VIEWPOINT

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Group Purchasing Organizations, Health Care Costs, and Drug Shortages

Most medical centers today acquire supplies, medications, and devices through group purchasing organizations (GPOs) rather than directly from a manufacturer. GPOs are intermediaries that catalog medical supplies so medical centers can purchase them from manufacturers. According to the American Hospital Association, 68% of hospitals used a GPO for their main purchasing needs in 2000, and by 2014, an estimated 98% of hospitals used a GPO.¹ The nation's largest GPO, Vizient Inc, claims to own 30% of the national market for all medical supplies, and, collectively, the 4 largest GPOs in the United States account for 90% of the market for medical supplies. In this Viewpoint, we explore the role of GPOs in health care, concerns with their current payment structure, and potential solutions.

GPOs provide many benefits for hospitals. Since their inception in 1910, GPOs have simplified the way hospitals purchase supplies, ranging from bathroom items (eg, hand soap) to epinephrine vials. GPOs spare hospitals the work and expense of negotiating and contracting with hundreds of different manufacturers. GPOs instead offer hospitals a catalog of thousands of

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products and product training and support services to accompany some products. GPOs also have volume purchasing leverage to negotiate lower prices. Moreover, the ability of GPOs to list multiple comparable products in their catalogs can promote competition and reward innovation. However, there have been some concerns about how the current business model of GPOs may be undermining price competition and limiting hospital access to medical supplies.

In 1972, Congress enacted the Anti-Kickback Statute as part of the Social Security Act Amendments that banned kickbacks, bribes, or rebates in return for furnishing items or services; the statute was intended to protect patients and federal health programs from the inherent conflict of interest. However, in 1987, group purchasers were granted an exception to the antikickback law, known as the safe harbor exemption. The exemption allowed creative strategies for GPOs to increase their profits. Today, GPOs ask manufacturers to pay them undisclosed vendor fees as a condition to have their products placed in the GPO catalogs. This issue can be problematic when GPOs go further and invite a manufacturer to pay a premium fee to become a sole supplier, allowing the manufacturer that is the highest bidder to essentially purchase market share, rendering hospitals and patients dependent on a single manufacturer's supply chain. Hospitals in turn are sometimes asked to enter into contracts with GPOs that offer greater discounts for longer, more exclusive contracts.

One potential result of these contracting interactions is that only 1 or 2 manufacturers may be responsible for an entire regional or national supply chain. This reliance on a narrow supply chain can have an adverse effect on hospital inventories if a factory has production problems. A 2016 US Government Accountability Office study concluded that there was a strong association between critical drug shortages and a decline in the number of drug suppliers.² Furthermore, GPOs were a significant focus in a US House of Representatives report on drug shortages, which stated that "the GPO structure reduces the number of manufacturers producing each generic drug."³ This association between

> drug shortages and the number of drug suppliers was likely a contributing factor when hospitals faced a nationwide shortage of intravenous saline bags after Hurricane Maria made landfall in Puerto Rico and damaged the manufacturing plant of Baxter International, which has dominated the US saline bag market.⁴ Although there is limited evidence to support the direct link between GPOs and drug shortages, the

vendor fee model of GPOs has the potential to create barriers to market entry for manufacturers by rewarding fewer, larger manufacturers and thus increasing dependence on fewer supply chains.

The modern GPO vendor fee model can also contribute to higher prices of medical supplies. Vendor fees create an added incentive for GPOs to consolidate market share in a smaller number of vendors who can then have monopoly power to set prices. Compounding this price inflation, a manufacturer may simply pass on its vendor fee cost to hospitals by raising the price of the product. Based on a 2014 survey of 1210 hospital executives, proponents of the current GPO vendor fee model claimed that 90% of hospital executives were satisfied with their GPO pricing and savings.⁵ However, in both the GPO purchasing model and alternative purchasing payments arrangements, the lack of price and quality information may result in market failures. For GPO purchasing, this lack of transparency makes it challenging for hospitals to discern which products are being sold with a significant price markup. This difficulty in discerning value can be further magnified when a product is new and does not have comparable products listed in GPO catalogs.

A 2009 study funded by the GPO industry trade group and involving a survey of materials management staff from 429 hospitals showed that hospitals reportedly save up to 18% on health care costs using a GPO compared with negotiating contracts on their own.⁶ However, the US Senate Finance Committee reported in 2010 that there was no empirical, peer-reviewed data to support GPO industry claims that these organizations generate hospital cost savings.⁷ In addition, a 2011 study of 8100 hospital purchases not mediated through a GPO found that hospitals negotiated lower prices compared with GPOs in 3 of 4 purchases and had an average savings of 10%.⁸ The authors from that study concluded, in another report from 2010, that payments from manufacturers to GPOs inflated health care costs up to an estimated \$37.5 billion annually, including an estimated \$17.3 billion in government payments for Medicaid.⁹

There are also instances in which the sole supplier contracting arrangements of GPOs may stifle innovation in medicine. For example, the technology company Masimo discovered this challenge when it developed a new type of pulse oximeter but was unable to sell the product through GPOs. Tyco International, the industry giant that had a majority share of the pulse oximeter market at the time, was paying vendor fees to GPOs to ensure market dominance.¹⁰ The GPOs continued to list the Tyco product and would not include Masimo's product. Masimo eventually filed an antitrust lawsuit and won, enabling it to sell its product through GPOs.

Given concerns over anticompetitive practices, GPOs have taken several steps to improve transparency regarding their contracting practices. In response to concerns from a 2002 US Government Accountability Office report, GPOs created a voluntary membership association in 2005, the Healthcare Group Purchasing Industry Initiative, which developed an industry-led code of conduct that defined ethical business practices. However, participation in the association is voluntary and no formal mechanism is in place to ensure industry-wide compliance with this code of conduct. Hospitals could have an effect on the GPO business model by favoring GPOs that embrace the Healthcare Group Purchasing Industry Initiative code of conduct.

Another potentially disruptive force in purchasing is the effect of large health systems. As hospitals merge, they are increasingly using their purchasing power to negotiate directly with some manufacturers and bypass GPOs. In most instances, the GPO price is the starting point for negotiation. For instance, the Johns Hopkins Health System recently started its own GPO to obtain more competitive prices, a goal amplified by Maryland's unique globally capitated payment model. Taking matters a step further, a recent venture by Intermountain Healthcare and a group of partnering hospitals seeks to bypass GPOs for the purchase of select drugs by directly acquiring generic drug manufacturers and vertically integrating the supply chain. These market activities suggest that some GPOs are not providing an optimal value proposition to hospitals.

GPOs can serve a valuable role in the purchasing of drugs and medical supplies; however, hospitals should consider several factors when selecting a GPO and the products that the GPO offers. These factors include the availability of comparable products and the reliability of the supply chain of a manufacturer. Nationally, the requirement for manufacturers to pay vendor fees to GPOs in order to be included in GPO product catalogs should be reevaluated, or, at a minimum, disclosed to hospitals. Lastly, to protect consumers from bearing the cost of vendor fees and kickbacks, policy makers should reevaluate the safe harbor laws exempting GPOs from antikickback statutes. More choices with honest prices and fair market practices promoting competition could result in lower prices, help reduce critical drug and supply shortages, and bring more innovative products to the bedside.

ARTICLE INFORMATION

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