

Introduction and Consent to Participate

Please review the information below and **SELECT ONE** of the two choices at the end to either **PROCEED** to the survey or **DECLINE** the survey.

Before starting the survey, it may be helpful to: 1) Have a list of graduates from your training program from the last 3 years, 2) Make sure that you have briefly reviewed the IDSA Antimicrobial Stewardship Core Curriculum to be able to answer a few basic questions regarding how you plan to incorporate this curriculum into your training program.

Title: Evaluating Infectious Disease Fellows' Knowledge, Attitudes, and Practices of Antimicrobial Stewardship after Implementation of a New Curriculum

Principal Investigator: Wendy Armstrong, MD

Co-investigators: Jennifer Spicer, MD, MPH; Brian Schwartz, MD

We are inviting you to participate in our study because you are in a fellowship training program that is implementing the new Infectious Diseases Society of America (IDSA) Core Antimicrobial Stewardship curriculum this year. The purpose of this study is to evaluate the effectiveness of this curriculum in teaching Infectious Diseases (ID) fellows antimicrobial stewardship principles and skills.

We plan to survey faculty and ID fellows at all training programs who are implementing the curriculum this year. You will be asked to complete a short online survey, which should take approximately 15 minutes. All identifiable data will be anonymized prior to analysis. Your individual answers to this survey will not be shared with any individuals in your training program. Although we have made every effort to protect your identity by using de-identification and independent researchers, there is a minimal risk of loss of confidentiality. You may benefit directly from this study as information gained from this study will be used to improve the IDSA Core Antimicrobial Stewardship curriculum.

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IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Program Directors)

Training Program Information

2. Does your training program currently have a formal antimicrobial stewardship curriculum?

- Yes
- No

3. How satisfied are you with your existing antimicrobial stewardship curriculum?

Not at all	Somewhat	Moderately	Very	Extremely	N/A
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Which of the following activities related to antimicrobial stewardship are included in your training program (check all that apply and describe curriculum and associated hours)?

- Lectures
- Small group discussion
- Attending hospital antimicrobial stewardship meetings
- Covering the antibiotic approval pager
- Other (please specify)
- Audit and feedback of patient records
- Quality improvement projects
- My program does not have any formal educational activities related to antimicrobial stewardship.

5. How many **hours** do your trainees spend during their training doing each of the following activities related to antimicrobial stewardship in your training program? (If your trainees do not do one of the activities, type "0" for that answer.)

Lectures	<input type="text"/>
Small group discussion	<input type="text"/>
Attending hospital antimicrobial stewardship meetings	<input type="text"/>
Covering the antibiotic approval pager	<input type="text"/>
Audit and feedback of patient records	<input type="text"/>

6. Does your program formally assess your trainees' competence in antibiotic stewardship activities?

- Yes
- No

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Program Directors)

Training Program Information

7. How does your program formally assess your trainees' competence in antimicrobial stewardship activities?

8. How satisfied are you with your trainees' knowledge of antimicrobial stewardship by the time they complete your training program?

Not at all

Somewhat

Moderately

Very

Extremely

9. Do you have a role in formal teaching of antimicrobial stewardship content to trainees in your program? (i.e. lectures, small group discussions, etc.)

- Yes
- No

10. How confident are you in your own knowledge of antimicrobial stewardship?

Not at all

Somewhat

Moderately

Very

Extremely

11. How comfortable are you teaching antimicrobial stewardship curricular content?

Not at all

Somewhat

Moderately

Very

Extremely

12. What areas of antimicrobial stewardship do you feel less comfortable teaching (if any)?

13. Considering your graduates from the past three years, how many of them now have positions in hospital epidemiology or antibiotic stewardship programs? (please provide a number only)

* 14. Please provide the name of your training institution.

15. Your program is:

- An Adult ID Fellowship Training Program A Pharmacy Training Program
- A Pediatric ID Fellowship Training Program
- Other (please specify)

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Program Directors)

Training Program Information - ID Fellowship Programs Only

16. Please indicate the number of ID fellows in your program as follows:

1st year fellows (ACGME)

2nd year fellows (ACGME)

Advanced fellows (Non-ACGME)

17. During the **2018 - 2019 academic year**, which of your fellows will be offered the option to participate in the IDSA Antimicrobial Stewardship Core Curriculum? (select all that apply)

- 1st years 3rd years
- 2nd years 4th years
- Other (please specify)

18. For your **current first year fellows**, how do you plan to implement the IDSA Antimicrobial Stewardship Core Curriculum?

- All of the curriculum will be completed in their first year of fellowship
- The curriculum will be spread over their first and second year of fellowship
- All of the curriculum will be completed in their second year of fellowship
- Other (please specify)

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Program Directors)

Plans for Curriculum Implementation

19. Do you plan to implement the complete IDSA Antimicrobial Stewardship Core Curriculum or only a portion of it?

- Complete curriculum
- Only a portion of the curriculum
- Other (please specify)

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Program Directors)

Plans for Curriculum Implementation

20. Please describe **what portions** of the IDSA Antimicrobial Stewardship Core Curriculum you plan to implement.

21. Please describe **why** you chose to only implement those portions of the curriculum.

22. Will participation in the IDSA Antimicrobial Stewardship Core Curriculum be mandatory or optional?

- Mandatory Optional
 Other (please specify)

23. On reviewing the IDSA Antibiotic Stewardship Core Curriculum, do you see any potential challenges to implementation at your site?

- Yes
 No

24. What potential challenges do you foresee with implementing the IDSA Antimicrobial Stewardship Core Curriculum at your site? (select all that apply)

- Time for formal teaching Lack of adequate facilitators
 Time for fellows to complete web-based content I do not foresee any challenges
 Other (please specify)

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Program Directors)

Evaluation of Primary Outcomes

Instructions: Program Directors, please refer to your existing curricular content to answer these questions about your perceptions of the effectiveness of your fellows' education in antimicrobial stewardship.

25. For the following statements, please indicate how well you think your **current** antimicrobial stewardship curriculum content teaches your first year fellows to be able to:

	Not at all	Somewhat	Moderately	Very	Extremely
Educate other healthcare providers on the importance of antimicrobial stewardship in the care of their individual patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate other healthcare providers on the importance of antimicrobial stewardship in the community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in their day-to-day care of patients in the inpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in their day-to-day care of patients in the outpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. For the following statements, please indicate how well you think your current antimicrobial stewardship curriculum content teaches your first year fellows to be able to:

	Not at all	Somewhat	Moderately	Very	Extremely
Determine when an infectious diseases consultation would be more appropriate than just an antimicrobial stewardship intervention over the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use effective communication techniques to change the antimicrobial prescribing practices of other healthcare providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the elements of an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the inter-professional collaborations necessary for an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describe the day-to-day activities of a leader in an antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. How would you rate the overall quality of your fellowship or residency program's training in antimicrobial stewardship?

Very poor	Poor	Average	Good	Very good
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Program Directors)

Training Program Information

* 2. Please provide the name of your training institution.

3. Your program is:

- An Adult ID Fellowship Training Program
- A Pediatric ID Fellowship Training Program
- Other (please specify)
- A Pharmacy Training Program

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Program Directors)

Training Program Information - ID Fellowship Programs Only

4. During the **2018 - 2019 academic year**, which of your fellows participated in the IDSA Antimicrobial Stewardship Core Curriculum? (select all that apply)

- 1st years
- 2nd years
- 3rd years
- 4th years
- Other (please specify)

5. For your **first year fellows during the 2018-2019 academic year**, how did you implement the IDSA Core Antimicrobial Stewardship curriculum?

- All of the curriculum was completed in their first year of fellowship
- The curriculum will be spread over their first and second year of fellowship
- They did not participate in the curriculum during their first year of fellowship
- Other (please specify)

6. **In future years**, how do you plan to the IDSA Core Antimicrobial Stewardship curriculum?

- All of the curriculum will be completed in the fellows' first year of fellowship
- All of the curriculum will be completed in the fellows' second year of fellowship
- The curriculum will be spread over the fellows' first and second year of fellowship
- I do not plan to implement the IDSA Antimicrobial Stewardship curriculum in the future
- Other (please specify)

7. Please describe any factors that have affected your decision regarding when to teach the IDSA Core Antimicrobial Stewardship curriculum during the course of your fellows' training (i.e. during their first year of fellowship, second year of fellowship, or spread out over both years).

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Program Directors)

Plans for Curriculum Implementation

8. What portion of the IDSA Antimicrobial Stewardship curriculum did you implement during the 2018-2019 academic year?

- Complete curriculum
- Only a portion of the curriculum
- Other (please specify)

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Program Directors)

Plans for Curriculum Implementation

9. Please describe **what portions** of the IDSA Antimicrobial Stewardship Core Curriculum you plan to implement.

10. Please describe **why** you chose to only implement those portions of the curriculum.

11. Was participation in the IDSA Antimicrobial Stewardship Core Curriculum mandatory or optional?

- Mandatory Optional
 Other (please specify)

12. Did your program share the IDSA Antimicrobial Stewardship Clinical Teaching Tool (or other curriculum content) with other faculty members in your training program?

- Yes
 No
 I don't know

13. Please list any of the IDSA Antimicrobial Stewardship curriculum tools that you shared with your faculty members to use in teaching the fellows and how they were used (e.g. Antimicrobial Stewardship Clinical Teaching Tool, NARROWS scoring rubric, quick-reference pocket guides, etc.).

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Program Directors)

Evaluation of Primary Outcomes

Instructions: Program Directors, please use your current antimicrobial stewardship curriculum content (including any portion of the IDSA Core Antimicrobial Stewardship curriculum that you included this year) to answer these questions about your perceptions of the effectiveness of your fellows' education in antimicrobial stewardship.

14. For the following statements, please indicate how well you think your **antimicrobial stewardship curriculum content for the 2018-2019 academic year** (including any portion of the IDSA Core Antimicrobial Stewardship curriculum that you included) teaches your first year fellows to be able to:

	Not at all	Somewhat	Moderately	Very	Extremely
Educate other healthcare providers on the importance of antimicrobial stewardship in the care of their individual patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate other healthcare providers on the importance of antimicrobial stewardship in the community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in their day-to-day care of patients in the inpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in their day-to-day care of patients in the outpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. For the following statements, please indicate how well you think your **antimicrobial stewardship curriculum content for the 2018-2019 academic year (including any portion of the IDSA Core Antimicrobial Stewardship curriculum that you included)** teaches your first year fellows to be able to:

	Not at all	Somewhat	Moderately	Very	Extremely
Determine when an infectious diseases consultation would be more appropriate than just an antimicrobial stewardship intervention over the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use effective communication techniques to change the antimicrobial prescribing practices of other healthcare providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the elements of an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the inter-professional collaborations necessary for an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describe the day-to-day activities of a leader in an antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. How would you rate the overall quality of your fellowship or residency program's training in antimicrobial stewardship?

Very poor	Poor	Average	Good	Very good
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Program Directors)

Curriculum Feedback

17. How satisfied were you with the IDSA Core Antimicrobial Stewardship curriculum?

Not at all	Somewhat	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Did you experience any challenges with implementing the IDSA Core Antimicrobial Stewardship curriculum at your site?

- Yes
- No
- I don't know

19. What challenges did you encounter with implementing the IDSA Antimicrobial Stewardship curriculum at your site? (select all that apply)

- Time for formal teaching
- Time for fellows to complete web-based content
- Other (please specify)
- Lack of adequate facilitators
- I did not experience any challenges

20. What did you enjoy most about the IDSA Core Antimicrobial Stewardship curriculum?

21. Would you recommend the IDSA Core Antimicrobial Stewardship curriculum to others?

- Yes
- No

22. Why would you (or would you not) recommend the IDSA Core Antimicrobial Stewardship curriculum to others?

23. Do you have any suggestions regarding how to improve the IDSA Core Antimicrobial Stewardship curriculum?

24. Are there any areas that were not covered in the existing IDSA Core Antimicrobial Stewardship curriculum that you wish had been covered?

- Yes
- No
- I don't know

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Program Directors)

Curriculum Feedback #2

25. Please describe which areas you wish had been covered in the existing IDSA Antimicrobial Stewardship curriculum.

Eligibility

Please answer the following question to determine if you are eligible to continue to the survey.

1. Are you an Infectious Diseases fellow?

Yes

No

2. Did you finish your first year of Infectious Diseases fellowship during June or July 2018?

Yes - continue to survey

No - exit survey

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IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Fellows)

Knowledge Questions

Please answer the following questions about antimicrobial stewardship principles. These questions may be difficult if you have had limited exposure to antimicrobial stewardship principles in your training program. It is totally fine if you do not know the correct answer. Answer the questions to the best of your abilities, and please answer these questions without using any other resources so that we can assess the true effectiveness of the new IDSA Antimicrobial Stewardship Core Curriculum that we are piloting this year.

4. Which of the following is the best definition of antimicrobial stewardship?

- De-escalation of antimicrobial therapy from broad-spectrum to narrow-spectrum agents
- Tracking antimicrobial use and providing feedback to healthcare providers
- Customizing antimicrobial therapy to ensure patients receive optimal treatment
- Requiring prior approval for use of certain antimicrobial agents

5. Which of the following are examples of strategies used in a **microbiology laboratory report** to influence prescriber behavior? **(select all that apply)**

- Suppression
- Narrating
- Cascading
- Messaging

6. What **percentage of antibiotic prescriptions in the inpatient setting** are either **unnecessary**, because the patient does not need antibiotics, **or inappropriate**, because they are the incorrect spectrum, dose, or duration?

0% 50% 100%

7. Increased antibiotic prescribing on a hospital ward increases the risk of *Clostridium difficile* infection for all patients on that hospital ward.

- True
 False

8. In your role as leader of your hospital's antimicrobial stewardship program, you are reviewing a list of cultures results and antibiotic use in the hospital and come across the following patients. Which of these patients would be **more appropriately managed with a formal Infectious Diseases consultation** rather than a stewardship intervention? **(select all that apply)**

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> A patient in the intensive care unit found to be in septic shock on admission who has been on vancomycin and meropenem for 1 week and has a persistent fever | <input type="checkbox"/> A diabetic patient who was admitted with a new draining foot ulcer, was found to have osteomyelitis of his left foot on MRI, was evaluated by surgery with no plans for surgical intervention or biopsy, and is on vancomycin and piperacillin-tazobactam |
| <input type="checkbox"/> A patient who has a blood culture positive for fluconazole-susceptible <i>Candida albicans</i> and was switched from micafungin to fluconazole today | <input type="checkbox"/> An intubated patient who developed a fever and a new pulmonary infiltrate, has an endotracheal aspirate with more than 100,000 cfu/ml <i>Klebsiella pneumoniae</i> only susceptible to meropenem, and is currently on ceftazidime |

9. You are reviewing all methicillin-susceptible *Staphylococcus aureus* (MSSA) bloodstream infections at your hospital over the last month and notice that multiple patients have been inappropriately treated with vancomycin. Which of the following strategies would be effective way(s) for the microbiology lab to reduce vancomycin use for these patients? **(select all that apply)**

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Do not automatically report vancomycin susceptibility results for MSSA isolates | <input type="checkbox"/> Change the order of the antibiotics listed on the microbiology lab's susceptibility report to put vancomycin at the bottom of the list |
| <input type="checkbox"/> Add the statement "Nafcillin or cefazolin are recommended for the treatment of MSSA" to the end of the microbiology lab report | <input type="checkbox"/> Create and distribute an antibiogram showing the susceptibility results of all <i>Staphylococcus aureus</i> isolates in your hospital from the previous year |

10. A 38-year-old female with no medical problems presents to the emergency room with dysuria, fever, and flank pain. Her temperature is 39.4 degrees Celsius, her heart rate is 106 beats per minute, and her blood pressure is 110/ 68 mmHg. She has pyuria on her urinalysis. She is started on vancomycin and piperacillin-tazobactam . A urine culture is pending. You call the hospitalist to discuss narrowing her antibiotics to ceftriaxone, but he is resistant to making changes because he is worried that she looks really sick. **What is the most likely reason behind his unwillingness to change her antibiotic regimen?**

- Diagnostic uncertainty
- Unfamiliarity with the guidelines
- A belief that "broader is better"
- Lack of trust in other healthcare professionals

11. Dr. B is a critical care physician in the medical intensive care unit who requests meropenem for a 51-year-old male presenting with septic shock secondary to community-acquired pneumonia. Dr. B tells you that in his experience, meropenem works better because it has broader coverage, and his patients usually need broad coverage because they are very sick. He does not believe that the guidelines apply to his patient population, and he frequently requests meropenem for patients when he is working in the intensive care unit even for his patients who do not have risk factors for multidrug resistant organisms. **What would be the most effective way to convince him to change his meropenem prescribing habits?**

- Complete an audit and feedback of his meropenem use
- Review his meropenem use with him and compare it to his critical care colleagues
- Review the community-acquired pneumonia guidelines with him
- Add a decision support tool to the electronic medical record to help with antibiotic selection

12. **In your role as a member of the antimicrobial stewardship team**, you find out that there is a nationwide shortage of an intravenous antibiotic. You plan to review all of the records of individuals on that antibiotic to make a plan for how to manage the antibiotic shortage at your hospital. What information should you consider for each patient receiving this antibiotic? **(select all that apply)**

- Indication for the antibiotic
- Ability to take medications by mouth
- Bioavailability of oral alternatives
- Patient allergy information

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Fellows)

Antimicrobial Stewardship Education

The following questions will ask you about your fellowship program's training in antimicrobial stewardship. Even if you are not interested in pursuing a career in antimicrobial stewardship, we are still interested in your responses.

13. How satisfied are you with your fellowship program's training in antimicrobial stewardship?

Not at all Somewhat Moderately Very Extremely

14. Which of the following educational formats have been used to teach you about antimicrobial stewardship in your fellowship program? **(select all that apply)**

- | | |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Lectures | <input type="checkbox"/> Covering the antibiotic approval pager |
| <input type="checkbox"/> Web-based modules or curricula (excluding the IDSA antimicrobial stewardship curriculum) | <input type="checkbox"/> Performing formal audit and feedback of patient records |
| <input type="checkbox"/> Small group discussion | <input type="checkbox"/> Attendance at antimicrobial stewardship meetings |
| <input type="checkbox"/> Engaging in role play techniques | <input type="checkbox"/> Quality improvement projects related to antimicrobial stewardship |
| <input type="checkbox"/> Required clinical rotation in antimicrobial stewardship | <input type="checkbox"/> I have not received any formal training in antimicrobial stewardship |
| <input type="checkbox"/> Elective clinical rotation in antimicrobial stewardship | |
| <input type="checkbox"/> Other (please specify) | |

15. For the following statements, indicate **how effective** your fellowship program is in teaching you how to:

	Not at all	Somewhat	Moderately	Very	Extremely
Educate other healthcare providers on the importance of antimicrobial stewardship in the care of their individual patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate other healthcare providers on the importance of antimicrobial stewardship in the community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the inpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the outpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. For the following statements, indicate **how confident** you are in your ability to:

	Not at all	Somewhat	Moderately	Very	Extremely
Educate other healthcare providers on the importance of antimicrobial stewardship in the care of their individual patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate other healthcare providers on the importance of antimicrobial stewardship in the community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the inpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the outpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. For the following statements, indicate **how effective** your fellowship program is in teaching you how to:

	Not at all	Somewhat	Moderately	Very	Extremely
Determine when an infectious diseases consultation would be more appropriate than just an antimicrobial stewardship intervention over the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use effective communication techniques to change the antimicrobial prescribing practices of other healthcare providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the elements of an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the inter-professional collaborations necessary for an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describe the day-to-day activities of a leader in an antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the initial steps that the antimicrobial stewardship team would use to respond to an antibiotic shortage at your hospital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. For the following statements, indicate **how confident** you are in your ability to:

	Not at all	Somewhat	Moderately	Very	Extremely
Determine when an infectious diseases consultation would be more appropriate than just an antimicrobial stewardship intervention over the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use effective communication techniques to change the antimicrobial prescribing practices of other healthcare providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the elements of an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the inter-professional collaborations necessary for an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describe the day-to-day activities of a leader in an antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the initial steps that the antimicrobial stewardship team would use to respond to an antibiotic shortage at your hospital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Have you attended an antimicrobial stewardship meeting during your fellowship training?

- Yes
- No

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Fellows)

Antimicrobial Stewardship Education, cont.

20. How many antimicrobial stewardship meetings have you attended during your fellowship training?

21. How effective was attending an antimicrobial stewardship meeting in teaching you about the role of an antimicrobial stewardship program?

Not at all	Somewhat	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Have you completed a quality improvement project related to antimicrobial stewardship during your fellowship training?

- Yes
- No

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Fellows)

Antimicrobial Stewardship Education, cont.

23. Please briefly describe **what you did** for your quality improvement project and **how much time** you spent on the project.

24. How would you rate the overall quality of your fellowship program's training in antimicrobial stewardship?

Poor	Below average	Average	Above average	Excellent
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IDSA Antimicrobial Stewardship Core Curriculum, Pre-survey (Fellows)

Background Information

Please answer the following questions to give us information about your prior exposure to antimicrobial stewardship.

25. During medical school, residency, or fellowship, did you seek any additional training in antimicrobial stewardship? (e.g. electives, courses, or quality improvement projects specifically focused on antimicrobial stewardship)

- Yes
- No

26. If you have had additional training in antimicrobial stewardship, please describe what that training was.

27. **Prior to** Infectious Diseases fellowship, how interested were you in a career in antimicrobial stewardship?

Not at all	Somewhat	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. **Currently**, how interested are you in a career in antimicrobial stewardship?

Not at all	Somewhat	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. What factors have contributed to your interest in a career in antimicrobial stewardship? (**select all that apply**)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> I am not interested in a career in antimicrobial stewardship | <input type="checkbox"/> Compensation for antimicrobial stewardship positions |
| <input type="checkbox"/> Coursework/electives focused on antimicrobial stewardship | <input type="checkbox"/> Interest in working with an interdisciplinary team (i.e. pharmacists, nurses, etc.) |
| <input type="checkbox"/> Workshops or other talks on antimicrobial stewardship at regional/national conferences (e.g. IDWeek, SHEA, etc.) | <input type="checkbox"/> Interest in having a broader impact on patient outcomes |
| <input type="checkbox"/> Experience with a research or quality improvement project | <input type="checkbox"/> Interest in preventing antibiotic resistance |
| <input type="checkbox"/> Exposure to a mentor (e.g. faculty, fellow, etc.) | <input type="checkbox"/> Interest in creating and/or influencing healthcare system policies |
| <input type="checkbox"/> Prior interactions with antimicrobial stewardship staff | <input type="checkbox"/> Interest in interacting with healthcare administrators |
| <input type="checkbox"/> Availability of jobs in antimicrobial stewardship | |
| <input type="checkbox"/> Other (please specify) | |

30. **Please provide the name of your Infectious Diseases fellowship program.** (This information is only being used to compare the answers of fellows within the same program before and after implementation of the IDSA Antimicrobial Stewardship Core Curriculum. Your responses will not be shared with anyone in your program.)

31. What year of your Infectious Diseases fellowship are you currently in?

- 1st year 2nd year
 Other (please specify)

32. What type of residency program did you complete?

- Internal Medicine Combined Med/Peds
 Pediatrics
 Other (please specify)

33. What is your gender?

- Female Prefer not to answer
 Male
 Other (please specify)

34. Please provide your email address if you would be willing to participate in an hour-long in-depth interview over the phone about your experiences with your antimicrobial stewardship curriculum for a \$50 gift card:

35. Please provide any additional thoughts, comments, or feedback on the survey or your experiences with antimicrobial stewardship:

Eligibility

Please answer the following question to determine if you are eligible to continue to the survey.

1. Are you an Infectious Diseases fellow?

Yes

No

2. Did you finish your first year of Infectious Diseases fellowship during June or July 2019?

Yes - continue to survey

No - exit survey

Introduction and Consent to Participate

Please review the information below and SELECT ONE of the two choices at the end to either PROCEED to the survey or DECLINE the survey.

Title: Evaluating Infectious Disease Fellows' Knowledge, Attitudes, and Practices of Antimicrobial Stewardship after Implementation of a New Curriculum

Principal Investigator: Wendy Armstrong, MD

Co-investigators: Jennifer Spicer, MD, MPH; Brian Schwartz, MD

We are inviting you to participate in our study because you are in a fellowship training program that is implementing the new Infectious Diseases Society of America (IDSA) Core Antimicrobial Stewardship curriculum this year. The purpose of this study is to evaluate the effectiveness of this curriculum in teaching Infectious Diseases (ID) fellows antimicrobial stewardship principles and skills.

We plan to survey faculty and ID fellows at all training programs who are implementing the curriculum this year. You will be asked to complete a short online survey, which should take approximately 20 minutes. All identifiable data will be anonymized prior to analysis. Your individual answers to this survey will not be shared with any individuals in your training program. Although we have made every effort to protect your identity by using de-identification and independent researchers, there is a minimal risk of loss of confidentiality. You may benefit directly from this study as information gained from this study will be used to improve the IDSA Core Antimicrobial Stewardship curriculum.

Your participation in this survey is completely voluntary, and you are free to choose not to serve as a research subject in this protocol for any reason. You may refuse to answer any questions that you do not wish to answer. If you choose to participate and later change your mind, you may quit this survey

at any time and ask for your data to be removed from the study. If you refuse to participate or withdraw from the study, there will be no penalty or loss of any benefits to which you are otherwise entitled.

This study is sponsored by the IDSA. Records may be reviewed and copied by the Emory University Institutional Review Board and the Office for Human Research Protections. If you have any questions regarding your rights as a research subject, you may contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or irb@emory.edu.

Your input is critical in order to evaluate the effectiveness of the IDSA Core Antimicrobial Stewardship curriculum. If you have questions about the study, please contact Jennifer Spicer (Jennifer.spicer@emory.edu) or 404-828-0291. Thank you for considering participating in this study!

3. Please SELECT ONE of the two choices to either PROCEED to the survey or DECLINE the survey.

- I have read the above information and **would like to participate** in the study
- I **do not wish to participate** in the study

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Fellows)

Knowledge Questions

Please answer the following questions about antimicrobial stewardship principles. These questions may be difficult if you have had limited exposure to antimicrobial stewardship principles in your training program. It is totally fine if you do not know the correct answer. Answer the questions to the best of your abilities, and please answer these questions without using any other resources so that we can assess the true effectiveness of the new IDSA Antimicrobial Stewardship Core Curriculum that we are piloting this year.

4. Which of the following is the best definition of antimicrobial stewardship?

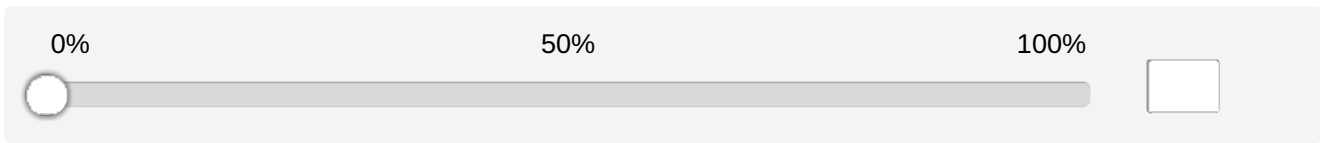
- De-escalation of antimicrobial therapy from broad-spectrum to narrow-spectrum agents
- Tracking antimicrobial use and providing feedback to healthcare providers
- Customizing antimicrobial therapy to ensure patients receive optimal treatment
- Requiring prior approval for use of certain antimicrobial agents

5. Which of the following are examples of strategies used in a **microbiology laboratory report** to influence prescriber behavior? **(select all that apply)**

- Suppression
- Narrating
- Cascading
- Messaging

6. What **percentage of antibiotic prescriptions in the inpatient setting** are either **unnecessary**, because the patient does not need antibiotics, **or inappropriate**, because they are the incorrect spectrum, dose, or duration?

0% 50% 100%



7. Increased antibiotic prescribing on a hospital ward increases the risk of *Clostridium difficile* infection for all patients on that hospital ward.

- True
- False

8. In your role as leader of your hospital's antimicrobial stewardship program, you are reviewing a list of cultures results and antibiotic use in the hospital and come across the following patients. Which of these patients would be **more appropriately managed with a formal Infectious Diseases consultation** rather than a stewardship intervention? **(select all that apply)**

- A patient in the intensive care unit found to be in septic shock on admission who has been on vancomycin and meropenem for 1 week and has a persistent fever
- A patient who has a blood culture positive for fluconazole-susceptible *Candida albicans* and was switched from micafungin to fluconazole today
- A diabetic patient who was admitted with a new draining foot ulcer, was found to have osteomyelitis of his left foot on MRI, was evaluated by surgery with no plans for surgical intervention or biopsy, and is on vancomycin and piperacillin-tazobactam
- An intubated patient who developed a fever and a new pulmonary infiltrate, has an endotracheal aspirate with more than 100,000 cfu/ml *Klebsiella pneumoniae* only susceptible to meropenem, and is currently on ceftazidime

9. You are reviewing all methicillin-susceptible *Staphylococcus aureus* (MSSA) bloodstream infections at your hospital over the last month and notice that multiple patients have been inappropriately treated with vancomycin. Which of the following strategies would be effective way(s) for the microbiology lab to reduce vancomycin use for these patients? **(select all that apply)**

- Do not automatically report vancomycin susceptibility results for MSSA isolates
- Add the statement "Nafcillin or cefazolin are recommended for the treatment of MSSA" to the end of the microbiology lab report
- Change the order of the antibiotics listed on the microbiology lab's susceptibility report to put vancomycin at the bottom of the list
- Create and distribute an antibiogram showing the susceptibility results of all *Staphylococcus aureus* isolates in your hospital from the previous year

10. A 38-year-old female with no medical problems presents to the emergency room with dysuria, fever, and flank pain. Her temperature is 39.4 degrees Celsius, her heart rate is 106 beats per minute, and her blood pressure is 110/ 68 mmHg. She has pyuria on her urinalysis. She is started on vancomycin and piperacillin-tazobactam . A urine culture is pending. You call the hospitalist to discuss narrowing her antibiotics to ceftriaxone, but he is resistant to making changes because he is worried that she looks really sick. **What is the most likely reason behind his unwillingness to change her antibiotic regimen?**

- Diagnostic uncertainty
- Unfamiliarity with the guidelines
- A belief that "broader is better"
- Lack of trust in other healthcare professionals

11. Dr. B is a critical care physician in the medical intensive care unit who requests meropenem for a 51-year-old male presenting with septic shock secondary to community-acquired pneumonia. Dr. B tells you that in his experience, meropenem works better because it has broader coverage, and his patients usually need broad coverage because they are very sick. He does not believe that the guidelines apply to his patient population, and he frequently requests meropenem for patients when he is working in the intensive care unit even for his patients who do not have risk factors for multidrug resistant organisms. **What would be the most effective way to convince him to change his meropenem prescribing habits?**

- Complete an audit and feedback of his meropenem use
- Review his meropenem use with him and compare it to his critical care colleagues
- Review the community-acquired pneumonia guidelines with him
- Add a decision support tool to the electronic medical record to help with antibiotic selection

12. **In your role as a member of the antimicrobial stewardship team**, you find out that there is a nationwide shortage of an intravenous antibiotic. You plan to review all of the records of individuals on that antibiotic to make a plan for how to manage the antibiotic shortage at your hospital. What information should you consider for each patient receiving this antibiotic? **(select all that apply)**

- Indication for the antibiotic
- Ability to take medications by mouth
- Bioavailability of oral alternatives
- Patient allergy information

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Fellows)

Antimicrobial Stewardship Education

The following questions will ask you about your fellowship program's training in antimicrobial stewardship. Even if you are not interested in pursuing a career in antimicrobial stewardship, we are still interested in your responses.

13. How satisfied are you with your fellowship program's training in antimicrobial stewardship?

Not at all Somewhat Moderately Very Extremely

14. Which of the following educational formats have been used to teach you about antimicrobial stewardship in your fellowship program? **(select all that apply)**

- | | |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Lectures | <input type="checkbox"/> Covering the antibiotic approval pager |
| <input type="checkbox"/> Web-based modules or curricula (excluding the IDSA antimicrobial stewardship curriculum) | <input type="checkbox"/> Performing formal audit and feedback of patient records |
| <input type="checkbox"/> Small group discussion | <input type="checkbox"/> Attendance at antimicrobial stewardship meetings |
| <input type="checkbox"/> Engaging in role play techniques | <input type="checkbox"/> Quality improvement projects related to antimicrobial stewardship |
| <input type="checkbox"/> Required clinical rotation in antimicrobial stewardship | <input type="checkbox"/> I have not received any formal training in antimicrobial stewardship |
| <input type="checkbox"/> Elective clinical rotation in antimicrobial stewardship | |
| <input type="checkbox"/> Other (please specify) | |

15. For the following statements, indicate **how effective** your fellowship program is in teaching you how to:

	Not at all	Somewhat	Moderately	Very	Extremely
Educate other healthcare providers on the importance of antimicrobial stewardship in the care of their individual patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate other healthcare providers on the importance of antimicrobial stewardship in the community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the inpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the outpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. For the following statements, indicate **how confident** you are in your ability to:

	Not at all	Somewhat	Moderately	Very	Extremely
Educate other healthcare providers on the importance of antimicrobial stewardship in the care of their individual patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate other healthcare providers on the importance of antimicrobial stewardship in the community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the inpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Model antimicrobial stewardship in your day-to-day care of patients in the outpatient setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. For the following statements, indicate **how effective** your fellowship program is in teaching you how to:

	Not at all	Somewhat	Moderately	Very	Extremely
Determine when an infectious diseases consultation would be more appropriate than just an antimicrobial stewardship intervention over the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use effective communication techniques to change the antimicrobial prescribing practices of other healthcare providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the elements of an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the inter-professional collaborations necessary for an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describe the day-to-day activities of a leader in an antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the initial steps that the antimicrobial stewardship team would use to respond to an antibiotic shortage at your hospital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. For the following statements, indicate **how confident** you are in your ability to:

	Not at all	Somewhat	Moderately	Very	Extremely
Determine when an infectious diseases consultation would be more appropriate than just an antimicrobial stewardship intervention over the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use effective communication techniques to change the antimicrobial prescribing practices of other healthcare providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the elements of an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize the inter-professional collaborations necessary for an effective hospital-based antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describe the day-to-day activities of a leader in an antimicrobial stewardship program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the initial steps that the antimicrobial stewardship team would use to respond to an antibiotic shortage at your hospital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Have you attended an antimicrobial stewardship meeting during your fellowship training?

- Yes
- No

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Fellows)

Antimicrobial Stewardship Education, cont.

20. How many antimicrobial stewardship meetings have you attended during your fellowship training?

21. How effective was attending an antimicrobial stewardship meeting in teaching you about the role of an antimicrobial stewardship program?

Not at all	Somewhat	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Have you completed a quality improvement project related to antimicrobial stewardship during your fellowship training?

- Yes
- No

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Fellows)

Antimicrobial Stewardship Education, cont.

23. Please briefly describe **what you did** for your quality improvement project and **how much time** you spent on the project.

24. How would you rate the overall quality of your fellowship program's training in antimicrobial stewardship?

Poor	Below average	Average	Above average	Excellent
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Fellows)

IDSA Antimicrobial Stewardship Core Curriculum

The following questions ask you what portion of the IDSA Core Antimicrobial Stewardship curriculum you completed.

25. How much of Section 1: Introduction to Antimicrobial Stewardship did you complete?

- The entire section
- A portion of the section
- None of the section
- I'm not sure

26. How much of Section 2: Antimicrobial Stewardship in Everyday Practice did you complete?

- The entire section
- A portion of the section
- None of the section
- I'm not sure

27. How much of Section 3: Educating and Coaching on Antimicrobial Stewardship did you complete?

- The entire section
- A portion of the section
- None of the section
- I'm not sure

28. How much of Section 4: Antimicrobial Stewardship Program Logistics did you complete?

- The entire section
- A portion of the section
- None of the section
- I'm not sure

29. Do you think the IDSA Antimicrobial Stewardship curriculum exposed you to aspects of antimicrobial stewardship that you would not have encountered otherwise during your Infectious Diseases fellowship training?

- Yes
- No
- Other (please specify)

30. How would you rate the overall quality of the IDSA Core Antimicrobial Stewardship Curriculum?

Very poor	Poor	Average	Good	Very good
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. What did you enjoy most about the curriculum?

32. Would you recommend this curriculum to other Infectious Diseases fellows? Why or why not?

33. Were there any barriers that made it difficult for you to complete the IDSA Core Antimicrobial Stewardship curriculum? If so, please describe them.

34. Are there topics that you wish had been covered in this curriculum?

35. Do you have any suggestions for improving this curriculum?

IDSA Antimicrobial Stewardship Core Curriculum, Post-survey (Fellows)

Background Information

Please answer the following questions to give us information about your prior exposure to antimicrobial stewardship.

36. During medical school, residency, or fellowship, did you seek any additional training in antimicrobial stewardship? (e.g. electives, courses, or quality improvement projects specifically focused on antimicrobial stewardship)

Yes

No

37. If you have had additional training in antimicrobial stewardship, please describe what that training was.

38. **Prior to** Infectious Diseases fellowship, how interested were you in a career in antimicrobial stewardship?

Not at all	Somewhat	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. **Currently**, how interested are you in a career in antimicrobial stewardship?

Not at all	Somewhat	Moderately	Very	Extremely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

40. What factors have contributed to your interest in a career in antimicrobial stewardship? **(select all that apply)**

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> I am not interested in a career in antimicrobial stewardship | <input type="checkbox"/> Compensation for antimicrobial stewardship positions |
| <input type="checkbox"/> Coursework/electives focused on antimicrobial stewardship | <input type="checkbox"/> Interest in working with an interdisciplinary team (i.e. pharmacists, nurses, etc.) |
| <input type="checkbox"/> Workshops or other talks on antimicrobial stewardship at regional/national conferences (e.g. IDWeek, SHEA, etc.) | <input type="checkbox"/> Interest in having a broader impact on patient outcomes |
| <input type="checkbox"/> Experience with a research or quality improvement project | <input type="checkbox"/> Interest in preventing antibiotic resistance |
| <input type="checkbox"/> Exposure to a mentor (e.g. faculty, fellow, etc.) | <input type="checkbox"/> Interest in creating and/or influencing healthcare system policies |
| <input type="checkbox"/> Prior interactions with antimicrobial stewardship staff | <input type="checkbox"/> Interest in interacting with healthcare administrators |
| <input type="checkbox"/> Availability of jobs in antimicrobial stewardship | |
| <input type="checkbox"/> Other (please specify) | |

41. **Please provide the name of your Infectious Diseases fellowship program.** (This information is only being used to compare the answers of fellows within the same program before and after implementation of the IDSA Antimicrobial Stewardship Core Curriculum. Your responses will not be shared with anyone in your program.)

42. What year of your Infectious Diseases fellowship are you currently in?

- 1st year 2nd year
 Other (please specify)

43. What type of residency program did you complete?

- Internal Medicine Combined Med/Peds
 Pediatrics
 Other (please specify)

44. What is your gender?

- Female Prefer not to answer
 Male
 Other (please specify)

45. Please provide your email address if you would be willing to participate in an hour-long in-depth interview over the phone about your experiences with your antimicrobial stewardship curriculum for a \$50 gift card:

46. Please provide any additional thoughts, comments, or feedback on the survey or your experiences with antimicrobial stewardship: