

AASV Foundation – Second Quarterly Report

Title:

- Does knowledge of testing procedures or the format of culture and susceptibility reports from veterinary diagnostic laboratories (VDLs) influence antimicrobial selection decisions?

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Statement of problem:

- Antibiotics, one of the greatest discoveries of humankind, continue to be threatened by growing antimicrobial resistance. To combat resistance, judicious use of antibiotics is required. To meet such standards, veterinarians need to understand the process, format, and context of information provided by VDL antimicrobial susceptibility reports.

Objective(s):

- Determine if training how laboratory susceptibility results are generated changes antimicrobial selection.
- Determine if the format and context of antimicrobial susceptibility reports changes antimicrobial selection.

Brief materials and methods:

- This study reviews how major swine VDLs generate and report susceptibility data and summarizes the processes into an online training module.
 - Participants will be presented three fictional cases (A, B and C) with three different levels of antimicrobial susceptibility reports (1, 2 and 3). Participants will choose an antibiotic for each case prior to completing a training module. Participants will then have the option to change their selection based off of the information presented in the module.
- Antibiotic selections will be compared prior to and after completion of the training video, along with an analysis of the provided case report type.
- Participants will complete an open-ended exit survey regarding report type preference and value of the training module.

Significant results: *No results to report at this point in the study.*

- Progress:
 - Study protocol is finalized.
 - ISU Institutional Review Board (IRB) application was submitted and the study was determined to be exempt from IRB oversight.
 - An on-line training module via the learning management system, Moodle has been created.
 - Participant correspondence, directions, and randomization procedures are in place.
 - Three cases and three levels of antimicrobial susceptibility reports have been created with accompanying questions.

- An overview of the bacteriology process has been recorded and turned into an educational video for the training module.
 - Three out of four major swine VDLs have shared their bacteriology processes and provided initial video edits.
- A supplemental narrated, PowerPoint video has been created for the training module to provide an overview of the Clinical and Laboratory Standards Institute (CLSI) and their antimicrobial susceptibility testing guidelines.
- Upcoming steps:
 - Finalize Moodle platform documents and training module information.
 - Begin recruiting participants.
 - Troubleshoot Moodle platform with ISU post-doctoral research associates.
 - Enroll participants.

Discussion of how results can be applied by practitioners: *No results to report at this point in the study.*

- Expected outcome:
 - Participants will gain further knowledge on how culture and susceptibility results are generated and reported. The training module will provide background information and exposure to report styles. This study will provide self-awareness and possibly elicit a behavioral change for future antimicrobial selection decisions.