AIIMS/ICMR/CDC NETWORK

CHECKLIST FOR HOSPITAL ANTIMICROBIAL STEWARDSHIP PROGRAMS

This assessment tool is to be used to measure the status of major activities in a hospital's antimicrobial stewardship program. Responses can be used to guide improvements in the program.

Facilities using this checklist should involve one or more knowledgeable staff to determine if the following principles and actions to improve antibiotic use are in place. One checklist should be completed for each institution.

DETAILS OF PERSON COMPLETING THIS CHECKLIST

Name:

Title:

Date: Facility: Total number of inpatient beds at the facility: Total number of monthly outpatient visits: Total number of monthly discharges: _____ INSTRUCTIONS: For each item below, mark either YES or NO. **ESTABLISHED** A. LEADERSHIP SUPPORT AT FACILITY Does your facility have a formal, written statement of support from facility administration ☐ Yes ☐ No that supports efforts to improve antibiotic use (antibiotic stewardship)? Does your facility receive any budgeted financial support for antibiotic stewardship ☐ Yes ☐ No activities (e.g., support for salary, training, or IT support)? **B. ACCOUNTABILITY** Is a staff member directly responsible for coordination and program outcomes of ☐ Yes ☐ No stewardship activities at your facility? Does your institution have a committee to review processes and outcomes of the ☐ Yes ☐ No stewardship program? Does your antibiotic stewardship committee meet at least once every 6 months? ☐ Yes ☐ No Are the minutes of the stewardship committee communicated to all stakeholders? ☐ Yes ☐ No KEY SUPPORT FOR THE ANTIBIOTIC STEWARDSHIP PROGRAM Does any of the staff below participate in the stewardship program to improve antibiotic use? Clinical pharmacist or other pharmacy staff ☐ Yes ☐ No

Clinical pharmacologist or pharmacology staff	☐ Yes ☐ No
Infectious disease physician	☐ Yes ☐ No
Infection prevention and control team/focal persons	☐ Yes ☐ No
Quality improvement staff	☐ Yes ☐ No
Clinical microbiologist	☐ Yes ☐ No
Information Technology (IT) department staff	☐ Yes ☐ No
Clinical departments heads	☐ Yes ☐ No
Hospital administration Staff	☐ Yes ☐ No
D. POLICIES TO SUPPORT OPTIMAL ANTIBIOTIC USE Does your facility have a policy that requires prescribers	POLICY ESTABLISHED
to document in the medical record a dose and duration for all antibiotic prescriptions?	☐ Yes ☐ No
to document in the medical record an indication for each antibiotic prescription?	☐ Yes ☐ No
to collect and submit relevant clinical specimens before an antibiotic is prescribed?	☐ Yes ☐ No
to list the prescribed antibiotic by its generic name (instead of brand name)	☐ Yes ☐ No
E. POLICIES TO SUPPORT OPTIMAL ANTIBIOTIC PROCUREMENT Does your facility have a policy that requires the pharmacy	POLICY ESTABLISHED
to maintain a facility-level antibiotic formulary (i.e a list of the antibiotics that the institution will procure and stock)	☐ Yes ☐ No
to avoid procurement of unnecessary or duplicative combinations of antibiotics? (eg. cloxacillin and dicloxacillin)	☐ Yes ☐ No
F. BROAD INTERVENTIONS TO IMPROVE ANTIBIOTIC USE Are the following actions to improve antibiotic prescribing conducted in your facility?	ACTION PERFORMED
Is there a procedure for reviewing the appropriateness of all empiric antibiotics 48 hours after the initial orders?	☐ Yes ☐ No
Do specified antibiotic agents (e.g., colistin, carbapenems) need to be approved by a senior physician, pharmacologist, or infectious disease specialist prior to administration (i.e., preauthorization) at your facility?	☐ Yes ☐ No
Does a physician, pharmacist, or pharmacologist conduct retrospective audit with feedback for courses of therapy for specified antibiotic agents (e.g., colistin, carbapenems) at your facility?	☐ Yes ☐ No
G. PRESCRIPTION-SPECIFIC INTERVENTIONS TO IMPROVE ANTIBIOTIC USE Does your facility have written guidelines or policies for the following actions?	ACTION PERFORMED
Recommended changes from intravenous to oral antibiotic therapy in appropriate situations (e.g., switch to an appropriate antibiotic with good oral bioavailability such as a	☐ Yes ☐ No

quinolone in the setting of clinical improvement)?	
Dose adjustments in cases of organ dysfunction?	☐ Yes ☐ No
Dose optimization (pharmacokinetics/pharmacodynamics) for treatment of organisms with reduced susceptibility?	☐ Yes ☐ No
Feedback in situations where therapy might be unnecessarily duplicative (e.g., double anaerobic coverage)?	☐ Yes ☐ No
Time-sensitive stop orders for specified antibiotics (e.g., colistin, carbapenems, surgical prophylaxis to be stopped after a certain number of days)?	☐ Yes ☐ No
H. DIAGNOSIS AND INFECTIONS SPECIFIC INTERVENTIONS TO IMPROVE ANTIBIOTIC USE Does your facility provide written guidance for treatment of the following common infections?	ACTION PERFORMED
Among HOSPITALIZED PATIENTS (i.e. INPATIENTS)	
Community-acquired pneumonia	☐ Yes ☐ No
Healthcare-associated pneumonia	☐ Yes ☐ No
Community-acquired urinary tract infection	☐ Yes ☐ No
Healthcare-associated urinary tract infection	☐ Yes ☐ No
Skin and soft tissue infections (e.g. abscess, cellulitis)	☐ Yes ☐ No
Surgical prophylaxis	☐ Yes ☐ No
Acute gastrointestinal infections	☐ Yes ☐ No
Meningitis	☐ Yes ☐ No
Neonatal sepsis	☐ Yes ☐ No
Clinical sepsis (non-neonates)	☐ Yes ☐ No
Maternal intrapartum/postpartum infections	☐ Yes ☐ No
Among OUTPATIENTS	
Upper respiratory tract infection	☐ Yes ☐ No
Community acquired pneumonia	☐ Yes ☐ No
Skin and soft tissue infections	☐ Yes ☐ No

Acute gastroenteritis	☐ Yes ☐ No
Sexually transmitted infections	☐ Yes ☐ No
Maternal antenatal/intrapartum/postpartum infections	☐ Yes ☐ No
I. PROCESS MEASURES Routine monitoring allows program coordinators to assess the performance of stewardship practices at specified intervals (e.g., the proportion of prescriptions that had a dose documented). Does your stewardship program routinely monitor adherence to	MEASURE PERFORMED
documentation of dose in <u>inpatient</u> antibiotic prescriptions?	☐ Yes ☐ No
documentation of duration in <u>inpatient</u> antibiotic prescriptions?	☐ Yes ☐ No
documentation of clinical indication in <u>inpatient</u> antibiotic prescriptions?	☐ Yes ☐ No
facility-specific empiric treatment recommendations for at least one common <u>inpatient</u> infection (infections listed in Section H)?	☐ Yes ☐ No
collecting and submitting cultures before beginning empiric antibiotic therapy for <u>inpatient</u> infections?	☐ Yes ☐ No
adjusting antibiotics based on culture results for <u>inpatient</u> infections?	☐ Yes ☐ No
documentation of dose in <u>outpatient</u> antibiotic prescriptions?	☐ Yes ☐ No
documentation of duration in <u>outpatient</u> antibiotic prescriptions?	☐ Yes ☐ No
documentation of clinical indication in <u>outpatient</u> antibiotic prescriptions?	☐ Yes ☐ No
facility-specific empiric treatment recommendations for at least one common <u>outpatient</u> infection (infections listed in Section H)?	☐ Yes ☐ No
collecting and submitting cultures before beginning empiric antibiotic therapy for outpatient infections?	☐ Yes ☐ No
adjusting antibiotics based on culture results for <u>outpatient</u> infections?	☐ Yes ☐ No
J. ANTIBIOTIC USE AND OUTCOME MEASURES	MEASURE PERFORMED
Does your facility track rates of infections caused by antibiotic resistant pathogens (e.g., bloodstream infections caused by carbapenem-resistant Enterobacteriaciae or colistin-resistant gram-negative bacteria)?	□ Yes □ No
Does your facility produce an annual cumulative antibiogram for at least one common infection (infections listed in Section H)?	☐ Yes ☐ No
Does your facility monitor antibiotic use (consumption) at the unit level and/or facility-wide level by one of the following metrics:	
By counts of antibiotics administered to patients per day (Days of Therapy; DOT)?	☐ Yes ☐ No

By number of grams of antibiotics used (Defined Daily Dose; DDD)?	☐ Yes ☐ No
By overall purchasing cost of antibiotics consumed?	☐ Yes ☐ No
K. REPORTING INFORMATION TO STAFF ON ANTIBIOTIC USE AND RESISTANCE	MEASURE PERFORMED
Does your stewardship program share unit/department-specific reports on antibiotic use with prescribers?	☐ Yes ☐ No
Has a current antibiogram for common infections been disseminated to prescribers at your facility in the past year?	☐ Yes ☐ No
Do prescribers routinely receive direct, personalized communication about how they can improve their antibiotic prescribing (e.g., dose adjustments, narrowing antibiotics based on culture results)?	☐ Yes ☐ No
Do prescribers receive warnings regarding clinically significant interactions between prescribed antibiotics and other medications (e.g., co-trimoxazole and phenytoin toxicity, ototoxicity induced by gentamicin in combination with loop diuretics)	☐ Yes ☐ No
L. EDUCATION	MEASURE PERFORMED
Does your stewardship program provide orientation to prescribers for facility-specific antibiotic policies?	☐ Yes ☐ No
Does your stewardship program provide refresher training to prescribers for facility-specific antibiotic policies?	☐ Yes ☐ No
Does your stewardship program provide unit/department-specific training on antibiotic policies?	☐ Yes ☐ No