

AN OVERVIEW OF STANDARD OPERATING PROCEDURES (SOPs)

Definitions

A standard Operating procedure is a document which describes the regularly recurring operations relevant to the quality of service being rendered. The purpose of an SOP is to carry out the operations correctly and always in the same manner. It should be available at the place where the work is done. An SOP is a compulsory instruction. All changes in the instructions must be documented and reported to the authorities who are the only ones to authenticate and approve such variations.

OBJECTIVES OF DEVELOPMENT OF SOPs

Standard Operating Procedures (SOPs) for pharmaceutical Care Delivery in all health facilities in Nigeria will be expected to:

- ❖ Enhance the quality of the services provided by the Pharmacist.
- ❖ Promote uniformity in the services provided
- ❖ Eliminate operational errors in pharmaceutical care delivery services.
- ❖ Elevate the status of pharmacists and enhance their motivation for better performance.

SOPs occupy the center stage in most organizations worldwide and the practice of pharmacy cannot be an exception.

Areas covered by this SOPs include:

1. SOP for Drug Lists
2. SOP for Procurement of Medicines
3. SOP for Receiving Drugs into Pharmacy
4. SOP for Drug Storage
5. SOP for Vaccine Storage
6. SOP for Temperature Control

7. SOP for Issue and Delivery of Drugs to Dispensary/Satellite Pharmacies/Wards /Other Units
8. SOP for Dispensing /UDDS
9. SOP for Patients Counseling
- 10.SOP for Counseling of Handicapped Patients
- 11.SOP for Compounding of Medicines
- 12.SOP for Procurement, Dispensing and Distribution of Narcotic Drugs and Poisons.
- 13.SOP for Disposal of Expired Drugs
- 14.SOP for Clinical Ward Round
- 15.SOP for Training of Intern Pharmacists
- 16.SOP for Continuing Education
- 17.SOP for Drug Revolving Fund (DRF) Scheme
- 18.SOP for Drug Information Service (DIS)/Drug Information Center (DIC).
- 19.SOP for Dress Code
- 20.SOP for Therapeutic Drug Monitoring(TDM)
- 21.SOP for Screening Prescriptions
- 22.SOP for Preparing a Drug Formulary.

1. SOP FOR DRUG LISTS

- I. Prepare an advocacy plan for the SOP
- II. Write a proposal to management for setting up of drug and therapeutic committee in line with requirements prescribed by the National Drug Policy.
- III. Identify different categories of drugs required by the health facility based on the national essential drug list (EDL) / National Standard Treatment Guideline (NSTGs).
- IV. Draw up list using generic and international non-proprietary name (INN) of the drug.
- V. Obtain approval for the management of the facility
- VI. Circulate approved list to stake holders within the facility.
- VII. Ensure strict compliance to the use of the ELD.

2. SOP FOR PROCUREMENT MEDICINES/ CONSUMABLES

- I. Prepare an advocacy plan for the sop
- II. Confirm the availability of funds
- III. Match needs with available funds
- IV. Identify and verify the suppliers
- V. Qualify suppliers
- VI. Choose method of procurement
- VII. Prepare an order form
- VIII. Contact suppliers to quote the returns and complete the form
- IX. State the date of submission of the tender document
- X. Organize public bid openings and record proceedings
- XI. Conduct evaluations
- XII. Submit recommendations to tender committee for approval of awards
- XIII. Forward copies of award document to the store and finance departments
- XIV. Facilitate the signing of contract agreements
- XV. Monitor suppliers performance and sanction defaulters
- XVI. Receive and store drugs
- XVII. Facilitate prompt payment to suppliers
- XVIII. Commence preparation for next procurement cycle
- XIX. Provide the names and strength of each drug in the following order:
 - Name (generic), strength and form, e.g.
Paracetamol 500mg tablets
Paracetamol 125mg/5ml oral liquid
Ampicillin 500mg injection
Glucose 5% injection
- XX. Provide the package size required e.g. 10's, 500's, sachet, vial.
- XXI. Provide a column for the quantity required e.g each, 10, 200, 1000, 5000
- XXII. Provide a column for the for name of manufacturer
- XXIII. Provide a column for the NAFDAC number of the product

- XXIV. Provide a column for the expiry date of drug
- XXV. Provide a column for the price of each item and a column for the total price
- XXVI. Provide a space for the name of the company, giving relevant details such as address, telephone number, e-mail address, name of the contact person.

EXAMPLE OF ORDER FORM DRUGS

No	Name and strength of drug	Pkg size	Qty. required	Name of manufacturer	NAFDAC No.	Expiry date	Price: per pkg size	Total N	Remarks
1	Paracetamol 500mg tablets	1000's	20		12345	March 2009			

Name _____ of _____ company:

.....

Address:

.....

Telephone

No.:

.....

E-mail:

.....

.

Name of contact person: Telephone No.:

.....

Date

of

submission

of

document:

.....

Signature:

.....

date:

.....

3. SOP FOR RECEIVING DRUG ITEMS INTO A PHARMACY BULK STORE

- I. Prepare an advocacy plan for the SOP
- II. identify and prepare store space
- III. ensure the presence of the stock verifier and auditor before receiving items
- IV. verify award documents
- V. match the documents with that from the supplier
- VI. conduct physical check of every item supplied in the line with the specification
- VII. receive items
- VIII. note the number of items supplied
- IX. verify NAFDAC certificate of analyses for each of the products supplied
- X. if the quality of the item is suspicious, remove and quarantine
- XI. submit samples for quality assurance test
- XII. Release and accept into the store if quality assurance standards are met
- XIII. Sign all necessary supply documents
- XIV. Document all items received
- XV. Prepare appropriate documents and forward for prompt payment
- XVI. Arrange all items appropriately according to the storage system in use
- XVII. Items requiring cold storage should be put in cold store or in the refrigerator immediately.
- XVIII. Ensure the store is locked and the key is returned to the appropriate place for safe keeping
- XIX. The store should be insured incase of fire out break or theft

4. SOP FOR DRUG STORAGE

- I. Prepare an advocacy plan for the sop
- II. Ensure the pharmaceutical store is centrally located
- III. Ensure the pharmaceutical store meets PCN guidelines
- IV. Ensure the a tile floor finishing and that pallets and shelves are provided
- V. Ensure that the store in the storage area are made of concrete reinforcement and/or tiled/terrazzo finishing.
- VI. Ensure the that the pharmaceutical store is solely used for storage of pharmaceuticals
- VII. Ensure the that pellets and shelves, steel ladder, steel cabinets and other relevant furniture's and fittings are provided
- VIII. Ensure that the pharmaceutical store has a good and functional cooling system at all times in line with the recommended storage conditions. Thermometer should be in place and record temperature in chart regularly
- IX. Ensure the pharmaceutical store has a good lightening system
- X. That at least two standby generating systems are provided
- XI. Ensure regular servicing of cooing systems
- XII. Ensure the store is adequately secure through the use of burglary proof
- XIII. Ensure the photosensitive drugs are protected from light by provision of blinds or paintings of windows using dark colors.
- XIV. Ensure that availability of standard stores' stationary such as bin cards, ledgers, store receipt vouchers, stores issue voucher, daily issue books, antibiotic record book, poison disposal book, etc.
- XV. Ensure the record received stock into bin or tally card using red pen.
- XVI. Ensure the record issue stock into bi or tally card using blue pen
- XVII. Issue stock using FIFO/FEFO system (first in first out/ first expired first out)
- XVIII. Enter the stock into appropriate ledgers

- XIX. Update store records regularly
- XX. Ensure the fire extinguishers are installed
- XXI. Storage of items should be in dosage forms and arranged according to their pharmaceutical uses or in alphabetical order
- XXII. Shelves labeling should code for ease of ensuring into a computerized system

5. SOP FOR STORAGE OF VACCINES

- I. Prepare advocacy plan for SOP
- II. Ensure direct control for vaccines' stores by pharmacists
- III. Ensure that the vaccine store complies with all conditions enlisted under general drug storage
- IV. Ensure strict adherence with unbroken chain system
- V. Ensure proper documentation of receipt and issues
- VI. Conduct regular quality assurance/revalidation by pharmacist in charge
- VII. Ensure that expired vaccines are completely separated from the usable vaccines
- VIII. Initiate prompt action for destruction of expired vaccines.

6. SOP FOR TEMPERATURE CONTROL

- I. Prepare advocacy plan for SOP
- II. Ensure availability of temperature control
- III. Monitor and record temperatures at regular intervals taking note of the following:

Standard temperatures (temperature chart)

Room temperature 15-30⁰C

Cool place	below 15⁰C
Cold place	below 8⁰C
Refrigerator	2-8⁰C
Freezer	-20⁰C

- iv. Report any deviations to management stating the implications
- v. Document actions taken

7. SOP FOR ISSUING AND DELIVERING OF DRUGS TO DISPENSARY/SATELITE PHARMACIIES/WARDS AND OTHER UNITS

- I. Prepare advocacy plan for sop
- II. Receive read and validate the requisition (taking note of source , date, signature of requisition)
- III. Confirm availability of drugs in the store by reviewing the balances of items in the bin cards
- IV. Approve and issue accordingly
- V. Ensure complete documentation of all transactions and delivery if necessary.

8. SOP FOR DISPENSING

- I. Prepare advocacy plan
- II. Receive read and validate the prescription
- III. Introduce yourself to the patient by saying “I am a pharmacist
- IV. Identify the prescribers intention for the patient
- V. Confirm the ownership of the prescription in order to avoid dispensing to proxy
- VI. Find out if the medicine and/or other required items are available in the pharmacy
- VII. Cost the medicines prescribed
- VIII. Inform patient of the cost implication of their medication (conduct with the physician for reviews if the need arises).

- IX. Direct the patient to make necessary payments and to present the appropriate receipt confirming payment of medicines/items dispensed.
- X. Select the correct medicines /items in the pharmacy and read the label on the container (and/or package) before, during and after dispensing.
- XI. Write the label on each medicine, giving precise direction for use.
- XII. Put the medicine in the dispensing vial and place the label on the vial
- XIII. Check the dispensed medicine and confirm that the medicine is what was prescribed
- XIV. Hand the dispensed medicine to the patient or care giver/patient's relation.
- XV. Counsel the patient giving details on how the medicine should be used
- XVI. Give the patient a chance to ask questions and give the patient appropriate answers.
- XVII. Say "thank you" to the patient before he leaves. This is to be done with a smile.
- XVIII. Keep all patient medication record.

Telephone number: Name of patient: to be taken everyhour before /with or after meals Name, strength and form of drug..... Quantity dispensed: Expiry date: Name of prescriber: Signature and name of Pharm.:
--

9. SOP FOR UNIT DOSE DISPENSING SYSTEM (UDDS)

- I. Prepare advocacy plan for the SOP
- II. Design the produce the patients medication profile (PMP) (see prototype on pg. 22).
- III. Receive , read and validate prescription
- IV. Find out the prescriber's intention for the patient
- V. Find out whether the medicines (and / or other required items are available in the pharmacy)
- VI. Open the patient medication profile.
- VII. Cost the medicines
- VIII. Inform patient of the cost implication of their medication (conduct with the physician for reviews if the need arises).
- IX. Direct the patient to make necessary payments and to present the appropriate receipt confirming payment of medicines/items dispensed.

- X. Select the correct medicines /items in the pharmacy and read the label on the container (and/or package) before, during and after dispensing.
- XI. Prepare the appropriate label which could contain the name, strength and quantity of the medicine being dispensed. All necessary directions should comply with legal requirements (where applicable).
- XII. Include the expiry date for any product with limited shelf-life (where applicable).
- XIII. Select the appropriate container and closure for dispensing medicines (where applicable). Plastic, amber dispensing vials for tablets and capsules are preferred.
- XIV. Affix the written instructions (labels) on the container.
- XV. Ensure that all dispensed are put in patients respective cassettes and arranged in a trolley

- XVI. Deliver the trolley to the ward and give any necessary information to the nurses.
- XVII. Initiate therapeutic drug monitoring (TDM) where necessary.
- XVIII. Document patients' medication complaint(s) and discuss with the prescriber.
- XIX. Reference must be made to the doctor's prescription for every administration.
- XX. Pharmacist must be present at the ward to monitor the unit dose dispensing system (UDDS), improve in-patient dispensing and make the necessary therapeutic interventions.

Note: the technical aspects of dispensing (such as counting tablets, pouring liquid and labeling containers) can properly be conducted by trained support staff under the supervision of a pharmacist. There is no alternative to the direct involvement of the pharmacist in the assessment of prescriptions and ensure that all necessary information is given to the patient or care-giver (i.e. patients' relative) to achieve maximum therapeutic benefits.

10.SOP FOR PATIENT COUNSELLING

Patient counseling should be carried out in a room or space dedicated for such purpose. Such a room should be adequately equipped.

- I. Prepare advocacy plan for the SOP
- II. Welcome the patient with a warm smile
- III. Ensure the patient is comfortably seated before facing you
- IV. Introduce yourself to the patient by saying' I am a pharmacist..... I am here to talk to u about your medication''.
- V. Receive the prescription from the patient or the patients' relative (care giver)

- VI. Ensure the patient's identity matches that written on absentee patient. Counsel the patient's representative in the absence of the patient. (This should not be encouraged).
- VII. Confirm if the patient has been counseled by the doctor (prescriber) or any other staff member of the hospital. Note what the patient had been told.
- VIII. Confirm if it's the 1st time the patient is receiving the medication on prescription.
- IX. Show the patient what the prescribed drug looks like.
- X. Tell the patient the name(s) of the drug(s) prescribed and explain in a simple language, how the drug works.
- XI. Inform the patient of the dosage requirement, route of administration, duration of drug therapy.
- XII. Provide the patient with any information on the onset of action.
- XIII. Explain to the patient the intended use of the medicine, expected action drug interaction, special directions and precautions, administration and use by the patient.
- XIV. Explain to the patient of common side effects and contraindications that may be encountered including actions to be taken.
- XV. Dispense the medication and place the medicines in appropriately labeled containers
- XVI. Explain to
- XVII. The patient the appropriate storage conditions and advice that all medicines be kept out of the reach of children.
- XVIII. Explain how the medication is taken e.g. swallow one capsule with water every 8hr (do not chew the capsule).
- XIX. Explain to the patient the need for compliance.
- XX. Hand over the medicine to the patient with a warm smile.
- XXI. Confirm if the patient understood the instructions.
- XXII. Advise the patient to return any unused medicine to the pharmacist for destruction.
- XXIII. Advise the patient not to share their medication with another person

- XXIV. Explain prescription refill information. Note that narcotics cannot be refilled except with a fresh prescription.
- XXV. Explain to the patient what to do in case of a missed dose. Encourage the patient to take the next dose and reschedule the timing accordingly
- XXVI. Ask the patient if he has any questions concerning the medication or any other question.
- XXVII. Say to the patient “ thank you for coming”. Contact me any time should the need arise.
- XXVIII. In case of a patient with chronic condition say “ we shall see you during your next visit”.

11. SOP FOR COUNSELLING PHYSICALLY CHALLENGED PATIENTS

Physically challenged patients are those who are hard of hearing, elderly patients, blind patients and deaf patients.

- I. Prepare advocacy plan for the SOP
- II. Identify patient’s problems and express services.
- III. If the patient is hard of hearing speak slowly, pause from time to time to ascertain that the patient understands your instructions.
- IV. If the patient is elderly, spend as much time as possible to counsel the patient, demonstrating all actions as necessary.
- V. Ensure that the blind, deaf and dumb patients are accompanied by an adult.
- VI. Counsel the adult on their behalf.
- VII. If patient is deaf and unaccompanied, use a sign language to demonstrate the method of taking the medicine. If unable to use the sign language, invite someone who is conversant with the method.
- VIII. For patients with other forms of handicap, devise the best possible way to counsel the patient.

12. SOP FOR COMPOUNDING OF MEDICINES

- I. Prepare advocacy plan for the SOP
- II. Identify adequate space for compounding.
- III. Determine products to be compounded.
- IV. Compile list of raw materials, equipping and packaging materials.
- V. Identify source of distilled water
- VI. Develop SOP for each preparation with reference to official procedure.
- VII. Ensure cleanliness of compounding at all times.
- VIII. Ensure cleanliness of the compounding space at all times.
- IX. Ensure quality control at every stage.
- X. Assign an expiry date to each compounded items.

13. SOP FOR PROCUREMENT, DISTRIBUTION, DISPENSING AND STORAGE OF NARCOTIC DRUGS AND POISONS

- I. Prepare advocacy plan for the SOP
- II. Identify narcotic needs for the establishment
- III. Make a requisition to Federal Medical Stores Oshodi, Lagos.
- IV. Ensure requisitions are properly authorized by the State Director of Pharmaceutical Services
- V. Make payments and receive supplies.
- VI. Ensure accurate documentation of all proceedings.
- VII. Ensure adequate security of products at all times.
- VIII. Strictly monitor the usage and entries at all times.
- IX. Collect and store all empty ampoules and broken tablets.
- X. Cross any mistake neatly and sign. No shadings is allowed in the poisons book.
- XI. Keep the narcotic and poisons register under lock and key at all times. The key must be under the custody of the pharmacist at al times.

- XII. Ensure that all unused or expired narcotic drugs are handed over to the Central Medical Stores, Oshodi, Lagos, for record and disposal.
- XIII. Return all expired and damaged narcotics to the Federal Medical Stores for records and disposal.

14. SOP FOR DIPOSAL OF EXPIRED DRUGS

- I. Prepare advocacy plan for the SOP
- II. Maintain records for all expired drugs.
- III. Determine the total cost of expired drugs
- IV. Notify the Head of Department on the presence of expired drugs.
- V. Request for appropriate action to be taken towards the timely disposal of expired drugs.

15. SOP FOR CLINICAL WARD ROUNDS

- I. Prepare advocacy plan for the SOP.
- II. Draw up a roster for ward rounds.
- III. Send a copy of the roster to Chief medical Director and to the medical teams.
- IV. Conduct “ Pharmacist only” therapeutic ward rounds before the general ward rounds.
- V. Join the general ward rounds and participate actively.
- VI. Take note of the medication issues from the general ward rounds for general discussion in the pharmacy during clinical meetings.
- VII. File such notes for future references.

16. SOP FOR TRAINING OF INTERN PHARMACISTS

- I. Prepare advocacy plan for the SOP.
- II. Obtain approval of Pharmacist Council of Nigeria (PCN) for your facility.

- III. Identify preceptor (note that they must have not less than 5yrs post registration).
- IV. Determine the number to be trained based on capacity (staff, space, equipment etc) of facility.
- V. Identify co-training centers for complementary training (hospital, administration, industrial, and community pharmacy)
- VI. Ascertain that the prospective internees have undertaken swearing in/ oat taking with evidence of provisional license.
- VII. Conduct recruitment exercise with approval of management of the institution.
- VIII. Select the successful candidates.
- IX. Commence training in line with Pharmacist Council of Nigeria Guidelines for Internship Programme
- X. Conduct a comprehensive two week orientation
- XI. Expose the internee to basic entrepreneurial skills acquisition.
- XII. Ensure all relevant forms are obtained, completed and forwarded to PCN promptly.
- XIII. Ensure log-book is completed for each internee every day/every week.
- XIV. Ensure that all preceptors undergo the relevant training by PCN every year.
- XV. Expect monitoring team from PCN.
- XVI. Insist on neat formal dressing (white overall with name tags.)and punctuality.

17. SOP FOR CONTINUING EDUCATION

- I. Prepare advocacy plan for the SOP.
- II. Identify training needs relevant to your practice and beneficiaries.
- III. Propose budget lines for identified training needs.
- IV. Organize regular in-house seminars, workshops and clinical meetings.
- V. Encourage attendance at internal seminars, workshops and clinical meetings.

- VI. Compel all pharmacists to improve their IT skills and apply some in pharmacy practice.
- VII. Compel all pharmacists to attend the PCN Mandatory Continuing Professional Development Programme for recertification of pharmacists.
- VIII. Encourage self development in various areas of human endeavor.

18.SOP FOR DRUG REVOLVING FUND SCHEME (DRFs)

- I. Prepare advocacy plan for the SOP.
- II. Ensure strict implementation of the provisions of the national drug policy on DRF as well as the DRF Policy of 1994.
- III. Organize in house seminars on DRF to sensitize the health workers and public.
- IV. Set up a DRF committee with a pharmacist in charge as the secretary.
- V. Apply and obtain seed money from the management.
- VI. Open a DRF dedicated account with the pharmacist in charge as one of the principal signatory to the account.
- VII. Ensure there is a dedicated DRF accountant.
- VIII. Insist on the payment of 15% of basic salary to DRF operators as an incentive in line with the National Policy Frame work for DRF 1994.
- IX. Ensure that part of the proceedings of DRF is used for maintenance of the programme.
- X. Provide appropriate DRF training for personnel
- XI. Prepare daily DRF report to management and quarterly report to the board.

19.SOP FOR DRUG AND INFORMATION SERVICES (DPIS)

- I. Prepare advocacy plan for the SOP.
- II. Obtain approval from management to set up DPIS

- III. Determine the requirement for DPIS centre (i.e. space, equipment, personnel, furniture, telephone etc.) and the personnel (dept. of food and drug services FMOH to provide technical support)
- IV. Propose budget line for the centre.
- V. Make budget proposal for centre on annual bases.
- VI. Procure and install all requirements including; reference text books, journals, computer with internet access.
- VII. Organize a sensitization workshop for the hospital staff and general public.
- VIII. Produce and circulate drug bulletin, newsletters etc.
- IX. Create awareness on the activities of the centre.

20.SOP FOR DRESS CODE

- I. Prepare advocacy plan for the SOP.
- II. Style of dress should emphasize uniformity and smartness for both men and women:
 - a. Men: a pair of trousers, shirt and tie is recommended.
 - b. Women: skirt and blouse, skirt suit or trousers and Eloise.
 - c. PCN approved white long sleeved overall is mandatory for both men and women.
- III. Disseminate the information to all pharmacist
- IV. Get all pharmacists to comply regardless of where they work (PCN to sanction non-conformity).

21. SOP FOR THERAPEUTIC DRUG MONITORING (TMD) (clinical pharmacist)

- I. Prepare advocacy plan for the SOP.
- II. Determine the process of absorption, distribution, metabolism and excretion of the drug being monitored.
- III. Determine concentration of the drug in plasma
- IV. Use the following factors to determine the plasma level; lean body weight, age, sex, race, hepatic and renal function, concurrent disease state such as typhoid, or chronic heart failure.
- V. Use of pharmacokinetic equations to calculate the rate of absorption, volume of distribution, clearance of the drug from the body, first order kinetics and half-life of the drug.
- VI. Determine the dosage regimen of the drug using the half-life.
- VII. Determine the loading dose of the drug
- VIII. Determine the maintenance dose
- IX. Determine the dose change required to produce the desired plasma level (optimum plasma concentration)
- X. Monitor for signs of toxicity or under treatment
- XI. Monitor for drug interactions, time of sampling, compliance and hepatic functions.
- XII. Pay special attention to drugs with narrow therapeutic indices such as dioxin, lithium, phenytoin, carbamazepine and theophylline.
- XIII. Do all your work in collaboration with the physician and support from the laboratory
- XIV. Maintain record of all the information obtained from the Therapeutic Drug Monitoring.
- XV. Discuss results with prescribing Doctor and propose alternative medication where necessary.
- XVI. Ensure availability of all relevant equipment and reagents and their validation at all times.

22. SOP FOR SCREENING PRESCRIPTIONS

- I. Prepare an Advocacy Programme for the SOP.
- II. Ascertain that all the legal requirements for the prescription are met, including full name of the patient, age and sex date on which the prescription was written, name and strength of the drug written generically, quantity of drug to be supplied, directions for use, and full name and signature of the prescriber in his own handwriting.
- III. Ascertain that all prescriptions for narcotic drugs are written on a separate prescription sheet.
- IV. Ensure that quantity of drugs in a prescription are properly written e.g 3g not 3.0g, 500mg not 0.5g, 100micrograms not 0.1mg, ml not cc or cm³.
- V. Ensure that unapproved abbreviations are not used in writing prescriptions e.g. PCM for Paracetamol.
- VI. Ensure that the quantities for each drug to be supplied is clearly stated, e.g. 100 Tablets or that the dose and directions are clearly stated e.g. one tablet every 8 hours for 5 days.
- VII. Make sure that the age of the patient is clearly stated especially for children under the age of 12 years.
- VIII. Screen all prescriptions for any incompatibility.
- IX. Ensure that all alterations on the prescription are signed by the prescriber.
- X. Ensure that prescriptions written in duplicate are clearly labeled e.g. "Original", "Duplicate".
- XI. Ensure that prescription written for animals contain all the necessary information, including the name of the owner and that it is clearly marked "for animal use only"

23. SOP FOR PREPARING A DRUG FORMULARY/STANDARD TREATMENT GUIDELINE

- I. Prepare an Advocacy Programme for the SOP.

- II. Consult and work with drug formulary committee at the institution.
- III. Consult the latest edition of the Nigerian Essential drug list and the Nigerian Standard Treatment Guideline for drugs to be included in the Drug Formulary.
- IV. List the drug according to their therapeutic classes using their generic name (INN).
- V. Consider the benefit/risk/ cost information for each drug for a given indication (efficacy) with minimum production of adverse effect (safety).
- VI. Verify the suitability of chosen pharmaceutical treatment for patients in the institution taking cognizance of the substance chosen in each class , in dosage form, standard dosage schedule and standard duration of treatment.
- VII. Utilize a set of format agreed upon by members of the drug formulary committee.
 - i. This includes uses, precautions, dosage, adverse effects, and contraindications.
- VIII Create a section of drug interaction using pharmacodynamic or pharmacokinetic principles.
- IX Create another section for use of drugs in pregnancy in order to protect the mother and the unborn child.
- X List the drugs which should not be used in breastfeeding and those that could be used with VXi precaution during pregnancy and breast feeding.
- XI Prepare a list of drugs that may cause hepatic, renal, or cardiac impairment.
- XII Prepare an alphabetical index of drugs and disease conditions in the final text.
- XIII Ensure that the formulary is printed and distributed to physicians, pharmacists, nurses and other health workers using a pocket size format
- XIV Ensure periodic review of Formulary and Standard Treatment Guideline.

ABC HOSPITAL, ANYTOWN
PATIENT MEDICATION PROFILE (PMP)

Month/yea	Name and strength of	Drug/medicine	Route	of	Date	Quantity	Sub	Total	Charge	Pharm.
-----------	----------------------	---------------	-------	----	------	----------	-----	-------	--------	--------

r	drug	code	administration		of drugs dispensed /day	total			signature
5/1/2007	Paracetamol 500mg tabs	1,2,3,4	Oral	5/23/2007	6	6	6	18	
	Amoxicillin	2,3	I.M	5/23/2007	9	3	3	15	
	chlorphenamine	1,3,4	Oral	5/23/2007	4	2	8	14	
Ward/bed No.	Name of patient	Sex/age	Wt.		Diagnosis	allergies			
	Atiku buhari	M/65	70kg		H	Glaucoma	Nil		
Name and signature of pharmacist i/c	Attending physicians	Amount deposited & receipt No.	Laboratory tests	Receipt No.	Total cost of all medications	Remarks and sig. of pharmacist			
	Dr. Ibe		Nil		N 230.00				