

# Outsourcing of Pharmaceutical Care Services: A New Initiative Project in the Kingdom of Saudi Arabia

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## ABSTRACT

**Objectives:** To explore the outsourcing of pharmaceutical care services as a new initiative project in the Kingdom of Saudi Arabia. **Methods:** This is a new initiative project driven by the international outsourcing of pharmaceutical care services guidelines. The project has been formulated from the global business model, pharmaceutical project guidelines, and professional project management of a new project. The project management professionals have written this initiative project. It consists of the following parts: The initial phase, the planning phase, the execution phase, and finally, the monitoring and controlling phase. **Results:** We explored the outsourcing of pharmaceutical care services with a defined vision, mission, and goals. The services had various benefits, including clinical and economic outcomes on patients. The risk management model was explored, which assured the continuity of the project. Moreover, the monitoring and controlling of the project's services as declared. The transition to operation project through the closing project stage has also been explored in this study.

**Conclusion:** The outsourcing of pharmaceutical care services is a new initiative project and part of the pharmacy strategic plan with Saudi Vision 2030 programs. The outsourcing of pharmaceutical care services meets the pharmacy workforce's demand, completes the requirement of some pharmacy services, and improves clinical pharmacy sections without additional cost. We highly recommend it to be implemented in Saudi Arabia.

**Key words:** Outsourcing, Pharmaceutical care, Pharmacy, Services, Initiative, Saudi Arabia.

## INTRODUCTION

Recently, there was implementation and improvements made in the pharmaceutical care services in the Kingdom of Saudi Arabia, including drug distribution system as unit dose methods, intravenous admixture services, medication safety measures, drug information services, and clinical pharmacy services.<sup>1-3</sup> Moreover, the increase of workforce of distributive pharmacists and clinical pharmacists.<sup>4-6</sup> However, the improvement does not meet the demand for pharmacy workforces, service requirements, and fundamentals of pharmacy strategic plan or updated strategies with New Saudi Vision 2030.<sup>7-13</sup> It will take a long time until the plan is executed. As a result, we need to facilitate the improvement of pharmacy services in a short period and appropriate economic burden on healthcare services through utilization of the outsourcing of pharmaceutical care services.<sup>14-16</sup> The American Society of Health-System Pharmacists (ASHP) established outsourcing pharmacy services around 20 years back.<sup>17</sup> It released specific outsourcing guidelines related to intravenous admixture services.<sup>18</sup> The outsourcing of pharmaceutical care services can either operate fully or fully substitute the pharmacy services on behalf of the owner.<sup>17</sup> So far, various studies have reported the experience and benefit of the utilization of outsourcing part to start or implement the pharmaceutical service, for instance, home total parenteral nutrition, repacking medications system, drug distribution system, and intravenous admixture services.<sup>19-24</sup> Recently, after the implementation of a new

pharmacy strategic plan with New Saudi Vision 2030,<sup>25,13</sup> the outsourcing of primary healthcare centers through the dispensing of medications on behalf of healthcare institutions called Saudi managed care pharmacy had been implemented.<sup>26</sup> However, to the best of our knowledge, no studies discuss outsourcing pharmaceutical care services to the Gulf and Middle Eastern countries. Therefore, we aimed to declare the outsourcing of pharmaceutical care services as a new initiative project in the Kingdom of Saudi Arabia.

## PROJECTS METHODS

This new initiative project was driven by the international pharmaceutical outsourcing programs.<sup>14-17</sup> The task force team of outsourcing pharmaceutical care services was formulated, which consisted of the author's pharmacy administration and clinical pharmacy practitioner expertise. The committee developed the guidelines for the outsourcing of pharmaceutical care services by deriving information from international sources of literature and by utilizing pharmacy project guidelines, the international business model, and project management institution guidelines of a new project.<sup>27-30</sup> The outsourcing of pharmaceutical care services is adjusted based on the outsourcing of the pharmacy services, general pharmacy outsourcing regulations, and the transformation from regular pharmacy services to outsourcing pharmaceutical services. The project is written by project management

professionals and contains various parts, including the initial phase, the planning phase, the execution phase, and the monitoring and control phase.

### Initiative phase Assessment needs

The full pharmacy services are not available at most of the Ministry of Health (MOH) or private healthcare institutions. Implementing any of the pharmacy services will take time and will be costly, whereas utilizing outsourcing of pharmaceutical services will save time and will be less expensive. Moreover, the number of personnel working as pharmacists and pharmacy technicians was not adequate to fully operate current pharmacy services; therefore, the pharmaceutical companies should provide enough staff to meet the pharmacy staff shortage. Education and training are other important factors determining the outsourcing of new pharmacy services; outsourcing companies should provide educated and trained pharmacists or pharmacy technicians for further services. The utilization of outsourcing clinical pharmacy services, including drug information services, will save time for healthcare institutions and expand their current clinical pharmacy at a reasonable cost.

Moreover, the Hajj period is a unique situation that shows high demand for pharmacy services and the pharmacy workforce. Therefore, the outsourcing pharmaceutical care companies should aim to provide the best pharmacy services to all pilgrims with a high-quality workforce in a short time. As a result, the outsourcing of pharmaceutical care needs to meet the high demand for full and high quality of pharmacy services, including any pharmacy workforce shortage with the reasonable cost burden on the healthcare system.

### SWOT analysis

The SWOT analysis is considered one of the popular tools in assessing the outcome of a new project. It consists of four parts: analysis of the strengths, weaknesses, opportunities, and threats to the project. This project's strengths are outsourcing pharmaceutical care services to cover the shortage of staff, reduce the pharmacy workload, reduce or avoid medication errors, and build a medication safety culture. This project's weaknesses can be the need for education, training, and updating the pharmacy services system. This project's opportunities include issues related to the current methods of quality accreditation and patient safety program necessary foundation and meet the Saudi Vision 2030 by utilizing the private sectors of outsourcing the pharmaceutical care system. This project's threat points include outsourcing pharmaceutical care companies, which might suddenly be stopped, or the administrative changes to the plan.

### Market Analysis

The majority of the pharmacy services are operated by the government or private healthcare organizations. It is sporadic to use outsourcing of pharmaceutical care services through their part of pharmaceutical companies. Recently, the transformation system (from governmental to the private operation system) through the implementation of Saudi Vision 2030 and the MOH's strategic health plan.<sup>25,31</sup> Therefore, the outsourcing of primary healthcare pharmacy services was implemented by Saudi managed care pharmacy system (dispensing of MOH prescriptions on behalf of community pharmacy).<sup>26,32</sup> Moreover, the outsourcing of total parental nutrition through the compounding pharmaceutical companies prepared total parenteral nutrition (TPN) for neonates, pediatric, and adult physicians' orders. These services have been implemented at private hospitals, whereas they have not been implemented at all healthcare institutions.

Furthermore, the medication supply company utilizes the logistics to purchase and distribute all pharmaceutical medications, for instance, the National Unified Procurement Company (NUPCO). Currently, the

medical supply outsourcing system is well-established and covers most MOH hospitals and primary healthcare centers, and NUPCO covers non-MOH healthcare organizations.<sup>33</sup> The new plan is to convert all logistic services, including all ambulatory care services, intravenous administration, clinical pharmacy services, and drug information services, from regular operations to the Saudi market's outsourcing system.

### Planning phase Scope of the project

The scope of the project covers the outsourcing of pharmaceutical care services, including narcotics and psychotropic medications for inpatient services, ambulatory care services, total parental nutrition, intravenous admixture preparations, clinical pharmacy services, and compounding or extemporaneous preparation in addition to drug information services, the inpatient pharmacy, and the repackaging medication system.

### Vision, Missions, and Goals

This project's vision is to perform the best outsourcing of pharmaceutical care services, and the mission is to provide the appropriate outsourcing of pharmaceutical care services for most pharmacy units. The goals of this project are as follows: to fix the outsourcing of pharmaceutical care services during transformation to privatization, to improve any missing pharmacy services within a short period, to replace the demand and requirement of the shortage of pharmacy staff, to prevent any drug-related problems during pharmacy activities, to reduce the workload of pharmacy staff and healthcare providers, and to avoid the additional unnecessary cost on the pharmacy and healthcare system via utilization of outsourcing of pharmaceutical care services.

### Project description

The following suggested policies and procedures were put in place for every pharmacy staff and other healthcare individuals:

- ✓ The guidelines for the outsourcing of pharmaceutical care services should be formulated at healthcare organizations.
- ✓ The outsourcing of the pharmaceutical care services committee should consist of the pharmacy, head of each pharmacy unit, pharmacy quality management, medication safety pharmacist, and physician and nurse representative.
- ✓ The committee revises the standards of the outsourcing of pharmaceutical care services and updates at least annually.
- ✓ The education and training sessions about the outsourcing of pharmaceutical care services.
- ✓ The committee should conduct the outsourcing of pharmaceutical care services to all pharmacy and healthcare providers.
- ✓ The policies and procedures related to outsourcing pharmaceutical care services should be distributed to healthcare sectors at the organization.
- ✓ The physician should write the prescription based on the Saudi regulation and dispense the medication based on outsourcing pharmaceutical care and medication formulary regulations.<sup>32</sup>
- ✓ If the physician wishes to prescribe outside the outsourcing of pharmaceutical care services guidelines, then he should document the justification.
- ✓ The prescription should be sent to the pharmacy and inpatient or outpatient pharmacist, and the pharmacy technician will prepare it based on the outsourcing of pharmaceutical care services.
- ✓ The pharmaceutical staff sends the medications to the ambulatory care patients or nursing department, and the nurse administers the medicines based on the outsourcing of pharmaceutical care services guidelines.
- ✓ The pharmaceutical department should measure the clinical outcome of the outsourcing of pharmaceutical care services.<sup>32</sup>

- ✓ The pharmacy department should perform the economic analysis of the outcome of outsourcing of pharmaceutical care services.<sup>32</sup>
- ✓ The pharmaceutical department should document any medication nonadherence to outsourcing pharmaceutical care services through the electronic system.<sup>32</sup>

### Plan cost management

For each new project regarding outsourcing pharmaceutical care services, the management team must set out the financial budget, including educational courses on outsourcing pharmaceutical care services, the management team meeting's value, and updated medical or pharmaceutical references to outsourcing pharmaceutical care services. The management team should supervise the budget from the beginning till the end of the project and switch to the operating system.

### Execution phase Management team

Project management professionals follow various steps, among which one of the essential steps is the execution phase. The execution phase should be lead by a team leader. The project should be outsourced for pharmaceutical care services from the beginning till the end and converted from a new project to a full operating system at the healthcare organizations. The team should consist of the following organization members: The director of the pharmacy, clinical pharmacists, distributive pharmacists, pharmacy technician experts in outsourcing pharmaceutical care services, physicians and nurses, pharmacy quality management officers, and medication safety officers. The team should implement and follow the guidelines for outsourcing pharmaceutical care services and follow-up with regular updates and increasing outsourcing services. Moreover, the team needs to educate and train the pharmaceutical and healthcare professionals about the new outsourcing of pharmaceutical care services and measure the project's clinical and economic outcome.

### Education and training

Each new project on outsourcing pharmaceutical care services requires special education and pharmacy staff training, including clinical pharmacists, pharmacists, and pharmacy technicians. Moreover, the healthcare professionals, including physicians and nurses, need additional particular outsourcing of pharmaceutical care services education and training. Furthermore, the team management needs to be orientated concerning the project for all healthcare professionals. The orientation should focus on new staff healthcare providers who have joined the healthcare institutions to cover outsourced pharmaceutical care services.

### Project total quality management

During the implementation phase, various tools can be used to manage total quantity with the current project outsourcing of pharmaceutical care services. The balance scorecards are tools used during the implementation phase.<sup>34</sup> The instruments consisted of four parts: The customer, finance, internal process, and education and innovation. The assessment of healthcare services of outsourcing of pharmaceutical care services was an example of an internal process type. The clinical outcome of outsourcing pharmaceutical care services might reflect all clinical pharmacists, distributive pharmacists, and pharmacy technicians' education and competency. The financial type includes the measurements of the cost avoidance of the outsourcing of pharmaceutical care services. The fourth type was the customer types measuring the patient's satisfaction with healthcare providers, including healthcare professionals and pharmacists, pharmacy technician's satisfaction of outsourcing pharmaceutical care service in Saudi Arabia.

### Risk Management

This project has various risks: schedule risks, scope risks, budget risks, personal risks, technical risks, and quality risks.<sup>35,36</sup> This project can also be exposed to various risks such as lack of personnel, budget, technical support, and quality risks. The project can suffer from personal risks without trained healthcare professionals or insufficient pharmacists and pharmacy technicians. The education and training sections for all pharmacy staff and healthcare professionals are not included in outsourcing the pharmaceutical care services budget as an example of budget risk. This project is also exposed to certain technical risks. The limited to electronic scientific recourses or not electronic system used in the pharmacy practice. The project outsourcing of pharmaceutical care services may be exposed to quality risks without implementing safety tools or nontrained personnel.

### Closing of the project

The outsourcing of pharmaceutical care services for healthcare organizations in the governmental and private sectors is highly required to prevent any drug-related problems, meet the shortage of pharmacy staff, and expand the pharmaceutical services. The outsourcing of pharmaceutical care services can reduce morbidity and mortality with patient outcome improvements. Moreover, we recommend adopting outsourcing of pharmaceutical care services to avoid economic burden on the pharmacy and healthcare system, including the hospitals and primary healthcare centers services in Saudi Arabia. The project should continue to outsource pharmaceutical care services at each pharmacy unit and keep supervision through related committees. The education and training related to the outsourcing of pharmaceutical care services should be implemented accordingly. The guidelines pertaining to outsourcing pharmaceutical services should be updated regularly, and the number of pharmacy services should be expanded in the future. The annual celebration of all outsourcing of pharmaceutical care pharmacy staff, including pharmacist and pharmacy technician, is highly recommended in Saudi Arabia.

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### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

### ABBREVIATIONS

**MOH:** Ministry of Health; **KSA:** Kingdom of Saudi Arabia; **ASHP:** American Society of Health System pharmacists; **SWOT:** Strengths, Weaknesses, Opportunities, and Threats; **TPN:** Total Parenteral Nutrition; **NUPCO:** National Unified Procurement Company; **BSC:** Balance Scored Cards.

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