

# Empowering the purchasing department in healthcare organizations

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## **ABSTRACT,**

Until now, there are still many healthcare organizations where the purchasing department is not valued. However, when a purchasing department has greater authority to perform strategic sourcing, this could improve the healthcare organization's performance. Yet this will all be based on the purchasing department having sufficient power. In this article, we, therefore, focus on how to empower the purchasing departments in healthcare organizations. This study compares the decision-making and strategic position of purchasing in healthcare organizations in the Netherlands and China. The results of this study show that the current power level of a healthcare organization's purchasing department depends on the type of healthcare organization and contextual factors (The Covid-19 pandemic). According to the findings, there are several ways to empower the purchasing departments of healthcare organizations: consulting firms, leaders of purchasing departments, professionalism, and strategies & technical purchasing systems. The most effective and straightforward way to empower a healthcare procurement department is when procurement leaders realize the need to empower the department and have a voice in the healthcare organization. This process of empowerment will then arise.

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## **Keywords**

healthcare purchasing, healthcare organization, purchasing department, strategic purchasing, physicians' involvement, purchasing empowerment

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# 1. INTRODUCTION

We started with the assumption that the Covid-19 pandemic would somehow lead to a change of power in the purchasing departments of healthcare organizations. Unfortunately, based on interviews with several Dutch hospital purchasing managers, they made the same point that the hospital's purchasing department is not valued and does not have a strategic position. They believe that everything the purchasing department currently does is to keep the hospital running. However, a good purchasing decision is more than a simple reimbursement for products and services. Still, when the purchase is aligned with societal health care needs and desires, it has the potential to play a critical role in determining the overall performance of the health system (Busse et al. , 2007). Therefore, how does empowering the hospital purchasing department to become an urgent need? That is, will there be a positive impact on the quality of healthcare performance after empowerment?

Much of the literature suggests that strategic purchasing is critical for healthcare organizations. In a study by Blumenthal and Jena (2013), hospital value-based purchasing (VBP) was designed to incentivize inpatient providers to provide high-value care rather than high-volume care. In addition, purchasing through group purchasing organizations (GPOs) can reduce costs to purchasers but may involve membership fees (Hu et al., 2012). Implementing all these strategies would be based on the fact that the purchasing department has sufficient authority. Therefore, it is becoming increasingly important to empower the purchasing departments of healthcare organizations.

For many years, the purchasing department was perceived as simply another department within the company, carrying out purchasing activities independently, without any connection to the other activities undertaken by the company. However, things have changed, and today this department is recognized as a fundamental part of the organization, actively selecting the best suppliers, choosing the lowest prices, and cooperating with other departments involved in the company's production process. In an increasingly competitive world, companies need to act strategically to optimize processes that directly impact productivity and business profitability. Effective management of the purchasing department can mean improvements in many areas, such as competitive advantage, profitability, and even corporate image.

This paper concentrates on analyzing how to empower the purchasing departments of healthcare organizations based on the perspective of purchasing managers in Dutch hospitals. Therefore, the following research question is proposed: how to empower the purchasing department in healthcare organizations further? The study is based on case studies and interviews with purchasing managers.

Since procurement managers in hospitals did not perceive the Covid-19 pandemic as a factor that contributed to enhancing the power of the hospital purchasing department, it raised the curiosity to figure out how to empower the purchasing department's ownership.

The remainder of the paper is structured as follows. Section 2 will summarize the concepts of healthcare purchasing. In Section 3, this study's methodology and data collection will be depicted. Following this, Section 4 will address the results of the case study. Finally, Section 5 will provide this study's conclusions, some limitations, and some recommendations for further research and practice.

## 2. THEORY

### 2.1 The concept of healthcare purchasing

#### 2.1.1 *The difference between the healthcare sector and other sectors*

The healthcare sector is viewed as the largest globally regarding budgets, employees, customers, etc. (Kahraman & Topcu, 2017). The healthcare sector has represented a large and growing portion of global GDP in recent years. National and local governments and financial institutions such as insurance companies are challenged to use these ever-increasing budgets to purchase quality healthcare services and meet the needs of their populations (Raaij & Erasmus Research Institute of Management (Rotterdam), 2016).

According to research conducted by Kolowitz, there are four differences between the healthcare sector and other sectors: Management, Customers, Variants, and Performance & Choices. The healthcare sector has clinical and operational reporting, and its customers involve various clinicians, payers, government, service providers, and users. In terms of variants, healthcare typically caters to millions of individuals. Finally, people's feelings and intentions also matter when we are concerned about performance and choice in the healthcare sector. However, it is different in other sectors. In most sectors, their management is unified, and they have clear customers with few industries exceeding tens of thousands of variants. Most industrial systems have hard metrics when performance and choices occur (Kolowitz, 2011).

#### 2.1.2 *Main challenges in healthcare purchasing*

The healthcare industry has always encountered many challenges, such as high inflation in healthcare costs, waste of time and resources in supplying needed items, and failure to guarantee the availability of supplies. These pervasive problems have pressured healthcare providers (Ahmadi et al., 2017). Thus, proper purchase of services has been one of the main concerns of health insurance. Lack of attention to the optimal acquisition of services has led to severe problems in the health system. Traditional (passive) purchasing has some weaknesses due to inefficiencies in the

health system, lack of targeted resources, low-cost effectiveness and cost efficiency indicators, and inequitable access to services (Dehnavieh et al., 2016).

In addition, the research from Dehnavieh and his fellows proposed four critical bottlenecks when making strategic healthcare purchasing. One of the major bottlenecks in strategic purchasing is the nature of the purchased services and goods, i.e., what should be bought? Simple interventions can address many of these issues, such as prioritizing services and determining services' effectiveness, efficiency, and safety. Another essential bottleneck in strategic purchasing involves the property of the healthcare provider from whom it should be purchased. The biggest problem is inefficient provider ranking. A third critical bottleneck in strategic purchasing is the type of people for whom services should be purchased, i.e., for whom should they be purchased? This question aims to define special packages for certain people. The fourth major bottleneck in strategic purchasing is the type of payment to the supplier by which payment method.

## 2.2 Purchasing department in healthcare organizations

### 2.2.1 Roles and responsibilities

As the country becomes wealthier, a higher proportion of healthcare spending occurs through centralized arrangements that allow for greater purchaser involvement in improving the quality of services (Waters et al., 2004). The majority of organizations follow the 7-step sourcing process, as defined by A. T. Kearney. Since 2001, the seven steps strategic sourcing process has stood the test of time and has become the gold standard for sourcing.

Based on the 7-step strategic purchasing process developed by A.T. Kearney (2011), it has been tested and proven effective for procurement. The first step is to identify the purchasing category or commodity, including the quantity (number, type, and size) used for products and services, current prices and suppliers, and specification details. The second step is to critically position the sourcing strategy by performing a market analysis to critically understand buyer forces and categories. The process then determines which strategic approach is more appropriate for the type of service being sought.

The third step involves finding a specific vendor. Find out how they operate and if they can meet your needs. It is highly recommended that company organizations visit to ensure industry compliance. Step four of the purchasing process is a Request for Proposal (RFP), actively soliciting bids. Implementing a Request for Information (RFI) to narrow down the available shortlist is also wise. RFPs should be very clear and come with strict specifications. A cloud-based procurement solution can speed up the procurement process. The fifth step of the 7-step purchasing process concerns negotiations with different suppliers. It is common for larger

companies to host multiple rounds of negotiations to foster contracts that clarify buyer and seller expectations; contract management software should be deployed to automate the process. Step 6 is to ensure that there is a way for everyone involved in the delivery process to communicate and collaborate. Only when everyone understands their role in the process can it be implemented smoothly. The final step in the strategic purchasing process is baseline testing, which ensures that suppliers meet the specifications outlined in the contract. Companies must implement comprehensive monitoring of purchasing and delivery to ensure that they do not lose savings or overspend. This final step is where many companies break their budgets and compromise their key objectives.

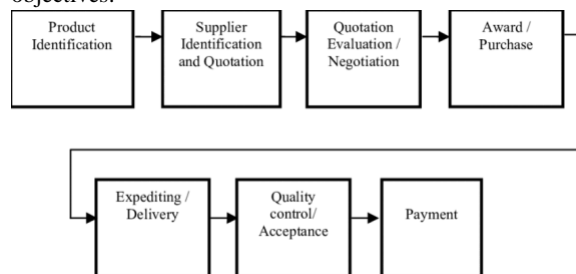


Figure 1, Purchasing process

### 2.2.2 Importance of healthcare purchasing

Conventionally, purchasing has three principal objectives to fulfill. These goals are to (1) secure a safe, timely, and plentiful supply of goods or services with (2) appropriate quality and (3) the lowest possible cost. However, as suppliers become more essential to the company's success, two new goals can be introduced. These two goals are (4) to foster innovation from and with suppliers and (5) to ensure the company's competitive advantage by guaranteeing access to the prerogatives of different sources of supply (Weele, 2005, p. 21).

In healthcare, quality is an essential factor that shapes purchasing decisions. According to Busse, Panteli, and Quentin (2019, p. 3), quality of care is currently one of the most commonly cited health policy principles at the national, European, and international levels. According to the World Health Organization (2018, p. 1), the quality of health services should be:

1. Effective: provide evidence-based health care services to those who need them
2. Safe: avoiding harm to those receiving care
3. Person-centered: providing care responsive to individual preferences, needs, and values.

### 2.2.3 The necessity of empowerment

Empowering purchasing departments means having greater decision-making power in the purchasing process. In healthcare organizations, strategic sourcing can, to some extent, affect the quality of healthcare performance (Hu et al., 2012). This section will describe several purchasing strategies in healthcare organizations.

1. *Quality-based purchasing* is a rising trend that seeks to improve the overall quality of healthcare through the purchaser-supplier relationship. Irrespective of the context, quality-based purchasing relies heavily on reporting, monitoring, and providing helpful information to healthcare consumers. In many low- and middle-income countries, lack of data is a significant constraint to measuring performance, a key component of quality-based purchasing (Waters et al., 2004).

2. *Value-based purchasing* seeks to ensure that the amount paid takes into account and provides incentives to encourage the delivery of high-quality, cost-effective care for services. With value-based purchasing strategies, healthcare payers and purchasers are shifting from passive claim payers (as in the traditional fee-for-service system) to active purchasers of quality care (Claiborne et al., 2009).

3. Purchasing through a group purchasing organization (GPO) offers possible cost reductions for providers. Selling through a GPO offers potentially higher sales volumes for manufacturers but requires manufacturers to pay a contract administration fee to the GPO (Hu et al., 2012).

There are several factors at play here that will influence a hospital's decision to purchase (Baer & Sullivan, 1990). A community hospital, for example, has needs that are different from those of a large health system. The former will have a smaller volume of business and they may be more price sensitive. Large health systems, on the other hand, tend to have greater negotiating power. But there are additional buying criteria beyond price, including

1. Supplier relationships: most hospitals have preferred supplier agreements with rebates
2. Urgency of demand for the product
3. Quality of goods and services (reliability, guarantees, etc.)
4. Risk factors: will the new goods or services disturb certain workflows?
5. Compliance: hospitals have to handle various regulations, so any product or solution they choose must be compliant

## 2.3 Synthesis

We presented the healthcare industry and the purchasing process in the previous sections. The focus was on the differences between the healthcare industry and other industries and the challenges encountered in healthcare purchasing. This was followed by an introduction to the importance of purchasing decisions in healthcare organizations, the different purchasing strategies, and how to have adequate power to implement these strategies in such a way as to improve the quality of healthcare performance.

We have introduced several strategic purchasing methods that are currently in use: Quality-based purchasing, Value-based purchasing and group purchasing organization, which have a different focus and have a different impact on healthcare performance afterwards. The impact on healthcare performance is also different. Quality-based purchasing, for example, provides the best possible medical

products for the amount of funding available. Value-based purchasing, on the other hand, provides the best value for money for patients with limited funds. Group organization purchasing, however, is based on the need for large volumes of goods, so that more products can be purchased at a lower price and thus less expenditure can be incurred.

In addition, we discuss the factors that influence the decisions made by the purchasing department and whether these factors have a positive or negative impact on the purchasing process. For instance, good supplier relationships have a strong preference in the purchasing process and can simplify the process due to good relationships. Furthermore, the quality of the product is of particular importance for healthcare organizations. Good quality is therefore more likely to be chosen by the purchasing department when selecting products.

## 3. METHODS: RESEARCH DESIGN & DATA COLLECTION

### 3.1 Field research

The study is based on the perspective of hospital purchasing managers and uses qualitative data analysis to understand how to empower the purchasing departments in healthcare organizations. In order to ensure data diversity, the study will include hospitals in the Netherlands and China, allowing for a more comprehensive understanding of the same and different purchasing challenges encountered by hospitals in different countries and whether hospitals in different countries have different solutions for purchasing departments empowerment.

The majority of the study's interviewees were contacted by emailing the hospital's purchasing department directly to request an interview, while some were contacted by phone through networking.

The interview questionnaire will consist of three sections: Context, Physicians' involvement, and Purchasing department. Through these three areas, we aim to understand to the extent possible how the purchasing department of the hospital works in practice. The context will provide an initial understanding of the hospital's purchasing process, while the physicians' involvement will provide information on the role of physicians in the purchasing process and how they shape the purchasing department's decisions. The questions in the Purchasing department will focus on the current status of the purchasing department in hospital decision-making, some of the purchasing challenges it faces, how to mitigate these challenges, and how to empower the purchasing department. The specific questions will be shown in the table below.

<b>Basic questionnaire: interview for purchasing managers</b>
<b>Context</b> 1. What types of medical supplies does your organization purchase?

<ol style="list-style-type: none"> <li>2. Could you describe the procurement process, please?</li> <li>3. Who is involved in the acquisition of medical supplies?</li> </ol>
<p><b>Physicians' involvement</b></p> <ol style="list-style-type: none"> <li>4. Please, describe the role of the physicians in the procurement process</li> <li>5. Are the physicians free to choose the brands of the medical supplies (especially prosthesis and expensive items)?</li> <li>6. Do the physicians collaborate to contain costs in the purchasing department? Could you explain, please.</li> </ol>
<p><b>Purchasing department</b></p> <ol style="list-style-type: none"> <li>7. Is the purchasing department totally empowered to make its own decisions? Please, explain.</li> <li>8. Is the purchasing department seen as having a strategic role in your organization by other departments?</li> <li>9. Do you think that the purchasing department role has changed over the past few years in terms of importance and decision-making centralization?</li> <li>10. What are the main challenges faced by the purchasing department in the decision-making process?</li> <li>11. How could these challenges be reduced?</li> <li>12. How do you think that the purchasing department could be further empowered?</li> </ol>

From the end of April 2022, the hospitals we have tried to contact to request interviews, most of which will take place in early June 2022. The interviews will be conducted in a hybrid format. We will perform the interview either at the hospital or online, subject to the interviewee's availability. Ideally, interviews will last 30 minutes and be grounded in a basic questionnaire. Where permitted, interviews will be recorded for evidence and subsequent qualitative data analysis.

The preferred interviewers for this study were hospital purchasing managers. They have extensive experience and deeper management of purchasing departments and could provide a more professional perspective to inform our research and suggest more practical ways to empower hospital purchasing departments. By empowering the hospital's purchasing department, it can be further strategically positioned to influence the quality of healthcare performance. In contacting purchasing managers, we realized that not all purchasing managers would have the time or desire to participate in this study. Therefore, the study will include both physicians and nurses knowledgeable about the purchasing process. The inclusion of them as interviewees will allow the study to provide a different perspective on the challenges currently encountered by hospital purchasing departments and different solutions for empowerment.

### 3.2 Data analysis

The data for the research came from interviews with five healthcare organizations. They are three hospitals from the Netherlands and two hospitals from China. The section will

focus on the analysis of purchasing products, purchasing process, strategic position, and decision-making process.

#### 3.2.1 Purchasing products

When it comes to procurement by healthcare organizations, it draws attention to the type of medical supplies they will procure. Through the interviews, we found that the medical supplies procured varied depending on the kind of healthcare organization in question. Of the five medical institutions we spoke to, only Hospital C is a nursing home, and the other four are general hospitals. Therefore, the differences in the products sourced are due to their different target audiences. The nursing home's audience is mainly elderly people who need to stay there for an extended period; therefore, the organization needs to purchase products that revolve around the elderly.

However, their target audience is much more extensive than the other four healthcare institutions, general hospitals. People come to hospitals for shorter stays than in nursing homes. Consequently, the products they procure need to be more comprehensive to meet the needs of all.

<i>Purchasing products</i>	
Hospital A in the Netherlands	<i>All medical supply (All range of aged)</i>
Hospital B in the Netherlands	<i>All medical supply (All range of aged)</i>
Hospital C in the Netherlands	<i>All medical supply (Aiming for elderly people)</i>
Hospital D in China	<i>All medical supply (All range of aged)</i>
Hospital E in China	<i>All medical supply (All range of aged)</i>

#### 3.2.2 Procurement process

The purchasing process that a healthcare organization will use depends largely on the country in which it is located, as this is closely related to the social pattern of the country. Healthcare organizations in the Netherlands are basically contract-based and evaluate the supplier through sourcing criteria to allow them to maintain a long-term relationship. Healthcare organizations in China, on the other hand, need to be socially transparent and therefore favor a tendering process where the entire purchasing process is carried out in an open mode. However, when it comes to medical supplies, it is also contract-based in Chinese healthcare organizations.

<i>Procurement process</i>	
Hospital A in the Netherlands	<i>Contract based</i>

Hospital B in the Netherlands	<i>Contract based</i>
Hospital C in the Netherlands	<i>Contract based</i>
Hospital D in China	<i>Based on tender</i>
Hospital E in China	<i>Based on tender</i>

### 3.2.3 Strategic role

Whether a purchasing department is strategically placed or not depends largely on how the healthcare organization assesses the department. This is independent of the type of healthcare organization, the country in which it is located. Purchasing strategies can enable the formalization of the process of buying high quality goods, allowing finance or purchasing departments to have recourse to seek total cost reductions and address issues such as maverick spending. Hence, strategic purchasing consists of the contract negotiation process, relationship management, etc. A broader view of the entire purchasing process can enhance a company's resilience in the face of uncertainty and even become a competitive advantage.

Ownership is essential for the purchasing department as well. The process owner can start to see how well the process is performing once they have ownership of the procurement process. They can also look at areas where improvements can be made. The simpler the purchasing process, the better it is for adoption.

<b>Strategic role</b>	
Hospital A in the Netherlands	<i>Relatively low</i>
Hospital B in the Netherlands	<i>Relatively low</i>
Hospital C in the Netherlands	<i>High</i>
Hospital D in China	<i>Relatively high</i>
Hospital E in China	<i>Relatively high</i>

### 3.2.4 Decision making process

The decision-making process in a purchasing department is either centralized or decentralized, depending to a great extent on the relative importance of the department in the healthcare organization. In the case of the five healthcare organizations interviewed, only Hospital C, a nursing home in the Netherlands, has a decentralized decision-making approach in its purchasing department. The other four healthcare organizations have centralized decision-making in their purchasing departments. The decentralized decision making is expressed in the fact that the doctors and nurses decide on the products to be purchased and the purchasing department does not make the decision but assists in the completion of the purchase. The decision is made by the

physician and nurse and not by the purchasing department. However, the centralized decision-making is that the purchasing department decides on the products to be purchased and the physicians and nurses may be involved in the purchasing process and voice their opinions. For those hospitals that use centralized decision-making, the opinions of physicians and nurses are valued. Yet the final purchasing decision is made by the purchasing department.

<b>Decision-making</b>	
Hospital A in the Netherlands	<i>Centralized</i>
Hospital B in the Netherlands	<i>Centralized</i>
Hospital C in the Netherlands	<i>Decentralized</i>
Hospital D in China	<i>Centralized</i>
Hospital E in China	<i>Centralized</i>

## 4. ANALYSIS & RESULTS

### 4.1 Company Introduction

Hospital A in the Netherlands operates two general hospitals in Twente. The organization was formed in 1998. The catchment area covers approximately 300,000 residents. The hospital performs regional functions and cooperates with general practitioners, family care organizations, and nursing homes. There are 1085 beds for 24-hour clinical care and day/part-time treatment, and this hospital provides specialist medical care and diagnostics at both sites. Virtually all medical specialties are represented.

Hospital B the Netherlands. These hospitals have 1,070 beds, more than 200 medical specialists, and a license for approximately 4,000 employees. In addition to the regular clinical departments, there are tertiary care departments such as cardiothoracic surgery, neurosurgery, advanced oncology, radiotherapy, bone marrow transplantation, hemodialysis, a large hospital pharmacy, and a regional level I trauma center. It is one of the largest non-academic hospitals in the Netherlands.

Hospital C in the Netherlands. This hospital helps elderly people by maintaining or improving their quality of life. This work is carried out in 16 locations where people can live and use care and services. The care and services are also provided for clients who live at home. This hospital operates nationwide, with its center of attention in the northeast of the Netherlands. It employs around 2,350 people. In addition, more than 1700 volunteers are active in the organization.

Hospital D in China is a large comprehensive tertiary hospital integrating medical treatment, teaching, scientific research, and preventive health care and one of the top 100 hospitals in China. It was founded in 1941; it was transferred from the military to Guangdong Province with the University in August 2004. The overall ranking of the

hospital is stable at around 15 in China's authoritative rankings, and 15 specialties have been ranked in the top 10 or nominated in China's Best Specialties Ranking (Fudan Edition).

Hospital E in China was found in 1971, it is a first-class general hospital of the Guangdong Provincial Planning Commission. This hospital serves many patients throughout the eastern and western parts of Guangdong Province. The hospital's discipline construction has been continuously strengthened, and its influence at home and abroad has increased yearly.

## **4.2 Findings**

### *4.2.1 Hospital A in the Netherlands*

Physicians are involved in the purchasing process of this healthcare organization and they have a very strong voice. It is very important for the purchasing department to look at the differences between suppliers. However, for physicians, they have a natural preference for a particular brand for many reasons, for instance, they are trained to work with a particular suture material supplier in their education. However, the procurement department at this hospital doesn't have a strategy in terms of sourcing as all they did was to basically have to keep the hospital running to ensure that everything was in place. They can develop a strategy to buy better things and make the operation successful more and more often, but that is the responsibility of the physicians.

Although the hospital's purchasing department was not empowered during the Covid-19 pandemic, a variety of problems were solved because the hospital was overcrowded, and patients had to go to other hospitals. In the meantime, they have the stuff they need. As a result, their purchasing department did a good job during the pandemic.

### *4.2.2 Hospital B in the Netherlands*

Similar to Hospital A, the general hospital actively involves physicians in the purchasing process and their views are valued. Next, in terms of strategic position, the hospital's purchasing department is also at a relatively low position and what they currently do is to keep the hospital running. In terms of decision making, as this hospital is the largest hospital in its region, their demand for medical supplies is also huge. Therefore, the hospital also uses a centralized decision-making approach and is contract-based. They are committed to maintaining a long-term relationship with their suppliers.

### *4.2.3 Hospital C in the Netherlands*

Unlike the other four general hospitals, the purchasing department at this hospital does not make the purchasing decisions. In this healthcare organization they will be purchasing in the following way: the decisions on the products purchased will be made through physicians and nurses with specialist knowledge. Still, it ensures that the purchases are carried out successfully. The organization has

adopted a decentralized approach to decision-making, delegating purchasing to the physicians and nurses, who use their expertise to decide which products to purchase. The purchasing department's role is to help the physicians and nurses achieve their purchasing goals. Over the past few years, the organization's purchasing department has improved considerably, notably by receiving more external funding and further reducing costs.

### *4.2.4 Hospital D in China*

This is a larger hospital located in Guangzhou, China. During the Covid-19, this hospital played an important role in this region and has been providing large Covid-19 PCR testing until now. As a consequence, the hospital's need for procurement has been enormous since the pandemic. In recent years, therefore, the hospital's procurement department has become increasingly powerful and they have this relative freedom of choice under centralized decision-making, i.e. they can have preferences and special requirements for products. Their purchases in recent years have not only been limited to medical supply, but they have also actively interacted with the community to introduce more advanced medical devices to assist physicians in their diagnoses and provide higher quality healthcare.

### *4.2.5 Hospital E in China*

This is another hospital in Guangzhou, China, which is relatively small compared to Hospital D. It has grown rapidly in recent years, however, mainly due to the rapid development of the university it is affiliated with and the rapid progress in medicine. They have also received a lot of external funding to help the hospital develop. Hence, the reasons are similar to those for which Hospital D was empowered: the Covid-19 pandemic. A more important reason was that they were well funded and had a very high demand for medical supplies in terms of quality. As a result, they centrally coordinate the resources they need and then also procure them through public tenders.

## **5. DISCUSSION**

### **5.1 General findings**

The assumption had been made that the Covid-19 pandemic would shift the power of purchasing departments in healthcare organizations, i.e., they would have more authority in purchasing after the pandemic. In terms of changing the power of the purchasing departments, it depends on how a country perceives the pandemic. Compared to China, the Netherlands has been relatively moderate in its approach to the pandemic and thus has not had more influence on the procurement sector. On the other hand, China has more strict regulations regarding the Covid-19 pandemic, has a strict dynamic zeroing policy, and often conducts large-scale nucleic acid testing. As a result, healthcare organizations in China, particularly the purchasing departments of general hospitals, have seen their powers increase in recent years.

Drawing together the five interviews, the purchasing managers suggested possible ways to empower the purchasing departments in healthcare organizations further.

**1. Consulting firm:** By hiring a consulting firm to assess the healthcare organization's purchasing department and create a sense of urgency for change, the purchasing department should have a greater level of power in terms of decision making. This can lead to the purchasing department being empowered through a formal process that can lead to change in the purchasing department.

**2. Leaders in the purchasing department:** This is another critical way to empower the purchasing department. The empowerment will only start if the head of the purchasing department believes that there is a need to change here; that is, the purchasing department needs more power. Secondly, the leader needs to have a voice in the healthcare organization, i.e., You need to be on the table with the boards so that you can plan and implement this action better.

**3. Professionalism:** When you do not have a position in management. People can still empower the purchasing department by using their expertise. People can show that their knowledge and actions can add value to the organization. Try to be part of the process and use professionalism to impress others to persuade empowerment to happen.

**4. Strategy & technical purchasing systems:** Unlike the above solutions, this one focuses more on empowering the purchasing department from the purchasing itself. Procurement departments must develop strategies and technology procurement systems to help healthcare organizations make more rational purchasing decisions.

## 5.2 Comparison of cases

In this section we categorize the data obtained from the five interviews. Comparing general hospitals and nursing homes in the Netherlands, and healthcare organizations in China and the Netherlands, respectively.

### 5.2.1 General hospitals and nursing home in the Netherlands

The first difference between a general hospital and a nursing home in the Netherlands is that they have different targets. Nursing homes are for elderly people who need to stay for a long time. Hospitals, on the other hand, have a much broader target audience in terms of age and have a relatively short stay. This can therefore lead to a different focus on the products that these two different healthcare organizations need to go about purchasing. Next, as the two types of healthcare organization are not the same. General hospitals are relatively large in terms of scale, while nursing homes are relatively small and will therefore have different demands on their purchasing decisions. This is that general hospitals will use centralized decision making, while nursing homes will use decentralized decision making. The purchasing decision for a nursing home needs to be further

explained in that its purchasing department does not make the decision, the decision is delegated to physicians and nurses who have the expertise to decide what products to purchase. The purchasing department then helps them to implement this purchase. Whereas in a general hospital more often than not, the decision is made centrally, i.e. by meeting the supplies that the hospital needs to keep it running properly.

### 5.2.2 Healthcare organizations in Netherlands and the China

Firstly, in the last two years of the Covid-19 pandemic, the Netherlands has taken the relatively less strict measure to allow the coronavirus to exist, keeping the health system stable and not collapsing. All three health organizations have experienced the same difficulties over the past two years. At the beginning of the pandemic, they all faced a shortage of medical products with keeping their hospitals functioning properly. As a result, they had to refer patients to other hospitals for treatment. Because of this, they could buy time to contact suppliers and obtain sufficient medical resources to function properly again. However, in terms of purchasing power, they have not been promoted because they have not been strategically placed for the last two years. All their purchases have been made on a contractual basis for one year at a time, so in the absence of major problems with the supplier, such as a drop in quality or a massive price increase. They continue to renew the contract. However, they have their own medical product requirements; masks must not scratch the face, and gloves must not only fit but also be flexible.

The situation in China is entirely different. Currently, China still considers the Covid-19 pandemic a severe public health event and controls it. The current Dynamic Zeroing Policy, which is used in China, means that when there is a confirmed case in a place, they need to test people in the area for nucleic acid to identify infected people as quickly as possible and recommend that they are quarantined. Thus, in recent years, the purchasing departments of hospitals in China have made greater purchasing decisions because PCR testing has become an essential part of the population in China, and each hospital is responsible for nucleic acid testing in their region. This has led to a large consumption and demand for medical products, which has increased hospitals' power in China to select their suppliers transparently by inviting public tenders under centralized decision-making. Alternatively, they can impose more stringent requirements on products to meet the needs of medical staff. For example, include masks that do not scratch the medical staff's face, gloves that not only fit but are also flexible, and swabs for PCR testing that are long and do not hurt the inside of the nasal cavity where the sample is taken.

## 5.3 Contributions, Limitations and Future Research



This article is based on interviews with the purchasing departments of healthcare organizations in the Netherlands and China. Through the interviews with purchasing managers, we learn about the similarities and differences between healthcare purchasing in the Netherlands and China at present and the differences between the different types of healthcare organizations. We aim to use this article to provide healthcare organizations with ideas on the importance of empowering the purchasing department and the positive impact that strategic purchasing can have on a healthcare organization. This article also provides purchasing managers with several ways to empower the purchasing department in healthcare organizations.

However, the limitations in this study are also apparent. The first is the insufficient sample size; in this study, we only included five healthcare organizations from China and the Netherlands. The sample data is not rich enough for us to include different types of healthcare organizations from more countries and perhaps a completely different approach to procurement and decision-making compared to what is mentioned in that article. Finally, because of the presence of the Covid-19 factor, which to some extent has a different impact on the purchasing of healthcare organizations in a country, we cannot be sure whether it will continue to empower purchasing departments after the pandemic.

Therefore, in future research, more types of healthcare organizations in different countries could be encompassed to identify if type would determine the decision-making by comparing different kinds of healthcare organizations in the same country. Secondly, the selection of the sample could be done in a country that is relatively easy on the coronavirus, as this is a critical variable that affects the empowerment of the healthcare procurement sector. We hope to be able to analyze how to more effectively empower the healthcare procurement sector in a more general context.

## **6. CONCLUSION**

This article starts with an analysis of the current challenges in healthcare purchasing, the role and responsibilities of the purchasing department in healthcare organizations, and the importance of strategic health purchasing, indicating the significance of empowering the purchasing department in healthcare organizations nowadays. We consequently used a questionnaire-based approach and interviews to obtain data. The interviews were conducted with healthcare organizations, including hospitals and nursing homes, in China and the Netherlands. In comparing the Chinese and Dutch healthcare organizations, the Chinese healthcare organizations have relatively high power in the purchasing department because of the covid-19 pandemic as a contextual variable to empower the healthcare organizations, which the Dutch healthcare organizations are not doing. When comparing hospitals and nursing homes in the Netherlands, we realized that the purchasing department of nursing homes has relatively greater power due to the type

of healthcare organization and its target group because the range of age will decide the target medical supply. Next, through interviews with purchasing managers, we learned of several ways in which the purchasing departments of healthcare organizations can be empowered: consulting firms, purchasing department leaders, professionalism, and strategic and technical purchasing systems. Of these, the purchasing leader is the most direct way of empowering the healthcare purchasing department. The article thus hopes to provide an idea for empowering procurement departments in healthcare organizations, which in turn will positively impact the healthcare performance of healthcare organizations. Finally, as the sample size of this study is not sufficient and prosperous, future studies could include more types of healthcare organizations from different countries to segment them further.

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