

Validated Comprehensive Checklist
for
Hospital Antimicrobial Stewardship Programs

CORE ELEMENT 1

SENIOR HOSPITAL MANAGEMENT LEADERSHIP TOWARDS ANTIMICROBIAL STEWARDSHIP

This section relates to governance of the program by hospital executives and specifies how senior hospital management supports the antimicrobial stewardship program.

Checklist item 1.1:

Has your hospital management formally identified antimicrobial stewardship as a priority objective for the institution and included it in its key performance indicators?

Checklist item 1.2:

Is there dedicated and sustainable budgeted financial support for antimicrobial stewardship activities (e.g., support for salary, training, or IT (information technology) support)?

Checklist item 1.3:

Does your hospital follow any (national or international) staffing standards for antimicrobial stewardship activities (e.g. number of full-time equivalent (FTE) per 100 beds for the different members of the antimicrobial stewardship team)?

Accompanying comment: These staffing standards should ideally be set at national level.

CORE ELEMENT 2

ACCOUNTABILITY & RESPONSIBILITIES

Checklist item 2.1:

Does your hospital have a formal/written antimicrobial stewardship program/strategy accountable for ensuring appropriate antimicrobial use?

Accompanying comment: This should be based on existing national/international guidelines and/or an existing national strategy.

Checklist item 2.2:

Does your hospital have a formal organizational multidisciplinary structure responsible for antimicrobial stewardship (e.g., a committee focused on appropriate antimicrobial use, pharmacy committee, patient safety committee or other relevant structure)?

Accompanying comment: This antimicrobial stewardship committee can be either stand-alone or embedded into another committee structure (e.g. pharmacy committee, patient safety committee or other relevant structure). In all cases, this antimicrobial stewardship committee is explicitly in charge of setting and coordinating the antimicrobial stewardship program/strategy in its mandate/terms of reference.

Checklist item 2.3:

Is there a healthcare professional identified as a leader for antimicrobial stewardship activities at your hospital and responsible for implementing the program?

Checklist item 2.4:

Is there a document clearly defining roles, procedures of collaboration and responsibilities of the antimicrobial stewardship team members?

Accompanying comment: *We refer here to the core operational team of healthcare professionals (led by the clinical leader) who will implement the antimicrobial stewardship strategy 'daily on the ground'. This is different from the antimicrobial stewardship committee, which is a larger formal organizational structure that includes antimicrobial stewardship team members and other relevant professionals and administrators. In resource-limited settings or small hospitals, although desirable, it is sometimes difficult to have an antimicrobial stewardship team; in that case, the antimicrobial stewardship clinical leader will implement the antimicrobial stewardship program. The composition of the (usually multidisciplinary) antimicrobial stewardship team is flexible and should be based on existing international recommendations and adapted to the local context.*

Checklist item 2.5:

Are clinicians, other than those part of the antimicrobial stewardship team (e.g. from the ICU, Internal Medicine and Surgery) involved in the antimicrobial stewardship committee?

Checklist item 2.6:

Does the antimicrobial stewardship committee produce regularly [*indicate minimum time*] a dedicated report which includes e.g. antimicrobial use data and/or prescription improvement initiatives, with time-committed short term and long term measurable goals/targets for optimizing antimicrobial use?

Checklist item 2.7:

Is there a document clearly defining the procedures of collaboration of the antimicrobial stewardship team/committee with the infection prevention and control team/committee?

CORE ELEMENT 3

AVAILABLE EXPERTISE ON INFECTION MANAGEMENT

Checklist item 3.1:

Do you have access to laboratory/imaging services and to timely results to be able to support the diagnosis of the most common infections at your hospital?

Accompanying comment: *A separate checklist on laboratory capacity and presence of quality assurance should be developed at national/international level. [49,57] These services can be onsite or not.*

Checklist item 3.2:

In your hospital are there, or do you have access to, trained and experienced healthcare professionals (medical doctor, pharmacist, nurse ...) in infection management (diagnosis, prevention and treatment) & stewardship willing to constitute an antimicrobial stewardship team?

CORE ELEMENT 4

EDUCATION & PRACTICAL TRAINING

Checklist item 4.1:

Does your hospital offer a range of educational resources to support staff training on how to optimize antimicrobial prescribing?

Accompanying comment: *These resources can be developed locally or not and can use multiple formats.*

Checklist item 4.2:

Do the antimicrobial stewardship team members receive regular training in antimicrobial prescribing and stewardship?

Accompanying comment: *This training is usually not offered at the hospital level, but likely to be at a regional, national or international level. The hospital should however ensure that members of the antimicrobial stewardship team are adequately trained, according to local/regional/national requirements.*

CORE ELEMENT 5

OTHER ACTIONS AIMING AT RESPONSIBLE ANTIMICROBIAL USE

Checklist item 5.1:

Is a multidisciplinary antimicrobial stewardship team available at your hospital (e.g., greater than one trained staff member supporting clinical decisions to ensure appropriate antimicrobial use)?

Checklist item 5.2:

Does your hospital support the antimicrobial stewardship activities/strategy with adequate information technology services?

Accompanying comment: *The level of requirement needs to be defined at local/regional/national level. This could include, for example, measurement of antimicrobial use.*

Checklist item 5.3:

Does your hospital have an antimicrobial formulary (i.e. a list of antimicrobials that have been approved for use in a hospital, specifying whether the drugs are unrestricted, restricted [approval of an antimicrobial stewardship team member is required] or permitted for specific conditions)?

Accompanying comment: *This might be based on national recommendations, or the WHO Essential Medicines List.*

Checklist item 5.4:

Does your hospital have available and up-to-date recommendations for infection management (diagnosis, prevention and treatment), based on international/national evidence-based guidelines and local susceptibility (when possible), to assist with antimicrobial selection (indication, agent, dose, route, duration) for common clinical conditions?

Checklist item 5.5:

Does your hospital have a written policy that requires prescribers to document an antimicrobial plan (includes indication, name, dosage, duration, route and interval of administration) in the medical record or during order entry for all antimicrobial prescriptions?

Checklist item 5.6:

Does the antimicrobial stewardship team review or audit courses of therapy for specified antimicrobial agents or clinical conditions at your hospital?

Checklist item 5.7:

Is advice from antimicrobial stewardship team members easily available to prescribers?

Checklist item 5.8:

Are there regular infections and antimicrobial prescribing focused ward rounds in specific departments in your hospital?

CORE ELEMENT 6

MONITORING & SURVEILLANCE (on a continuous basis)

Checklist item 6.1:

Does your hospital monitor the quality of antimicrobial use at the unit and/or hospital wide level?

Accompanying comment: *This can be done for example by undertaking point prevalence surveys or audits, assessing appropriateness of infection management and antimicrobial prescription (e.g. indication, choice and duration of antibiotic therapy in pneumonia or surgical prophylaxis according to policy/guidance).*

Checklist item 6.2:

Does your stewardship program monitor compliance with one or more of the specific interventions put in place by the stewardship team (e.g. indication captured in the medical record for all antimicrobial prescriptions)?

Checklist item 6.3:

Does your hospital monitor antibiotic susceptibility rates for a range of key bacteria?

Checklist item 6.4:

Does your hospital monitor the quantity of antimicrobials prescribed/ dispensed/purchased at the unit and/or hospital wide level?

CORE ELEMENT 7

REPORTING & FEEDBACK (on a continuous basis)

Accompanying comment: *All these reports should also be shared with the hospital management leadership.*

Checklist item 7.1:

Does your stewardship program share hospital-specific reports on the quantity of antimicrobials prescribed/dispensed/purchased with prescribers?

Checklist item 7.2:

Does your stewardship program share facility-specific reports on antibiotic susceptibility rates with prescribers?

Checklist item 7.3:

Are results of audits/reviews of the quality/appropriateness of antimicrobial use communicated directly with prescribers?