

Online Appendix. Questionnaire tabulation

Dimension	Question
Knowledge	Are you familiar with the concept of an Antimicrobial Stewardship Program (ASP)
	Which of the following Antimicrobial Stewardship Program components is currently in place in your Hospital
	1- Infectious Disease physician and/or Infectious Disease pharmacist rounding
	2- Audit--and--feedback for some antibiotics prescribed within your hospital
	3- Antimicrobials restricted to Infectious Disease consultants
Practices	4- Time-sensitive automatic stop orders for specified antibiotic Prescriptions
	5- Specific interventions for optimal use of antibiotics to treat Community-Acquired Pneumonia
	6- Specific interventions for optimal use of antibiotics to treat Urinary Tract Infection
	7- Specific interventions for optimal use of antibiotics for Surgical Prophylaxis
	8- Specific interventions for empiric treatment of intraabdominal infections
	9- Specific interventions for empiric treatment of skin and soft tissues infections
	Are there plans in your institution to implement an ASP
	How long has the ASP been present in your institution
	The stewardship team in your hospital is made up of (check all that apply)
	1- Infectious Disease Physician
2- ASP Pharmacist	
3- Infection Control officer	
4- Other	
Attitude	How often do you have interaction with the ASP in your hospital
	1- Once or twice per week
	2- 3 to 4 times per week
	3- > 4 times per week
	Do you have regular educational programs on the appropriate use of antimicrobials for hospital medical, nursing and other relevant staff
	Is your hospital's microbiology Lab developing and monitoring local antibiograms to assess local resistance and susceptibility patterns
	Please rate the level of agreement to the following statements
	1- I feel that my patients benefit/would benefit having an ASP in place.
	2- I feel that time spent interacting with the ASP physician and/or pharmacist is/would be an efficient use of my time.
	3- I feel that an ASP increases/would increase my knowledge of appropriate antimicrobial use.
4- I feel that an ASP affects/would affect my autonomy in a negative way.	
5- The necessity of gaining approval for restricted antibiotics makes the team think more carefully about antibiotic choice.	
6- The physician caring for the patient is in the best position to know what the best antibiotic treatment is for that patient.	
7- Antibiotic guidelines and antibiotic committee are an obstacle more than a help to clinical care	
8- A computer approval program would be a preferable system for approval of restricted antibiotics.	
9- A faxed or written approval program would be a preferable system for approval of restricted antibiotics.	
Usefulness	Please rate the following methods of interaction with the ASP as to their usefulness
	1- Prospective audit and feedback
	2- Antibiotic rounds with ASP physician/pharmacist
	3- Standard meeting time on rounds
	4- Written feedback in progress notes on patient chart
	5- Written suggestions in doctors' orders
6- Verbal feedback (outside of formal rounds).	
Decision tools	Yes/No
	1- Would you prefer to have more guidance from Infectious Disease experts regarding your antimicrobial prescribing
	2- The development of local guidelines is/would be more useful than the international ones
	3- Local resistance data is an important information for optimal antibiotic use.
	4- National resistance data is an important information for optimal antibiotic use
5- Availability of rapid microbiological diagnostic tests is important for antibiotic treatment decision	

Dimension	Question
	<p>Do you feel that your use of antimicrobials has changed significantly over the past couple of years</p> <p>In what way (s) has your use of antimicrobials changed? (check all that apply):</p> <ol style="list-style-type: none"> 1- Less empiric therapy 2- More empiric therapy 3- More targeted therapy 4- Longer durations of therapy 5- Shorter durations of therapy 6- Avoiding specific drugs or classes of antibiotics
Prescribing change	<p>Which of the following factors have contributed to this change? (check all that apply)</p> <ol style="list-style-type: none"> 1- Fellow/resident approach to antimicrobials prescribing 2- Pharmacists approach to antimicrobials prescribing 3- Greater consciousness of resistance 4- Budget constraints 5- Infectious Disease consults 6- Articles in medical literature 7- Conferences 8- Visiting speakers 9- Antimicrobial Stewardship Program
Barriers	<p>Select all the barriers that may hinder initiating or sustaining an antibiotic control program? (check all that apply)</p> <ol style="list-style-type: none"> 1- Infectious Disease physician shortages 2- Lack of leadership to promote antimicrobial stewardship 3- Lack of support from the medical staff 4- Lack of support from administration or department heads 5- Lack of training and education in antimicrobial use 6- Lack of financial incentives to the Infectious Disease physician and the pharmacist to initiate the program 7- Minimal support of the ministry of public health and absence of regulation 8- Absence of national approved guidelines 9- Physicians' compliance with hospital guidelines and antimicrobial prescribing policies 10- Insufficient evidence my hospital would benefit