



The Core Elements of Hospital Antibiotic Stewardship Programs

CHECKLIST



National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion



Checklist for Core Elements of Hospital Antibiotic Stewardship Programs

The following checklist is a companion to *Core Elements of Hospital Antibiotic Stewardship Programs*. This checklist should be used to systematically assess key elements and actions to ensure optimal antibiotic prescribing and limit overuse and misuse of antibiotics in hospitals. CDC recommends that all hospitals implement an Antibiotic Stewardship 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. The elements in this checklist have been shown in previous studies to be helpful in improving antibiotic use though not all of the elements might be feasible in all hospitals.

LEADERSHIP SUPPORT	ESTABLISHED AT FACILITY
A. Does your facility have a formal, written statement of support from leadership that supports efforts to improve antibiotic use (antibiotic stewardship)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
B. Does your facility receive any budgeted financial support for antibiotic stewardship activities (e.g., support for salary, training, or IT support)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
ACCOUNTABILITY	
A. Is there a physician leader responsible for program outcomes of stewardship activities at your facility?	<input type="checkbox"/> Yes <input type="checkbox"/> No
DRUG EXPERTISE	
A. Is there a pharmacist leader responsible for working to improve antibiotic use at your facility?	<input type="checkbox"/> Yes <input type="checkbox"/> No
KEY SUPPORT FOR THE ANTIBIOTIC STEWARDSHIP PROGRAM	
<i>Does any of the staff below work with the stewardship leaders to improve antibiotic use?</i>	
B. Clinicians	<input type="checkbox"/> Yes <input type="checkbox"/> No
C. Infection Prevention and Healthcare Epidemiology	<input type="checkbox"/> Yes <input type="checkbox"/> No
D. Quality Improvement	<input type="checkbox"/> Yes <input type="checkbox"/> No
E. Microbiology (Laboratory)	<input type="checkbox"/> Yes <input type="checkbox"/> No
F. Information Technology (IT)	<input type="checkbox"/> Yes <input type="checkbox"/> No
G. Nursing	<input type="checkbox"/> Yes <input type="checkbox"/> No

ACTIONS TO SUPPORT OPTIMAL ANTIBIOTIC USE

POLICIES	POLICY ESTABLISHED
A. Does your facility have a policy that requires prescribers to document in the medical record or during order entry a dose, duration, and indication for all antibiotic prescriptions?	<input type="checkbox"/> Yes <input type="checkbox"/> No
B. Does your facility have facility-specific treatment recommendations, based on national guidelines and local susceptibility, to assist with antibiotic selection for common clinical conditions?	<input type="checkbox"/> Yes <input type="checkbox"/> No

SPECIFIC INTERVENTIONS TO IMPROVE ANTIBIOTIC USE
Are the following actions to improve antibiotic prescribing conducted in your facility?

BROAD INTERVENTIONS	ACTION PERFORMED
C. Is there a formal procedure for all clinicians to review the appropriateness of all antibiotics 48 hours after the initial orders (e.g. antibiotic time out)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
D. Do specified antibiotic agents need to be approved by a physician or pharmacist prior to dispensing (i.e., pre-authorization) at your facility?	<input type="checkbox"/> Yes <input type="checkbox"/> No
E. Does a physician or pharmacist review courses of therapy for specified antibiotic agents (i.e., prospective audit with feedback) at your facility?	<input type="checkbox"/> Yes <input type="checkbox"/> No

PHARMACY-DRIVEN INTERVENTIONS
Are the following actions implemented in your facility?

PHARMACY-DRIVEN INTERVENTIONS	ACTION PERFORMED
F. Automatic changes from intravenous to oral antibiotic therapy in appropriate situations?	<input type="checkbox"/> Yes <input type="checkbox"/> No
G. Dose adjustments in cases of organ dysfunction?	<input type="checkbox"/> Yes <input type="checkbox"/> No
H. Dose optimization (pharmacokinetics/pharmacodynamics) to optimize the treatment of organisms with reduced susceptibility?	<input type="checkbox"/> Yes <input type="checkbox"/> No
I. Automatic alerts in situations where therapy might be unnecessarily duplicative?	<input type="checkbox"/> Yes <input type="checkbox"/> No
J. Time-sensitive automatic stop orders for specified antibiotic prescriptions?	<input type="checkbox"/> Yes <input type="checkbox"/> No

DIAGNOSIS AND INFECTIONS SPECIFIC INTERVENTIONS
Does your facility have specific interventions in place to ensure optimal use of antibiotics to treat the following common infections?

DIAGNOSIS AND INFECTIONS SPECIFIC INTERVENTIONS	ACTION PERFORMED
K. Community-acquired pneumonia	<input type="checkbox"/> Yes <input type="checkbox"/> No
L. Urinary tract infection	<input type="checkbox"/> Yes <input type="checkbox"/> No
M. Skin and soft tissue infections	<input type="checkbox"/> Yes <input type="checkbox"/> No
N. Surgical prophylaxis	<input type="checkbox"/> Yes <input type="checkbox"/> No
O. Empiric treatment of Methicillin-resistant Staphylococcus aureus (MRSA)	<input type="checkbox"/> Yes <input type="checkbox"/> No

P. Non-C. Difficile infection (CDI) antibiotics in new cases of CDI	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Q. Culture-proven invasive (e.g., blood stream) infections	<input type="checkbox"/> Yes	<input type="checkbox"/> No

TRACKING: MONITORING ANTIBIOTIC PRESCRIBING, USE, AND RESISTANCE

PROCESS MEASURES	MEASURE PERFORMED	
A. Does your stewardship program monitor adherence to a documentation policy (dose, duration, and indication)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
B. Does your stewardship program monitor adherence to facility-specific treatment recommendations?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
C. Does your stewardship program monitor compliance with one of more of the specific interventions in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

ANTIBIOTIC USE AND OUTCOME MEASURES	MEASURE PERFORMED	
D. Does your facility track rates of C. difficile infection?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
E. Does your facility produce an antibiogram (cumulative antibiotic susceptibility report)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

<i>Does your facility monitor antibiotic use (consumption) at the unit and/or facility wide level by one of the following metrics:</i>	MEASURE PERFORMED	
F. By counts of antibiotic(s) administered to patients per day (Days of Therapy; DOT)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
G. By number of grams of antibiotics used (Defined Daily Dose, DDD)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
H. By direct expenditure for antibiotics (purchasing costs)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

REPORTING INFORMATION TO STAFF ON IMPROVING ANTIBIOTIC USE AND RESISTANCE

A. Does you stewardship program share facility-specific reports on antibiotic use with prescribers?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
B. Has a current antibiogram been distributed to prescribers at your facility?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
C. Do prescribers ever receive direct, personalized communication about how they can improve their antibiotic prescribing?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

EDUCATION

A. Does your stewardship program provide education to clinicians and other relevant staff on improving antibiotic prescribing?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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