CONCEPT

Antimicrobial Stewardship Programme: Antimicrobial Resistance, Interventions and Metrics

25 – 29 January 2027
Dubai - Five-star CBD venue



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Ref: 381_13394 **Date:** 25 – 29 January 2027 **Location:** Dubai - Five-star CBD venue **Fees:** 21450 SAR

Introduction:

Antimicrobial stewardship in many hospitals stalls at a restricted-drug list and occasional pharmacy calls, while broad-spectrum use climbs, resistant organisms spread and leadership sees no consumption or outcome data. This Core Concept course trains pharmacists, prescribing physicians, infection prevention and quality leads to build and run a hospital antimicrobial stewardship programme: interpreting antimicrobial resistance and its burden, applying the CDC Core Elements and WHO AWaRe classification, running prospective audit and feedback, preauthorisation, IV-to-oral switch, de-escalation and duration controls, and measuring use in DDD and DOT. Participants produce a Hospital Antimicrobial Stewardship Programme Plan with a use and outcome scorecard.

Course Objectives:

- Assess current antimicrobial prescribing and resistance data to set stewardship priorities for the hospital
- Structure an antimicrobial stewardship team, charter and governance route against the CDC Core Elements of Hospital Antibiotic Stewardship Programs
- Run prospective audit and feedback, preauthorisation, IV-to-oral switch, de-escalation and duration interventions on inpatient prescriptions
- Interpret the cumulative antibiogram and microbiology results to guide empirical treatment guidelines and restriction decisions
- Measure antimicrobial consumption in DDD and DOT together with outcome and balancing measures, including Clostridioides difficile infection trends
- Report stewardship results to prescribers and hospital leadership and agree a joint plan with infection prevention for multidrug-resistant organisms

Target Audience:

- Clinical pharmacists who review antimicrobial orders and lead day-to-day stewardship interventions
- Physicians and infectious disease specialists who chair or advise the stewardship committee and approve restricted agents
- Infection prevention leads who coordinate MDRO follow-up with the stewardship team
- Quality and patient safety managers who report antimicrobial use and resistance indicators to leadership
- Microbiology laboratory leads who produce antibiograms and support culture-guided prescribing
- Medical and nursing managers accountable for prescribing practice on their departments

Course Outline:

Day 1: Antimicrobial Resistance Burden and Stewardship Current-State Review

- Antimicrobial Resistance Mechanisms Overview: Enzymatic Inactivation, Target Alteration, Efflux Pumps and Reduced Permeability
- Global AMR Burden, Mortality and Cost Evidence from WHO Sources
- Selection Pressure from Antimicrobial Overuse and Collateral Damage to the Patient Microbiome
- WHO One Health Approach and Global Action on Antimicrobial Resistance
- Hospital Stewardship Baseline Review: Prescribing Point Prevalence Survey and Resistance Data Scan

Day 2: Stewardship Core Elements, Team Structure and Governance

- CDC Core Elements of Hospital Antibiotic Stewardship Programs: Leadership Commitment, Accountability and Pharmacy Expertise
- CDC Core Elements Continued: Action, Tracking and Reporting Requirements
- Antimicrobial Stewardship Team Composition, Physician and Pharmacist Leads and Committee Charter
- WHO AWaRe Classification of Access, Watch and Reserve Antibiotics in Formulary Decisions
- Stewardship Policy Set: Restricted Antimicrobial List, Empirical Treatment Guideline and Approval Route

Day 3: Core Stewardship Interventions on Inpatient Prescriptions

- Prospective Audit and Feedback Rounds: Case Selection, Recommendation Script and Acceptance Log
- Preauthorisation Workflow for Restricted Agents with Approval Criteria and Turnaround Standards
- IV-to-Oral Switch Criteria and Pharmacist-Driven Conversion Protocol
- Culture-Guided De-escalation and Antibiotic Time-Out at 48 to 72 Hours
- Treatment Duration Standards, Automatic Stop Orders and Surgical Prophylaxis Review

Day 4: Antibiograms, Consumption Metrics and MDRO Coordination

- Cumulative Antibiogram Construction, Interpretation and Limits for Empirical Therapy Choice
- Microbiology Laboratory Support: Rapid Diagnostics, Cascade Susceptibility Reporting and Result Comments
- Antimicrobial Consumption Metrics: DDD per 1,000 Patient Days Versus DOT per 1,000 Patient Days
- Outcome and Balancing Measures: Clostridioides Difficile Infection, Resistance Trends and Readmissions
- MDRO Coordination with Infection Prevention: Carbapenem-Resistant Organism Alerts and Shared Action Plan

Day 5: Prescriber Behaviour Change and the Stewardship Programme Plan

- Prescriber Education and Behaviour Change Methods: Audit Feedback Reports, Peer Comparison and Clinical Champions
- Case Study: Rising Carbapenem Consumption on a Medical Ward Analysed with DOT Data and Audit Findings
- Antimicrobial Use and Outcome Scorecard Design for Leadership Reporting
- Hospital Antimicrobial Stewardship Programme Plan Drafting with Intervention Timeline
- Stewardship Committee Review Panel and Programme Plan Defence

Skills You Will Gain:

- Antimicrobial Prescribing Review
- Stewardship Governance Design
- Restricted Antimicrobial Approval
- Antibiogram Interpretation
- Antimicrobial Consumption Measurement
- Prescriber Feedback Delivery
- Stewardship Performance Reporting
- Resistant Organism Coordination

Why Attend This Course:

- Return with a Hospital Antimicrobial Stewardship Programme Plan and a use and outcome scorecard ready for your stewardship committee
- Replace ad hoc restriction calls with a structured audit and feedback and preauthorisation routine that prescribers accept
- Show leadership whether stewardship is working through DDD, DOT and outcome trends instead of anecdote
- Compare stewardship practice with pharmacists, physicians and infection prevention leads from public, private, teaching and specialist hospitals

Conclusion:

An antimicrobial stewardship programme changes prescribing only when governance, interventions, laboratory data and measurement work as one routine that prescribers trust. The course moves from antimicrobial resistance mechanisms and burden, through the CDC Core Elements and WHO AWaRe classification, to audit and feedback, preauthorisation, IV-to-oral switch, de-escalation and duration controls. It then covers antibiograms, DDD and DOT metrics, outcome measures and MDRO coordination, and closes with behaviour change methods and a stewardship programme plan for committee review.