



**Pharmaceutical Care Policy
Document
for Quality Use of Medicines
JSS Hospital, Mysuru
2019**



RACE
for
CARE



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Preamble

The purpose of the pharmaceutical care policy document is to describe the standardized methods to foster consistency and continuous provision of pharmaceutical care services within the purview of the healthcare system in the hospital settings. This policy document shall also facilitate to generate documentations and their critical analysis and sharing vital results among health care professionals to improve patient care. In-depth understanding must precede the efforts to implement pharmaceutical care, which merits the highest priority in all health care practice settings.

Department of Pharmacy Practice, JSS College of Pharmacy, Mysuru is committed to move forward in Pharmaceutical Care Services with standardized policies and procedures in the contemporary pharmacy practice settings and to assist/guide health care professionals to deliver such standards of care in a patient focused, interdisciplinary practice environment.



Definition and Process of Pharmaceutical Care

Definition:

Medicines are one of the most important modalities for treatment and prevention of diseases. However, rational use of medicines is essential in order to achieve optimum therapeutic outcomes, to improve patient safety and quality of life of the patients. Pharmacists are well placed in order to achieve these objectives of rational drug use through provision of pharmaceutical care.

Pharmaceutical Care is a patient-centered, outcomes oriented pharmacy practice that requires the pharmacist to work in concert with the patient and the patient's other healthcare providers to promote health, to prevent disease, and to assess, monitor, initiate, and modify medication use to assure that drug therapy regimens are safe and effective. The goal of Pharmaceutical Care is to optimize the patient's health-related quality of life, and achieve positive clinical outcomes, within realistic economic expenditures.

Who are responsible to provide pharmaceutical care services at JSS Hospital?

Academic clinical pharmacy practitioners: They are teacher practitioners who are involved in providing pharmacy practice education and training to PharmD students or post graduate pharmacy practice students. They should be licensed to practice and must be registered with state pharmacy council. Academic practitioners are responsible for providing and monitoring pharmaceutical care services to the assigned medical department(s) or practice setting(s).

Clinical pharmacists: They are full time clinical pharmacy practitioners who are responsible to provide and/or monitor pharmaceutical care services to the assigned medical department(s) or practice setting(s). They should be licensed to practice and must be registered with state pharmacy council. **Clinical pharmacy intern:** They are PharmD students (interns) who are undergoing advanced pharmacy practice experience. They are responsible for providing pharmaceutical care services as per the assigned clinical rotation. They provide services under supervision of assigned preceptors for respective clinical rotation.

Clinical pharmacy trainee: They are PharmD/ M.Pharm (Pharmacy Practice) students who are doing their clerkship/internship. They should provide pharmaceutical care services under supervision of the clinical pharmacists and preceptors.



Elements of Pharmaceutical Care Services at JSS Hospital, Mysuru

- ⊙ Procurement of medicines and Inventory control
- ⊙ Drug distribution
- ⊙ Detection and management of drug related problems
- ⊙ Medicine and Poison Information Service to health care professionals & Patients
- ⊙ Patient Medication Counselling & Education services
- ⊙ Medication error reporting, monitoring & management program
- ⊙ Anti-coagulation therapy management



Procurement of Medicines and Inventory Control

Medicine Procurement:

Pharmacy procurement officer is in charge of facilitating the procurement of medicines that meet prescribed safety and health standards at a cost-effective price. A pharmacy procurement officer drafts purchase orders for the required medication for a pharmacy and ensures the orders are in par with the budgetary allocation. The officer reviews purchase orders and other documentation and ensures they are accurate. A pharmacy procurement officer develops relationships with suppliers and distributors of medicines, and works with Pharmacy Purchase Committee to procure quality products at very affordable price.

Policy:

Stock Procurement in the Pharmacy stores.

Purpose:

To provide details on the method of stock procurement and control in the hospital pharmacy.



**Inventory Control:**

Pharmacy procurement officer keeps accurate records of all medicines in their possession and the funds applied in acquiring new medication. The officers in procurement determine whether there are any shortages in their stock of medicines and make requests to management for funds to acquire the medicines. They manage emergency stock to be made available during stock-outs. Pharmacy procurement officers review all documentation received in their office to ensure the procedures for procurement of medicines followed the proper pharmacy policies.

Policy:

Hospital's pharmacy store shall stock adequate amount of all medicines as listed in hospital formulary.

Purpose:

Medicines shall be classified in to Vital, Essential and Desirable category and it shall be ensured that stock out situations is not reached for vital and essential medicines. To procure medicines required for functioning of the hospital and its satellite units located in hospital as per the approved formulary and to provide uninterrupted quality medicines for both in-patients and out- patients.

Drug Distribution

Drug distribution concerns mainly dispensing the medicines to patients. This requires an understanding of the patients (who may not speak or understand the language of the dispenser) and practical skills in dispensing and record-keeping. The other aspect of distribution of medicines at the health center is the return of overstocked and nearly expired drugs to the medical store

Policy:

Inpatients shall receive their medication from the hospital pharmacy. medication dispensing shall be done with care to prevent any medication error. Following shall be checked before dispensing of medication:

- ◆ Name of medicine prescribed
- ◆ Strength and formulation of prescribed medicine
- ◆ Expiry date
- ◆ Particulate matter in liquid dosage forms and parenteral drugs
- ◆ Labels (if reconstituted drugs)

Labelling shall be done for every prepared / reconstituted medication, which shall include name, strength and frequency of administration of medicines

Purpose:

To provide a means for ancillary departments to obtain medications in a safe and efficient manner.

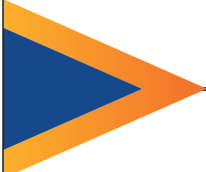
1. To deliver medication in an efficient and timely manner.
2. Improve pharmacist – nurse communication and cooperation.
3. Improve pharmacy-physician communication and cooperation by providing an immediate source of information as well as encouraging the use of Hospital Formulary of the approved medications.

Detection and Management of Drug Related Problems

Drug therapy review is an important activity performed by clinical pharmacists that help clinicians in identifying and resolving drug related problems (DRPs) during ongoing patient care. Drug related problem is defined as an event or circumstance involving drug treatment that actually or potentially interferes with the patient experiencing an optimum outcome of medical care. DRPs are one of the contributing factors in increasing morbidity and mortality in hospitalized patients. Resolving DRPs can improve therapeutic outcomes of the patients, reduce/prevent drug toxicities and minimize health care related expenses. Authenticating DRPs after identification and resolving the same required professionally fair communication between clinical pharmacists and clinicians. Since, correction of DRPs may lead to change in the prescribing orders and ongoing drug therapy, it is essential that DRPs are correctly identified, assessed, communicated, resolved and followed up appropriately

There are several classifications categorizing types of DRPs, however, Hepler and Strand classification is widely accepted. As per that classification, DRPs are classified in to eight different categories.



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1. **Untreated indication:** The patient has a medical problem that requires medication therapy (an indication for medication use) but is not receiving a medication for that indication.
 2. **Improper drug selection:** The patient has a medication indication but is taking the wrong medication.
 3. **Sub therapeutic dosage:** The patient has a medical problem that is being treated with too little of the correct medication.
 4. **Over dosage:** The patient has a medical problem that is being treated with too much of the correct medication (toxicity).
 5. **Adverse drug reaction:** The patient has a medical problem that is the result of an adverse drug reaction or adverse effect.
 6. **Drug interactions:** The patient has a medical problem that is the result of a drug–drug, drug–food, or drug– laboratory test interaction.
 7. **Drug use without indication:** The patient is taking a medication for no medically valid indication.
 8. **Failure to receive drug:** The patient has a medical problem that is the result of not receiving a medication (e.g., for pharmaceutical, psychological, sociological, or economic reasons).

Early identification and resolving of DRPs are very important as they may delay the recovery of the patients, may prolong the hospitalization, increase health care expenditure and impair the quality of life of the patients.

It is evident from the literature that globally, DRPs are contributing to adverse health outcomes in patients including the human suffering, and increased health care expenditure. These findings warrant for the development and implementation of the institutional Pharmaceutical care policy document.

Pharmaceutical Care Process (RACE) at JSS Hospital, Mysuru

R

Step 1:
Review of clinical status of the patient and formulating treatment plan

- Reviewing patients' clinical status
- Conducting medication history interview
- Documenting patient data
- Performing subjective & objective assessment
- Formulating individualized treatment plan for patients

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Step 2:
Assessment of drug related problems and quality use of medicines

- Reviewing medication orders and comparing treatment plan made
- Identifying scope of potential and actual drug related problems
- Assessing actual drug related problems

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Step 3:
Communicate and resolving drug related problems

- Discussing drug related problems with concerned pharmacy preceptors
- Communicating drug related problems with concerned clinicians or nurses as applicable
- Discussing strategies to resolve drug related problems
- Documenting drug therapy changes

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Step 4:
Evaluate and monitor therapeutic outcomes

- Follow up the progress of the patients in person or by telephone
- Reviewing treatment plan for necessary changes, if any
- Conducting patient medication counseling
- Discussing further follow up visits and refilling the prescriptions



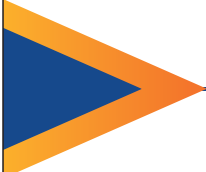
Step 1: Review of clinical status and formulate a treatment plan

Pharmacists must collect and/or generate subjective and objective information regarding the patient's general health and activity status, past medical history, medication history, social history, diet and exercise history, history of present illness, and economic situation (financial and insured status).

Sources of information may include, but are not limited to, the patient, medical charts and reports, pharmacist-conducted health/physical assessment, the patient's family or caregiver, insurer, and other healthcare providers including physicians, nurses, mid-level practitioners and other pharmacists. Since this information will form the basis for decisions regarding the development and subsequent modification of the drug therapy plan, it must be timely, accurate, and complete, and it must be organized and recorded to assure that it is readily retrievable and updated as necessary and appropriate. Patient information must be maintained in a confidential manner.

Step 2: Assessment of drug related problems and quality use of medicines

Based upon a thorough understanding of the patient's medical condition or disease and its treatment, the pharmacist must, in consultation with the patient and patient's other healthcare providers develop an outcomes-oriented drug therapy plan. The plan may have various components that address each of the patient's diseases or conditions. In designing the plan, the pharmacist must carefully consider the psychosocial aspects of the disease as well as the potential relationship between the cost and/or complexity of therapy and patient adherence.

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As one of the patient's advocates, the pharmacist assures the coordination of drug therapy with the patient's other healthcare providers and the patient. In addition, the patient must be apprised of (1) various pros and cons (i.e., cost, side effects, different monitoring aspects, etc.) of the options relative to drug therapy and (2) instances where one option may be more beneficial based on the pharmacist's professional judgment.

The essential elements of the plan, including the patient's responsibilities, must be carefully and completely explained to the patient. Information should be provided to the patient at a level the patient will understand. The drug therapy plan must be documented in the patient's pharmacy record and communicated to the patient's other healthcare providers as necessary.

Step 3: Communication and resolving of drug related problems

All the identified DRPs should be discussed with concerned pharmacy preceptors and possible solutions to resolve those DRPs should be suggested. After discussion with preceptor, the same DRPs should be communicated with the concerned clinicians and/or nurses with corrective actions. Acceptance and implementation of corrective actions should be recorded correctly and documented for the further needs.



Step 4: Evaluate and monitor therapeutic outcomes

The pharmacist is responsible for monitoring the patient's progress in achieving the specific outcomes according to strategy developed in the drug therapy plan. The pharmacist coordinates changes in the plan with the patient and the patient's other healthcare providers as necessary and appropriate in order to maintain or enhance the safety and/or effectiveness of drug therapy and to help minimize overall healthcare costs.

Patient progress is accurately documented in the pharmacy record and communicated to the patient and to the patient's other healthcare providers as appropriate. The pharmacist shares information with other healthcare providers as the setting for care changes thus helping assure continuity of care as the patient moves between the community setting, the institutional setting, and the long-term care setting.

Patient should also be provided with education and counseling on effective use of medicines. This education and counseling includes but not limited to disease process and its complications, information on drug therapy, expected adverse outcomes, medication adherence, life style modifications. Counseling can be provided to the patient during any phase of treatment but usually suggested when treatment is initiated, changed or modified and during discharge from the hospital.

Medicines & Poison Information Services

The provision of drug information service is among the most fundamental responsibilities of clinical pharmacists. This provision is also known as "Medicine Information Service" or "Drugs and Therapeutic Information Service". Drug and therapeutic information (DTI) refers to the provision of unbiased, well-referenced and critically evaluated up to date information on any aspect of drug use. This clinical service of pharmacists assist medical practitioners and other health care professionals (HCPs) to individualize patients' drug therapy, to enhance therapeutic outcome of the patients, to reduce drug toxicities and to minimize health care expenditure on medicines and hence contribute for better patient care. Availability and acceptability of DTI service across the developed world is tremendously high. However, its acceptability and availability across the developing world is still a question due to various reasons like limited growth of clinical pharmacy services in many countries, traditional prescribing habits, lack of funding and lack of resources. However, promotion and acceptability of this service is essential in the current scenario due to increasing patient load, high number of patients with multiple co-morbid conditions, availability of large number of medicines in the market and routine arrival of new medicine related updates from various research.

Provision of DTI service helps practitioners overcoming above mentioned barriers in patient care. Clinical

pharmacists are considered as 'Medication Experts' and hence are well positioned for this service. They are well trained and skilled to evaluate literatures and other applicable information resources to formulate and deliver answer for the requested drug related queries. There are many published literatures exploring contribution of clinical pharmacists in providing DTI service.



Policy:

This service should be provided by Drug and Poison Information Center of the JSS Hospital, Mysuru on all working days. The drug information services should be provided during working hours i.e. 8am to 8pm while poison information service should be provided 24X7. Academic clinical pharmacists, clinical pharmacists and trainee clinical pharmacists under supervision should provide Drug and Poison Information service at the JSS Hospital. This service is provided on request from any health care professional of the hospital or patient or patient's caretaker. This service is also provided on request from health care professionals of other hospitals or health care facilities within the region. The request for medicine information can be made during ward rounds or by telephone or by email or in person at drug and poison information center. The requesters should provide all the required information to the pharmacists while requesting the query.

In case of high workload of the clinical pharmacists, requests made for "Better Patient Care" and queries related to "Detection and Management" of poison and adverse drug reactions should be attended and answered on priority. The requests to update knowledge or literature search may need additional time to respond. The drug and poison information center is responsible for answering all the requests by following standard operating procedures for answering drug and poison information. The answered drug information queries are audited randomly for their quality by the quality assessment panel.

Patient Medication Counselling & Education Service

JSS Medication Information for Neuropsychiatric Disorders and Sensitization (JSS MINDS)

Department of Clinical Pharmacy in collaboration with Department of Psychiatry initiated the 'JSS Minds Program' with an objective to enhance increased medication adherence to achieve better patient outcomes among patients visiting outpatient Department of Psychiatry, JSS Hospital, Mysuru. The patients will be educated initially during their visit to the hospital, and will be followed up further to understand their medication adherence behavior, and counsel further as required, and also advise them on importance of consulting the psychiatrists on dates of scheduled appointments. Patients follow up, as required, will happen through regular telephonic contact. As hospital patients will have privilege of getting reminders on follow-up date and also appointments with the psychiatrist, which is expected to enhance better understanding of the medication use and improved medication adherence.

The JSS MINDS Program assists psychiatrists in overcoming the medication adherence problems associated with psychiatric patients. As pharmacists have adequate knowledge on medication use process, this service will enable the psychiatrists and patients in ensuring higher medication adherence rate thereby enhanced outcomes.

The goal of JSS MINDS is

- * Provide information and education to patients on the safe use of medication
- * Enhance therapeutic outcomes
- * Improve medication adherence in psychiatry patients
- * Enhance quality of life in patients with mental health diseases

Policy:

All the patients who visits Department of Psychiatry for the purpose of treatment can avail this service and will be provided at JSS MINDS center located at Department of Psychiatry on all working days from 9 am to 4 pm.



Medication Counselling & Education Centre

Ambulatory patient counselling & education centre practicing in the context of hospital settings is a integrated, accessible healthcare services by pharmacists who are accountable for addressing medication needs, developing sustained partnerships with patients. The trainee clinical pharmacists under the supervision of academic clinical pharmacists and/or clinical pharmacists provide ambulatory patient counselling at the JSS hospital, Mysuru.

This is accomplished through direct patient care and medication management for ambulatory patients, long-term relationships, coordination of care, patient advocacy, wellness and health promotion, triage and referral, and patient education and self-management. The patients visiting the outpatient departments of the hospital for various ailments after the diagnosis they would be procuring the medications from the outpatient pharmacy which is located adjacent to ambulatory patient counselling center will be guided to ambulatory patient counselling center to avail the free educational / training service provided on proper use of medications / medical devices.

The objective of the program is to improve the adherence and knowledge about pharmacotherapy in outpatients and to maximize the efficacy, medication adherence and minimize the adverse drug events.

Policy:

This service can be utilized by the patients who visits JSS Hospital, Mysuru for ambulatory care. The service is provided by the department of clinical pharmacy of JSS Hospital, Mysuru on all working days during working hours i.e., from 9 am to 5 pm.

Medication Error Reporting, Monitoring and Management Service

The provision of drug therapy by a medical provider to a patient is a complex process. Errors can occur at any step along the way, from prescribing to the ultimate provision of the drug to the patient. Medication events are inevitable despite the best efforts of conscientious professionals and the institution of systems to prevent them. As Clinical Pharmacists, medication errors are not necessarily viewed as incompetence nor misconduct on behalf of the practitioner(s) involved. It is believed that practitioners do their best to provide safe patient care. Clinical Pharmacists were trained to have an obligation to report medication events as a means to improve the medication use system and to provide a safe environment for patient care by making it difficult for similar events to occur in the future. A culture of prompt and thorough reporting of medication events in good faith by practitioners or staff has been adopted and corrective measures are taken to prevent/minimize the occurrence of such incidents in future. Further, medication errors that occur either do or do not harm patients and reflect numerous problems in the system, and a culture is inculcated which is driven towards safety and addressing the presence of unfavorable working conditions for all health care professionals. In order to effectively avoid future errors that can cause patient harm, improvements must be made on the underlying, more-common and less-harmful systems problems most often associated with near misses.

The Department of Clinical Pharmacy is committed to patient safety; eliminating a punitive culture and institutionalizing a culture of safety; increasing reporting of near misses; providing timely feedback and follow-up actions and improvements to avert future errors; and having a multidisciplinary approach to reporting. It works towards building sustained and collaborative efforts in reducing the occurrence and severity of medication errors, which in return yield safer, higher quality care resulting in improved patient safety.

Policy:

This policy is intended for all healthcare professionals (HCPs) who are working at JSS Hospital, Mysuru. This policy enables the HCPs to report a medication incident voluntarily through any of the established reporting modes with a provision of remaining anonymous.



Anti – Coagulation Therapy Management

The department of Clinical Pharmacy in collaboration with department of Cardiology initiated the anti-coagulation therapy management service with an aim to optimize anti-coagulation therapy that reduces the risk of thromboembolic as well as bleeding events besides imparting therapeutic outcomes in patients receiving anti-coagulation therapy, managing anticoagulation therapy is complex. Each patient's treatment must be individualized, monitored carefully to avoid medication-related problems and major adverse events. The clinical service of pharmacist in JSS-Anti-Coagulation Clinic (ACC) is to fulfil the following objectives:

- ✓ Optimization of anticoagulation outcomes.
- ✓ Prevent adverse effects of anticoagulation therapy.
- ✓ Provide effective patient education and counselling.
- ✓ Improve patient adherence to anticoagulants.

Policy:

All the patients visiting the ACC located at the cardiology department at JSS Hospital, Mysuru on every Monday and Thursday between 9 am to 2 pm can utilize this service. Our anticoagulation clinic located at JSS Hospital, Mysuru is the collaborative practice model by the department of Clinical Pharmacy and department of Cardiology.

The following are the services provided at JSS-ACC:

- a) Initiation and management of anti-coagulation therapy
- b) Medication reconciliation services on every visit
- c) INR Monitoring (POC device)
- d) Dose titrations based on Time in Therapeutic Range (TTR)
- e) Provide patient-specific individualized educational interventions
- f) Promote medication adherence
- g) Management of anticoagulant overdose



Constitution of Pharmaceutical Care Policy Committee

A Pharmaceutical Care Policy Committee was constituted comprising of;

Director, JSS Hospital, Mysuru

Medical Superintendent, JSS Hospital, Mysuru

Dean, Faculty of Medicine, JSS AHER, Mysuru

Dean, Faculty of Pharmacy, JSS AHER, Mysuru

Head, Clinical Pharmacy Services, JSS Hospital, Mysuru

Officer In-Charge of Pharmacy, JSS Hospital, Mysuru

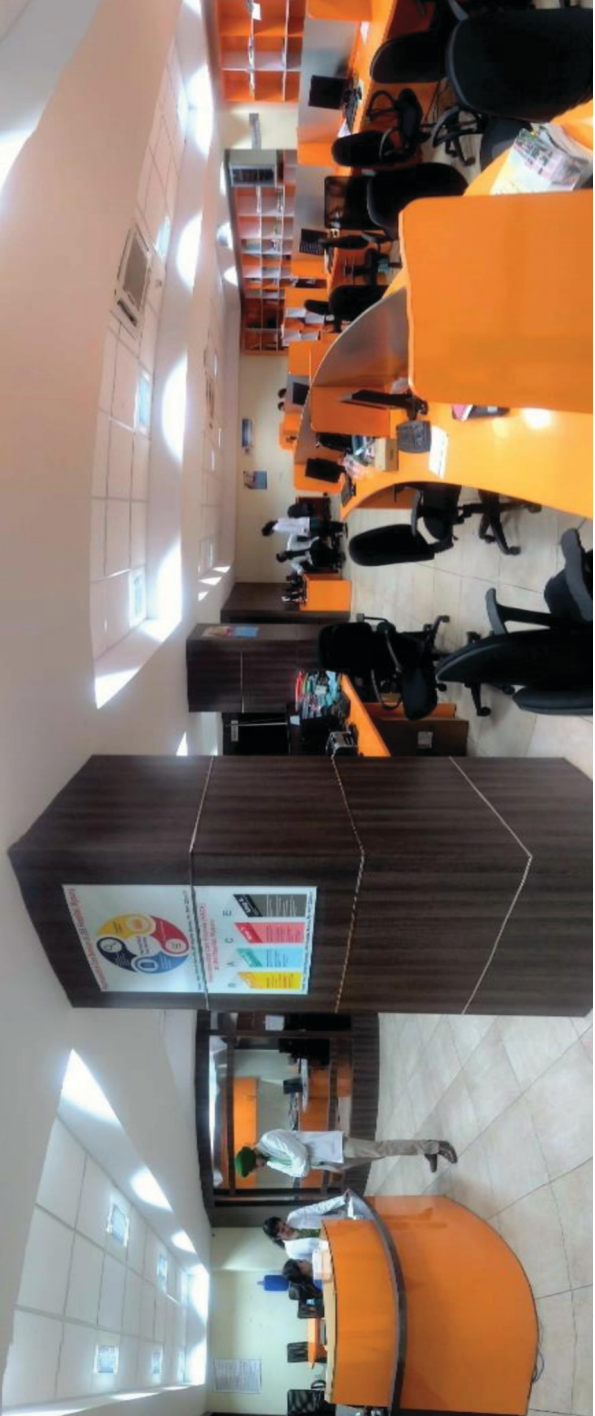
Head, Nursing Care Services, JSS Hospital, Mysuru

The committee reviewed the pharmaceutical care policy document and arrived to a consensus to implement the same and evaluate from time to time to strengthen the pharmaceutical care services in JSS Hospital, Mysuru.



Summary

Implementation of pharmaceutical care policy document will ensure the enhanced responsibilities of practicing pharmacists in providing pharmaceutical care services and improves patients' health outcomes and overall health related quality of life. Provision of such services requires philosophical, organizational and functional changes in the practice of pharmacy.



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