; Bagdonis et al. 2009; Feenstra et al. 2011).

<sup>13</sup> See <https://noharm-uscanada.org/issues/us-canada/food-resource-s?pid=121#guidesforgpos>, and purchasing guides available at <https://noharm-uscanada.org/issues/us-canada/healthy-food-resources>, including *Increasing the Availability of Sustainable Food Options via GPOs and Distributors*.

<sup>14</sup> Interview #68. 2012. Phone interview with representative of Practice Greenhealth. September 3.

**Table 1** US foods list of 'local' foods generated for a hospital client in Southern California

Product description	Grower/producer	City	State	Distance
Juice, prune 100 %	Ocean Spray, Inc	Henderson	NV	211
Watermelon, seedless fresh	United Melon Dist., Inc	Los Angeles	CA	41
Drink, soda cola diet Pepsi	Pepsi-Cola	Riverside	CA	13
Ice cream bar, Oreo	Unilever Ice Cream	Henderson	NV	211
Bean, garbanzo	Teasdale Quality Foods, Inc	Atwater	CA	295
Chicken, breast raw frozen	Golden West Trading, Inc	Vernon	CA	40
Peach, puree	Ken's Foods, Inc	Las Vegas	NV	199
Ice cream cup	Unilever Ice Cream	Henderson	NV	211
Water, purified, plastic bottle	Nestle Waters, N.A.	Ontario	CA	12
Popsicle, sugar-free, frozen	Unilever Ice Cream	Henderson	NV	211
Flour, self-rising	General Mills, Inc	Los Angeles	CA	40

CA California, and NV Nevada

### Transparency and communication

Potential discrepancies in evaluating and defining which characteristics of food products count and what constitutes *good* food are relevant in relation to what information GPOs and distributors communicate about a product, how that information is communicated, and the possibility that greenwashing may occur, particularly since the qualities of production and distribution hospitals in the HFHC movement are concerned with are credence characteristics that cannot be discerned by looking at the food itself; they must be communicated throughout the supply chain through labels or other forms of tracking. Guaranteeing credence characteristics throughout the supply chain depends on a high degree of transparency and verification.

Transparency, however, is not necessarily a value embedded in GPO-governed supply chains. Health care executives have charged that in an effort to retain control of pricing, GPOs frequently go to great lengths to keep hospitals in the dark about certain aspects of pricing (Werner 2002). When asked how the pricing and rebate system works, the director of foodservice and procurement for a major US health system I interviewed replied, "With our GPO it's not clear cut to us at all, it's always been, 'what exactly is the price?'...Moving forward, we want transparency."<sup>15</sup>

Online catalogues are the predominant tool GPOs and their corresponding distributors use to communicate product attributes to hospitals. Hospitals report that finding sustainable products in ordering catalogs can be difficult. Products that align with hospitals' sustainability criteria may not be labeled as such, and the technology platforms may have poor search capabilities in relation to these criteria. This limits hospitals' ability to access sustainable

foods as well as their ability to track and report their progress.

HFHC hospitals are pushing for increased transparency and communication of their requirements in a variety of ways. One way is through the RFI process used to solicit product information from suppliers. A GPO, at the behest of its member hospitals, could request relevant sustainability information through the RFI, such as information on a company's policy on local produce and how it verifies the source and production method of the produce it carries. The RFI can also be used as a tool to encourage a distributor to look for products it does not currently sell and to set a timeline for making them available (Sachs and Feenstra 2008).

Kaiser Permanente, for example, released a *Sustainable Food Scorecard* in 2014 to use in evaluating potential food and foodservice vendors' ability to support their sustainable food purchasing goals. Potential vendors are scored based on the vendors' distribution practices, their ability to track and report sustainable purchasing, and the selection of products they offer that meet the health system's Sustainable Food Criteria, which were modeled after HCWH's *Green Guide for Health Care*. Given the size and scope of Kaiser's food procurement, the Scorecard could have ripple effects throughout the industry, for example by forcing vendors to revamp their IT systems in order to accommodate new tracking and transparency goals, such as the ability to communicate farm name and production practices throughout the supply chain, not just price, brand, and product weight, as is currently the case.

Most GPOs make contract decisions with the help of committees comprised of representatives from their member hospitals and health systems. Although not all perspectives are heard on these committees since smaller hospitals are often not represented (Pritchard 2012), hospitals interested in new procurement initiatives can ask that environmental or health attributes of food products be considered during the bidding and contracting processes.

<sup>15</sup> Interview #29. 2011. Phone interview hospital Director of Director of Nutrition Services, Procurement, and Supply. February 10.

Hospital members of the HFHC movement have brought sustainability concerns to light by serving on these GPO advisory committees.<sup>16</sup>

### Food procurement pathways

In response to consolidation within GPO-governed supply chains, industry analysts see an emerging counter-trend toward regional contracting in the health care sector; “transparency, savings and control have been powerful enticements to many who felt that the nationals were growing ever more opaque, unwieldy and divorced from local and regional needs” (Pritchard 2012 p.61). Pritchard predicts an increase in regional purchasing coalitions of hospitals and health systems focused on handling local needs by voluntarily combining volume to access better pricing through their GPO or directly with suppliers. The examples below demonstrate this trend in relation to hospital food procurement.

Local and regional procurement presents the steepest challenge to the HFHC movement but has been the source of the greatest amount of supply chain innovation. In the popular imagination as well as in the literature on the local food movement, there is a great deal of emphasis on direct relationships between farmers and customers with the resulting benefits of cultivating consumers’ attachment to place, increasing the percentage of the food dollar that goes to farmers, and building trust through face-to-face relations (Feenstra 1997; Lyson 2004). Although a handful of hospitals have set up direct purchasing agreements with farmers, on the whole, the direct farm-to-customer structure typical within the local food movement is not feasible for large institutions. Due to the logistical realities of mass-feeder foodservice as well as federal dietary and food safety policy, hospitals rely on intermediaries that can process, pack, grade and deliver products in high and consistent volumes (Sachs and Feenstra 2008; Klein 2012). The broadline distributors used by GPOs, like Sysco and US Foods, excel in this regard. Yet, they guarantee a steady supply and large volume by sourcing mass-produced commodities through national and international supply streams (Cantrell 2010). Smaller-scale producers report facing a number of barriers to getting their product “on the Sysco truck,” including volume and food safety requirements, pricing structures, and the prohibitive cost of insurance (Salatin 2011).

Likewise, GPO’s purchasing structures may limit points of access for smaller-scale local and regional producers. “In all the hospitals that Novation serves,” remarked one hospital Foodservice Production Supervisor, “what

incentive [does the GPO] have to spend thousands of dollars in time to talk to the local farmer down the street, and not only help contract with that farmer, but help get that farmer into US Foods, which is another whole dynamic...The challenge in getting that product through the door may not make it feasible.”<sup>17</sup>

Although there is no data available related to food, in the field of medical supplies smaller-scale manufacturers of safety needles and oximeters have been shut out of GPO-governed supply streams as a result of both the emphasis on contracts with large manufacturers that can bundle goods and the administrative fees GPOs charge, which smaller players may not be able to afford (Bogdanich et al. 2002; Sethi 2009).<sup>18</sup>

Hospitals are therefore turning to farmer cooperatives and *food hubs* that purposefully aim to combine industrial values of efficiency and standardization with alternative social, health, and environmental values. Food hubs manage the aggregation, distribution, and marketing of source-identified food from local and regional producers to help them meet wholesale, retail and institutional demand (Barham et al. 2012). One example is the success of Michigan hospitals sourcing through Detroit Eastern Market with the help of the Ecology Center, a member of the HCWH coalition. Another model is Local Orbit, an online food hub which handles the logistics of aggregating product from multiple farmers to meet institutional demand. Puget Sound Food Network has serviced Seattle hospitals using this service.

Because of their values-based mission, food hubs offer assurance that the products they offer align with hospitals’ procurement goals. However, food hubs often struggle to achieve the consistency in supply that hospitals are accustomed to, and the majority do not have the capacity to offer minimally-processed products like fresh-cut green beans or pre-washed lettuce that are often central to institutional food provisioning.<sup>19</sup>

The examples below point to innovative models that shift procurement through the combined purchasing power of multiple hospitals in a region or that create supply chains that incorporate both conventional and alternative infrastructure and markets, in other words, *hybrid* values-based supply chains (Lerman 2012). The majority of these are occurring outside of the hospital–GPO relationship.

Hospitals and nonprofit organizations in the HFHC movement have realized the efficacy of creating regional

<sup>16</sup> Interview #42. 2011. Phone interview with Administrator of Non-Clinical Contracts. April 5.

<sup>17</sup> Interview #46. 2011. In-person interview with hospital Foodservice Production Supervisor. April 12.

<sup>18</sup> For an industry response to these claims, see reference to Lawton Burns study in HSCA (n.d.).

<sup>19</sup> Personal communication. 2013. Conversation with representative of Community Alliance with Family Farmers. Oakland, California.

purchasing alliances around a common goal. As one example, a collaboration of hospitals led by HCWH and Maryland Hospitals for a Healthy Environment succeeded in getting Murray's Chicken, which is Certified Humane Raised & Handled and produced without the use of antibiotics or arsenic, on their GPO contract with Premier (Secret 2011).

In cases where a targeted item is not available on contract, hospitals are leveraging their demand by contracting directly with broadline distributors, which can manage and deliver products in smaller quantities in ways that GPOs are not designed to do (Pritchard 2012). For example, a team of four California hospitals led by HCWH and San Francisco Bay Area Physicians for Social Responsibility went off contract to secure an alternative liquid egg supply.<sup>20</sup> As a result of their combined demand for over 91,000 pounds of liquid eggs annually, the hospitals were able to get a mid-scale farmer's products "on the US Foods truck." They are now sourcing cage-free, humane-certified eggs from Wilcox Farms in Washington through US Foods.

Hybrid values-based supply chains that create alliances between broadline distributors and regional companies or cooperatives are another emerging pathway. For example, in a pilot project aimed at increasing their local food offerings in Michigan, Sysco partnered with regional produce company Walsma & Lyons based on the idea that a regional company was uniquely positioned to "act locally" (Cantrell 2010; Barham et al. 2012). Another Midwestern model comes from Fifth Season Cooperative in southwestern Wisconsin which created a strategic alliance with broadline distributor Reinhart Foodservice in order to serve hospital and university customers. Aggregation managed by Fifth Season ensures transparency related to social and environmental values, while distribution by Reinhart provides fleets of trucks, warehouses and other necessary infrastructure, and the efficiency of an established vendor relationship with institutional buyers.<sup>21</sup> Finally, in a California-based model, a regional team of hospitals pooled their purchasing power in order to pull local and organic produce through the conventional supply chain. The hospitals, in collaboration with two non-profit organizations, pushed their conventional produce distributors to *act* as food hubs by increasing transparency in the supply chain and prioritizing produce from mid-scale family farmers (Klein and Michas 2014).

## Conclusion

While staunch alternative agrifood movement advocates envision food systems that thoroughly embody social, health, and environmental values, the types of efficiency and cost trade-offs that come with enacting that vision are rarely possible for institutions like hospitals that serve hundreds to thousands of meals a day. As Feenstra et al. (2011) remind us, institutions attempting to enact new food goals still operate within conventional markets where constraints of price, efficiency, convenience and food safety are not trivial and cannot be ignored.

The new food procurement initiatives of the HFHC movement represent an interesting amalgam of negotiation and compromise between competing economic, industrial, and movement values. Some hospitals are rethinking their relationship to the standardization and efficiency of industrial supply chains and are dedicating the time and money it takes to revolutionize their foodservice operations, for example, by dramatically increasing the amount of scratch cooking they do in order to use more whole foods and accommodate the heterogeneity of product size that often accompanies sourcing from smaller-scale producers (Herzog 2012; Sirois et al. 2013). Others are leveraging their purchasing power in order to secure new products that embody social and environmental values through their conventional supply streams.

To date, the vast majority of hospitals' alternative food procurement initiatives are occurring outside of the hospital-GPO relationship, but there has been increasing activity on the part of GPOs, hospitals, and nonprofit organizations involved in the Healthy Food in Health Care movement to source alternative food through GPOs.

If alternative agrifood efforts in the health care sector are to integrate with GPO-governed supply chains without losing the robustness of the social, health, and environmental values driving them, HFHC advocates will need to address concerns related to supply chain structure, transparency and traceability of alternative food attributes, and alignment of definitions of *local* and *sustainable* food between all supply chain members. Hospitals should be clear about their goals for new procurement initiatives, at times pushing for new options through their GPOs and at others sourcing "off the beaten path" from supply streams that embody their stated vision and values.

GPOs and their corresponding broadline distributors hoping to meet new hospital demands will need to rethink their one-size-fits-all model which offers each member hospital the same Red Delicious apple devoid of quality characteristics other than price and weight. Likewise, innovative food hubs may need to partner with or learn from existing supply chain intermediaries in order to meet the efficiency and standardization constraints of institutional purchasers.

<sup>20</sup> Liquid eggs, which are pre-separated from their shells, are commonly used in institution and restaurant kitchens and constitute the majority of hospital egg purchases.

<sup>21</sup> Interview #65. 2012. Phone interview with Operations Manager of Fifth Season Cooperative. Westby, WI. May 25.

Some leading hospitals provide models of new supply chain relationships that incorporate both industrial values of efficiency and standardization and environmental, health, and social values. It remains to be seen whether these models will be taken up more broadly within the health care sector, however, as they often require hospital foodservice directors and staff to go above and beyond in terms of planning, participation, and at times, cost.

While leading hospitals can play an important role in pointing the way toward a food system that embodies a broader set of social, health, and environmental values, many supply side barriers to the development of new food initiatives are not simply obstacles to overcome but indications of powerful economic and political forces aligned, either actively or passively, in support of the status quo. Without public policy setting the conditions for a food system that guarantees environmental stewardship, maintenance of rural communities and local economies, and protection of public health, hospitals hoping to achieve HFHC goals will continue to swim upstream against powerful currents.

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