**Institution Name:** Directorate General of Medical Supplies in collaboration with Quality Assurance Center, MoH

**Document Title:** Medication Home Delivery Service protocol

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Page 1 of 17
Executive Summary

In many developed countries, the provision of pharmacy services is no longer restricted to the traditional "walk-in" or face-to-face approach. Medication home delivery service is one of the common pharmaceutical services that can be conducted in all healthcare institutions (primary, secondary and tertiary), and provided for patients, who are unable to come to the healthcare institute to collect their medications from the pharmacy due to mobility problems or difficult access to the healthcare institution. The positive aspects of medication home delivery service have been considered as an alternative to improve patients' access to pharmaceutical services, increase their compliance with treatment regimen and increase their satisfaction.

However, there are important factors need to be considered in any a delivery system such as security, confidentiality, timeliness, and the capacity to meet the necessary storage requirements. Although the service will facilitate collection of medications, there is an increased risk of errors that might occur during the process of medication home delivery (e.g. delivering wrong medications to the patient). Therefore, the pharmacist should be responsible for all steps in the delivery process (i.e. preparing, labeling, checking, packaging, dispensing and recording).

This protocol explains all standard procedures, roles and responsibilities of the pharmacy staff and the selected delivery system to provide medication home delivery system safely and effectively based on the international guidance and procedures. It clarifies that medication home delivery service must only be activated under supervision of the responsible pharmacist to ensure adherence to the regulatory standards and rules, thus patients’ safety.
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Table of Contents

Introduction ........................................................................................................... 5
Scope ...................................................................................................................... 5
Purpose ............................................................................................................... 5
Procedures .......................................................................................................... 6
Roles and responsibilities .................................................................................. 8
The director/ head of the pharmacy ................................................................... 8
The responsible pharmacist .............................................................................. 8
The selected licensed delivery company .......................................................... 10
Directorate General of Pharmaceutical Affairs and Drug Control .............. 11
Directorate General of Medical Supplies ......................................................... 12
Monitoring and evaluation ............................................................................. 13
Medication home delivery service during crisis situations ......................... 14
References ......................................................................................................... 15
Appendix 1 .......................................................................................................... 16
1. Introduction

Medication home delivery service is one of the common pharmaceutical services that can be conducted in all healthcare institutions, and provided for patients, who are unable to come to the healthcare institute to collect their medications from the pharmacy or having chronic diseases with multiple prescriptions. The positive aspects of medicines home delivery service have been considered as an alternative to improve patients’ access to quality pharmaceutical services, increase their compliance with treatment regimen and increase their satisfaction.

There are important factors need to be considered in any a delivery system such as security, confidentiality, timeliness, and the capacity to meet the necessary storage requirements. Although the service will facilitate collection of medications, there is an increased risk of errors that might occur during the process of medication home delivery (e.g. delivering wrong medications to the patient). Therefore, the pharmacist should be responsible for all steps in the delivery process (i.e. preparing, labeling, checking, packaging, dispensing and recording).

2. Scope of Service

2.1 The service is applicable to all patients with monthly repeat medication prescriptions in the pharmacy (pending prescriptions) particularly the following conditions:

2.1.1 Patients who cannot drive and do not have a caregiver to go to their health institutions to collect their medications.

2.1.2 Elderly patients.

2.1.3 Patients with chronic conditions and multiple medications.

2.1.4 Patients with immune system disorders.

2.1.5 Patients with infectious diseases, and are isolated

2.2 Exclusion Criteria includes the following conditions:

2.2.1 Patients on modified Prescriptions.

2.2.2 Patients need face to face counseling.

2.2.3 Patients on controlled medications (narcotics and controlled psychotropic).
2.2.4 Patient on cytotoxic medications.

2.2.5 Patients taking very expensive medications which may subject to misuse of wastage.

2.3 Implementation of Medication Home Delivery Services is limited to regional hospitals

3. Purpose

This protocol aims to specify standard rules and procedures for medication home delivery service to ensure providing safe and effective service.

The objectives are:

3.1 To initiate safe and qualified medication home delivery service.
3.2 To identify roles and responsibilities of the pharmacy staff.
3.3 To identify roles responsibilities of the delivery system for ensuring safe medication delivery.
3.4 To improve access to the pharmaceutical services

4. Procedures

The following next steps describe the service implementation: (refer to the flowchart in appendix 1)

4.1 The patient sends a request for delivering medications to home via a special application for the medication home delivery service, which will be confirmed by providing a reference number.
4.2 The pharmacy staff receives the patient’s order via the application.
4.3 The pharmacy staff must review the patient’s details and eligibility for medication home delivery service.
4.4 If the patient is eligible for the service, the pharmacy staff must review the date of the prescription and the list of the required medications to be printed out.
4.5 The pharmacy staff should prepare the medications.
4.6 The pharmacy staff must label each medication with the followings:
   4.6.1 Healthcare institution ID number, name of the patient and the age
   4.6.2 Name, strength and quantity of the medication
4.6.3 Instructions for taking or using the medication

4.6.4 The batch number and the expiry date

4.7 The responsible pharmacist must check the medications and labels of each medication carefully, before putting them in the external package.

4.8 The responsible pharmacist must call the patient in case of changing of medication's manufacturer (change of trade name). The pharmacy staff must put the medications in the external package, and put labels on it (based on the number of medications), including the reference number of the patient, bar code of each medication, type of the item, date, location and the governorate.

4.9 The responsible pharmacist must ensure providing safe storage requirements for specific medications (e.g. medications sensitive to temperature extremes), in addition to informing the delivery personnel about these precautions when collecting the medications.

4.10 The responsible pharmacist can use a self-assessment checklist to ensure following all steps.

4.11 The responsible pharmacist must complete and keep E-documentations and manual records (refer to sections 3.2.4 and 3.2.7).

4.12 After collecting the medications (from the pharmacy) to the delivery, the patient should receive a phone message (from the delivery personnel) of the expected delivery time, which should be in the same day of the medications collection from the pharmacy.

4.13 The medications should be delivered to the patient or the caregiver/representative by the delivery personnel, after confirming the patient’s reference number and scan on the bar codes which will be provided in the labels on the external package.

4.14 The patient should sign on an electronic form, and receive a phone message to confirm receiving the medications.

4.15 Selection of medication home delivery company shall be limited to the companies licensed by the Directorate General of Pharmaceutical Affairs and Drug Control (DGPA&DC)

4.16 The director general/director of hospitals intending to implement the medication home delivery service shall notify both DGPA&DC and Directorate General of Medical
Supplies (DGMS) in advance about the name and address of the selected licensed company

4.17 Primary health care institutions are not permitted at this stage to implement medication home delivery services. Patients who referred to primary healthcare institutions, should collect their medications from nearest health centers as per catchment area during morning and evening shifts

4.18 Incidences of violations or negligence practiced by any delivery company and its consequence, if any shall be reported to DGPA&DC and DGMS

5. Roles and responsibilities

4.1 Director/ Head of the pharmacy

4.1.1 Prepares standard operating procedure (SOP) to set up step-by-step instructions and it must be located in the pharmacy.

4.1.2 Ensures staffs involved are competent and well trained to provide the service safely. Therefore, the responsible pharmacist must consider a training in the following areas:

4.1.2.1 Introduction about the service and its purpose.

4.1.2.2 Ensure understanding and implementing of the pharmacy staff to the mentioned processes in the SOP (i.e. preparing, labeling, checking, packaging, dispensing and recording).

4.1.2.3 Information security management (including confidentiality and protection of the patient data).

4.1.2.4 Communication skills to support staff in managing communication with patients and with the delivery personnel.

4.1.3 Ensures the responsible pharmacist completed the course of cold chain management.

4.1.4 Provides a specific pharmacy hotline for queries from patients and deliver personnel.

4.1.5 Performs risk assessments and internal audit to evaluate the service.
4.1.6 Sends medication error reports to the DGMS (Directorate of Pharmaceutical Care).

4.2 The responsible pharmacist

4.2.1 Communicates the patients to inform them about their roles and responsibilities, including the followings:

4.2.1.1 Making a request through the delivery application.

4.2.1.2 Raising complaints and comments about the service and the delivery company.

4.2.1.3 Informing the pharmacist in case of receiving wrong package or missing a medication

4.2.2 Communicates the patients to provide clear information on how they can communicate with the pharmacy staff for any queries or assistance. This must be done before the first delivery by calling the patient or the caregiver.

4.2.3 Reviews the patient’s prescription and evaluate medications which are required. To consider this, consider the followings:

4.2.3.1 Having a phone conversation with the patient/caregiver to confirm that each medication is required.

4.2.3.2 Recording medications which are not dispensed in the patient’s record and discussing with the prescriber if appropriate.

4.2.4 Completes E- documentation and records, including the followings:

4.2.1.4 The reference number for each patient and the healthcare institution ID number.

4.2.1.5 Details of the pharmacists and assistant pharmacists accountable and responsible for providing each part of the service (i.e. name of the pharmacy staff who prepared the medications and the responsible pharmacist who checked the medication prior collection for delivery.

4.2.1.6 Date and time of preparing.

4.2.1.7 Date and time of delivering.
4.2.5 Checks the prepared medications with labels prior collecting by the delivery personnel.

4.2.6 Reports any medication errors and incidents occur during the processes of the service.

4.2.7 Ensures the following methods of delivery adhered to:

4.2.7.1 Manage confidential data and information about the medication and patient.

4.2.7.2 Comply with any security requirements and specific storage (e.g. using delivery transport cooler box with a data logger for medications sensitive to temperature extremes).

4.2.7.3 Ensure the medication to be delivered securely (i.e. in a sealed and a good condition, and delivered for the intended patient).

4.2.7.4 Realise the storage requirements for some medications (e.g. medications sensitive to temperature extremes).

4.2.7.5 Include a delivery tracking system from collecting the medications from the pharmacy to the point which is received by, and signed for by the patient or its caregiver/ representative.

4.2.7.6 Include the required actions to be taken in failed delivery events (i.e. medications should be returned to the pharmacy in the same day of collection)

4.2.8 Keeps further required documentations and records, including (not limited):

4.2.8.1 A form of the list of the patients used the service per day, with their details (healthcare institution number, the contact phone number, and the reference number).

4.2.8.2 Details of the accountable pharmacy staff providing each part of the service.

4.2.8.3 The information and advice provided to the patients on using medications safely.

4.2.8.4 Complaints or concerns from the patients or caregiver.

4.2.8.5 Reported Incidents.
4.3 The selected licensed delivery company

4.3.1 There are some key points required to be known by the selected delivery company:

4.3.1.1 It is extremely important that the correct medication is delivered to the intended patient.

4.3.1.2 The medications should be delivered to the patients in a good condition, so storage requirements are an important aspect to ensure safety and efficacy of delivered medications.

4.3.1.3 The delivering period should be selected by the pharmacist to be matched with the opening times of the pharmacy.

4.3.1.4 Medications deliveries must be done at the same day of collecting them from the pharmacy.

4.3.1.5 Medications require special storage requirements, should be delivered first.

4.3.1.6 All deliveries (from each pharmacy) must be completed before collecting further prescriptions for delivery from other pharmacy to avoid confusion between prescriptions.

4.3.1.7 The contact details of the pharmacy and the responsible pharmacist of the service should be available with the delivery personnel for assistance and supervision.

4.3.1.8 The package of medications should not be opened by the delivery personnel. Labels (based on the number of medications) with the reference number of the patient must be available in the external packaging.

4.3.1.9 The patient’s reference number needs to be confirmed by the patient or caregiver / representative before receiving of the medications.
4.3.1.10 Confirmation for receiving the medications by the patient must be conducted (i.e. sending a message to the patient, sign on the electronic form, or both methods).

4.3.1.11 Any medications cannot be delivered shall be returned to the pharmacy in the same day during working hours.

4.3.1.12 The medication should not be left outside the house. This is an offended authorized the MOH to terminate the contract

4.3.1.13 In failed delivery events, medications should be returned to the pharmacy in the same day of collection otherwise the company is responsible to pay the medications cost.

4.4 Responsibilities of DGPA & DC

4.4.1 Licenses the selected companies for medication home delivery service.

4.4.2 Monitors the performance of the medication home delivery service conducted by the licensed company.

4.5 Responsibilities of DGMS

4.5.1 Circulates the list of the group of the expensive medications that are excluded from the delivery service.

4.5.2 Trains the responsible pharmacist in cold chain management.

4.5.3 Monitors and evaluates the service implementation by conducting audits and surveys in collaboration with the concerned hospitals.

5. Monitoring and evaluation

The evaluation can be conducted through:

5.1 Internal and external audits

Internal audits should be carried out by the healthcare institution itself. Whereas external audits should be conducted by DGQAC, in collaboration with the directorate of the pharmaceutical care (DGMS).

The main points need to be considered during the audit include (not limited):
5.1.1 Training of staff.

5.1.2 Appropriateness of communication methods with patients, between staff, other healthcare providers and delivery points.

5.1.3 The followed system and processes for receiving orders and prescriptions and compliance of the pharmacy staff to the processes.

5.1.4 Records and documentations.

5.1.5 Processes for secure delivery to patients.

5.1.6 Patient data protection.

5.1.7 Complaints and concerns.

5.1.8 Workload on the pharmacy staff to prevent negative implications on the daily practice.

5.2 Patient Satisfaction Survey

A standardized electronic questionnaire will be provided by DGQAC and linked through Al Shifa3Plus system by DIGIT in all health care facilities and hospitals, where SMS message will go be default once the patient has chosen this service to deliver his own medication.

Then, this can be performed by the hospital to evaluate the patients’ satisfaction about the new service, including:

5.2.1 The delivery system used (e.g. ease to use the application).

5.2.2 Physical appearance of medications (i.e. delivered in a good condition).

5.2.3 The selected delivery company (e.g. delivering the correct medication, timeliness, storage).

5.2.4 Communication level with the responsible pharmacist to provide more information or advice, and with the delivery personnel.

5.2.5 Further complaints and concerns.

5.2.6 Recommendation of SMS surveys and incidents to be sent to DGQAC for further action with DGMS.

5.3 A checklist

This can be conducted by The Directorate General of Pharmaceutical Affairs and Drug Control to ensure adherence of the company to the rules and regulations of the Ministry of Health. Additionally, this can be assessed directly from the responsible pharmacist in
the healthcare institution by direct observation to ensure the company meets all the requirements specification.

6. Medication home delivery service during crisis situations

Medication home delivery service can be activated in the crisis situations such as pandemics, cyclones, and floods. The service can be provided for the targeted groups (refer to section 1.1.2) or for patients who are in home isolation.

When activating medication home delivery service during crisis situations, it is important to identify risks, which include the following points:

6.1 Perform a risk assessment of each patient requiring a delivery individually.
6.2 Ensure the delivery personnel are not at-risk group.
6.3 Ensure the delivery personnel are equipped with hand hygiene products and antiseptic wipes.
6.4 Ensure the delivery personnel recognize the situation and the important advice provided to them.
6.5 The delivery personnel should restrict to the rules regarding the doorstep deliveries in pandemic outbreak, as a distance should be kept between the delivery personnel and the patient (at least 2 meters).
6.6 As it is a good practice to get a patient or caregiver / representative signature after medication delivering, this can be stopped during pandemic outbreak to prevent potential exposure to the disease. The delivery personnel can send a phone message to the pharmacist and the patient to confirm medications delivery.
6.7 Precautions should be taken for payment process for the delivery personnel in case of pandemic outbreak. Patients can pay online before delivery is arranged. If they wish to pay by cash, money should be kept at the entrance and obtained by the driver where sanitizing methods shall be used.
6.8 Volunteers can deliver medications to patients in crises situations only, however, they should be reasonable, trustworthy, and safe and public-spirited individuals, who wants to help others in their community. Additionally, they should have a recommendation letter or past experience volunteer activity.
References


Annexes
Appendix 1: Flow chart of medication home delivery service

1. The patient’s request is received via the application → NO
2. Review the patient’s eligibility to the service? → NO
3. Inform the patient
   YES
4. Review the date of the Rx and the list of medications → Prepare the medications → Label each medication with the required information
5. Check medications sensitive to temp. extremes?
   YES
6. Put the medications in the external package & put a labels including a bar code of each medication and the reference number of the patient → Call the patient in case of changing the manufacturer of the medication
   NO
7. NO
8. Complete and keep E-documentations and manual records → Give the delivery personnel the medications with all information
9. Contact the patient to know the expected delivery time → Confirm the patient’s reference number and scan on the bar code of each medication before delivering
10. Deliver medications to the patient → The patient should sign on the electronic form and receive a message to confirm receiving the medications

Page 16 of 17