

SOP for Prescription audit of Public health facilities in Maharashtra

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A) Introduction:

“Prescription” is a document through which doctor, patient and pharmacist are communicated to each other regarding medicines.

Prescription audit is defined as the review of the health care services being given by auditing the prescriptions. It is a systemic review & evaluation of prescription records to define the quality of the services provided at the health facility.

The prescription audit process helps to describe the drug use situation in a particular health facility. This also allows the health planners, managers and researchers in state to make basic comparisons between health facilities and suggest measures to improve the prescribing pattern in health facilities. Also, when an intervention is undertaken to improve aspects of drug use, the indicators can be used to measure impact of the audit process. Thus it is important to undertake Prescription audit process.

In order to have standardised procedure for undertaking the prescription audit in Maharashtra, a Standard Operating procedures have been prepared. The main purpose of this SOP document is to define the limited number of objective measures/indicators used for prescription audit.

B) Need of prescription audit:

Prescription audit is an important tool to ensure standardized quality of care in all the health facilities.

- If the prescription is not properly written or misinterpreted it can affect management of patients in the clinic / hospital settings.
- It is an important tool to improve the efficient and rational usage of drugs by hospital doctors.
 - a. Prescribing indicators
 - b. Completeness of prescription
 - c. Adherence towards standard treatment protocols.
- Rational antibiotic use
- Use of generic medicines
- Use of drugs other than Essential Drug list (EDL)

The process of diagnosis and its treatment is complex. The process of rationality of treatment requires standard treatment protocols for each diagnosis. The indicators described in this manual do not measure all dimensions of the appropriateness of drug care but a few important which can be objectively measured are mentioned.

C) Components of Prescription Audit:

Following are the four important components of Prescription audit:

- I) Prescribing Indicators
- II) Completeness of Prescription
- III) Adherence towards Standard treatment protocols.
- IV) Stock Inventory

I) Prescribing indicators

- Average no of drugs per prescription
- No of drugs prescribed by generic names
- No of combination drugs per prescription
- No of injection per prescription
- No of antibiotics per prescription
- No of vitamins / tonics per prescription
- No of drug prescribed from EDL (this also includes to verify the availability of copy of EDL at the health facility)*
(EDL with categorisation as per the type of drug along with two columns as indication and specific dosage is been prepared. The team should have this list while filed work)*

II) Completeness of Prescription

- Diagnosis mentioned
- Signs and Symptoms
- Treatment with dosage, strength, frequency and duration mentioned clearly
- Name, age and Sex of Patient
- Name of doctor with signature

III) Adherence to the standard Treatment Protocols

- If the drugs, which are contraindication or incompatible combination of drugs were prescribed
- If unnecessary drugs which have no role in the treatment were prescribed
- If drug choices were as per the treatment guidelines/Protocols (STPs)*
*(*A standard Treatment Protocols (STPs) have been already prepared by PHD, Maharashtra. A team should have a copy of these while going for the audit process)*

IV) Stock Inventory:

- Control through E-aushadhi Software
- Frequency of stock inventory verification through E-aushadhi software by head of Institute
- Verification of the E-aushadhi software updation status
- Whether buffer stock is maintained
- No. of drugs with "0" stock
- Demand sent to higher office as per norms
- Near expiry drug list is circulated to other health institute

- Near expiry drugs are preserved and disposed properly as per guidelines
- Free medicine board is displayed at prominent place in Health facility
- Drug availability list is displayed at front side of health facility
- Drug availability list is given to MO officer daily
- Drugs/Vaccines preserved as per guidelines

D) Steps of Undertaking Prescription Audit

a) Team:

- 1) PHI will be the nodal organisation for undertaking this process in the state and HFWTCs will function as the nodal organizations at the regional level. The team formed by Civil Surgeons at the district level will function at the district level for undertaking the prescription audit.
- 2) Civil Surgeons (districts) will constitute a team of 6 persons comprising of one MODTT / HTT, two faculty members, one specialist from DH/WH/GH, one QA member and one HFWTC member.
- 3) The MODTTs / HTTs and Specialists will assess the rationality and technical aspect of drug use as per the Standard Treatment Protocols (STPs).
- 4) Overall coordination and preparing monthly field visit plan for the teams will be the responsibility of the districts. Review has to be taken by the Civil Surgeons of the districts.

b) Sample selection:

- 1) All the DH, RH/SDH under the area of districts would have to cover in some point of time for the prescription audit process.
- 2) However considering the huge number of health facilities to be covered, the selection of these health facilities would be done through systematic random sampling.
- 3) Every month 2 facilities should be covered by district teams which include one DH/WH/MH/GH, one RH/SDH.
- 4) From the list of health facilities under each district a required number of health institutions will be randomly selected.
- 5) From DH/GH 60 IPD prescriptions (10 per specialties such as Medicine, Paediatrics, Gynaecology, Surgeries, Orthopaedics and Ophthalmology), WH 50 prescriptions and SDH 30 IPD prescriptions (10 per specialties such as General, Paediatrics and Gynaecology) will be selected through systematic random sampling i.e. every "n" case will be selected from the record of last one month by calculating sampling interval).
- 6) Additionally 10 OPD prescriptions of the day of visit will also be assessed.
- 7) Specialties selected for the prescription audit process: Pediatrics, gynecology, medicine, surgery and orthopedic.

c) Data Collection:

- 1) Data collection will be done by filling up the prescription audit format prepared by state by adopting WHO prescription audit guidelines.

- 2) The format considers all the cardinal indicators of the prescription audit mentioned in section C of this report.
- 3) The data collection format is attached as **Annexure I**.
- 4) **Data sources:**
 - IPD files (case papers), OPD prescription given to patients and interrogation with Pharmacist and verifying the data in E-aushadhi *
 - (* A checklist for data collection for E-Aushadhi and interrogations with Pharmacists is given as **Annexure III**.)
- 5) **Preparations for field work:**
 - Drug reference lists: EDL, Generic names, Antibiotics etc.
 - Select and train personnel, and conduct pilot tests
 - Selection of the health facilities
 - Plan the schedule of data collection visits

d) Data analysis and Feedback:

- 1) It is essential that team should give immediate feedback to the health facility on the day of visit so as to have improvement in the services provided. This will help HCPs to understand the gaps in service provision and can discuss the probable way forward for improvement.
- 2) Therefore after finishing the data collection team can sit together and have simple frequency analysis and proportions and prepare the analysis report based on the data collection format.
- 3) In order to facilitate the data analysis process if team could gather data in soft format (using PC/Laptop) it would be recommendable. However the non-availability of the PC or Laptop should not hamper the manual data analysis and reporting on the same day.
- 4) Detailed feedback format is provided as Annexure II.
- 5) The findings should be discussed with health facility head and with concerned staff of the health facility in details focusing on strengths and limitations reported during the assessment.
- 6) Same report should also be communicated to respective HFWTC, DHO and DD office.

e) Training of field investigators:

- 1) While Undertaking Prescription audit by the field investigators, training of the team is very crucial component for having desired results from the process
- 2) Data collectors should be familiar with pharmaceutical terms to be able to reliably extract information from records, and to record it accurately during observations. The most effective data collectors are persons with clinical experience such as physicians, nurses, pharmacists or paramedical staff. However, other MOH staff and temporary employees with some health-related experience hired specifically to collect and enter data can also be used.
- 3) Therefore PHIs and HFWTCs should plan day training for the field investigators regarding undertaking prescription audit process.

- 4) The training should comprise of both technical aspect of Prescription audit such as how to assess the rationality in drug use and non-technical part such as filling up the data collection format and reporting.

E) Annexures

- 1) Data collection format for Prescription Audit
- 2) Feedback Format
- 3) Checklist for E-Aushadhi
- 4) EDL list with Categorization, Indication and Dosages
- 5) Standard Treatment Protocols