

Antimicrobial Stewardship Certificate Practicums

The purpose of the Antimicrobial Stewardship Practical component (or practicum) of the certificate program is to apply and demonstrate the knowledge and skill gained through the online and live session portions of the programs. The practical component must be completed within twelve months of completing components 1 & 2.

Basic Requirements

1. The project must have been completed (and preferably initiated) after completing parts 1 and 2 of the programs as the purpose of this part of the program is to document that you can and have applied the knowledge and skill you acquired in the program.
2. Applications must include a completed submission cover sheet.
3. Applications from more than one participant at a given institution should be submitted together (at the same time) unless each participant is reporting on a separate project initiated or completed at a different time. If two or more applicants are seeking credit for the same project, the project must be substantive enough to justify multiple participants, and the cover letter must clearly explain the role and contribution of each applicant.

Acceptable Projects/Initiatives

Since the definition of Antimicrobial Stewardship can be broad based, there are many different types of activities that could be considered appropriate for the practicum component. Examples of these (although not limited to) can be found in the IDSA and SHEA guidelines published in *Clinical Infectious Diseases* (Barlam T, et al. Clin Infect Dis. 2016;62:1-27). The following will also serve as acceptable examples.

- A. Education (seminars, lectures, etc. to healthcare personnel on stewardship principles, information on ASP policies, surveillance, etc.)
- B. Guidelines and clinical pathways (developing ASP guidelines, pathways and decision support documents for appropriate use of antimicrobials... etc.)
- C. Antimicrobial order forms (developing a form or format for the appropriate prescribing of antimicrobials as part of your ASP objectives).
- D. Documentation of providing the following optimization of antimicrobials:
 - a. Appropriate use of combination therapy (empiric based on antimicrobial surveillance data, or definitive based on culture results, etc.)
 - b. Streamlining or de-escalation of therapy (on the basis of antimicrobial surveillance for empiric therapy or definitive culture results, etc.)
 - c. Dose optimization (on the basis of individual patient characteristics, ie weight, site of infection....and pharmacokinetic and pharmacodynamic principles (optimizing T>MIC, AUC/MIC,

- C_{max}/MIC through use of extended infusions, or optimization of dose and dosing interval)
- d. Parenteral to oral conversion (active conversion and documentation of converting patient's parenteral therapy to oral equivalent or step-down therapy, etc.)
- E. Surveillance
- a. Active surveillance of resistance for targeted organisms
 - b. Compiling/reviewing/analyzing antibiogram data and changing pathways, guidelines for antimicrobial use, etc based upon these results
- F. Measuring the impact of antimicrobial stewardship activities
- a. Collecting data on patient outcomes that support ASP activities
 - b. Developing drug usage reports
 - c. Determining cost data on drug usage, overall hospital costs including cost associated with length of stay, etc
- G. Outpatient or community setting ASP activities:
- a. Track usage patterns of antimicrobials for a particular practice (pediatrics, wound clinics, etc.)
 - b. Track the usage patterns of anti-infectives during flu season (e.g., azithromycin, amoxicillin)
 - c. Examine prescribing patterns for otitis media, determine how many patients receive their antibiotics first vs. a trial of acetaminophen per recommendations, etc. Perform counseling on the guidelines for otitis media, antibiotics vs. trial of analgesics and determine pre and post counseling how often parents try the analgesic route prior to antibiotics, etc.
 - d. Collect data on patients knowledge of antibiotics (no intervention) and determine compliance issues (follow-up), then perform counseling with each script for specific amount of time; determine compliance issues pre vs. post counseling
 1. Most States have an active campaign to educate patients in the community, and there are a number of programs on-line to obtain information to assist you on this type of intervention

If you are unsure of the appropriateness/acceptability of your planned project, or of the number of participants that can claim credit for the same project, please contact one of the members of the Scientific Committee listed at the end of this document.

Application for Practical Component Credit

Once you have completed your project, please describe your initiative/intervention in the form of a detailed letter (additional information such as documents prepared/used, tables of results, etc. may be appended). Include a general description of the initiative (e.g., justification/approval of a stewardship

program, education, dose optimization, IV to PO switch program, etc) with enough detail so the reviewers can appreciate the rationale/need, preparation and implementation steps, the dates of the intervention, the targeted population (audience, patients, etc.) and results to date. If you develop special forms (e.g., IV to PO conversion form, therapeutic substitution form, etc), we encourage you to include those in your submission. Your letter should be countersigned by your stewardship medical director, stewardship committee director, pharmacy and therapeutics committee chair or pharmacy director, attesting to the fact that this is a new initiative and it has indeed been implemented. Completed applications, including the submission cover sheet, must be transferred electronically (via email) to us at: bossoja@mad-id.org.

* Please consider submitting your practicum as an abstract to the MAD-ID Annual Meeting. Practicum submissions will receive a higher priority score for their abstract submission.

MAD-ID Antimicrobial Stewardship Practicum Committee
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If you have any further questions, you may contact the following members of the Scientific Committee:

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