2012 Survey of Antimicrobial Stewardship in VHA

VHA is committed to providing the highest quality health care to Veterans. The goal of this survey is to gather information on the current state of VHA Antimicrobial Stewardship (AS) programs and resources across the VHA system. This new survey will provide both VA Central Office officials and the field with a useful and accessible picture of the characteristics and organization of AS activities, teams, and programs available in VHA.

Purpose: This survey will gather information on the current state of facility level AS activities, programs, personnel, and resources across the VHA system.

The Program Office will use the results for multiple objectives.

- Identify currently available AS experts at facilities
- Understand the current state and effectiveness of AS policies, programs, and education
- Guide operational policies, procedures, standards, and guidelines on best practices for AS activities to provide Veterans with personalized, proactive health care
- Provide data to guide VHA's system-wide AS strategic plan
- Aid in developing and implementing AS programs and expanding existing programs
- Develop a communication plan to promote effective facility level AS programs

Suggested Respondents: Chief of Staff, Chief of Infectious Disease, Chief of Medicine, Chief of Pharmacy, (i.e., individual knowledgeable about AS activities within your medical facility)

All approved VA Integrated Facilities are to submit a single combined response.

Estimated Completion Time: 30-90 minutes (Additional time may be needed to gather information from other departments)

Section I: Point of Contact and Facility/Health Care System (HCS) Information

Name of Point of Contact for survey response: _____
Title: _____
Phone Number (including area code): _____ Extension: _____
What is your VISN Number? (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 17, 18, 19, 20, 21, 22, 23)
Select Facility and Station Number: (Select from list provided)

AS Point of Contact Information

If you would like to ensure that your facility is notified of activities, national policy, and field guidance please provide:

Name of AS lead physician: _____
Identify the physician's specialty:
( ) Infectious Diseases (ID)
( ) Internal Medicine
( ) Hospitalist
( ) Family Practice
( ) Other *If other,* please specify _____

Name of AS lead Clinical Pharmacist/Clinical Pharmacy Specialist: _____

Name of other AS lead provider: _____
Identify the provider's specialty: *(Check all that apply)*
[ ] Infection Control Professional (ICP)
[ ] Nurse
[ ] Advanced Practice Nurse
[ ] Physician Assistant
[ ] Microbiologist
[ ] Other *If other,* please specify _____

Section II: Facility Components

1. Please provide the number (i.e., head count) of the following medical professionals in your facility.
(Please include, VA, Non-VA, WOC, and Fee/ Contract)

ID Attending Physicians (head count) *Mark one each line*	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10+**
a. Full-Time ID Attending Physicians	□	□	□	□	□	□	□	□	□	□	□
b. Part-Time ID Attending Physicians	□	□	□	□	□	□	□	□	□	□	□

Mark one each line		
Does your facility participate in:	**Yes**	**No**
2. ID **fellowship** program?	□	□
3. Internal medicine residency program?	□	□
4. Family practice residency program?	□	□
5. Surgical residency program?	□	□
6. Emergency medicine residency program?	□	□
7. Pharmacy residency program?	□	□
8. ID pharmacy residency program?	□	□

9. Are Clinical Pharmacists/Clinical Pharmacy Specialists assigned to any acute care teams or wards at your hospital/facility? ( ) Yes ( ) No
   a. *If yes,* which teams/wards? *(Please include, VA, Non-VA, WOC, and Fee/Contract)* *(Check all that apply)*
      [ ] 1) Medicine
      [ ] 2) Surgery
      [ ] 3) Combined Medicine/Surgery
      [ ] 4) Intensive Care Unit
      [ ] 5) Community Living Center
      [ ] 6) Step-Down Unit/Telemetry
      [ ] 7) Dialysis Unit
      [ ] 8) Other *If other,* 8a) Please specify _____

10. Please estimate the proportion of general medicine inpatients admitted to hospitalists.
( ) 0% ( ) 1-10% ( ) 11-20% ( ) 21-30% ( ) 31-40% ( ) 41-50%
( ) 51-60% ( ) 61-70% ( ) 71-80% ( ) 81-90% ( ) 91-100% ( ) No hospitalists
( ) No inpatient services

11. Please estimate the proportion of inpatient attending service on general medical ward teams covered by the ID staff.
( ) 0% ( ) 1-5% ( ) 6-10% ( ) 11-15% ( ) 16-20% ( ) 21-25%
( ) 26-50% ( ) > 50% ( ) No ID staff ( ) No inpatient services

12. Does your facility offer internal VA inpatient ID Consultation Service?
( ) Yes ( ) No ( ) No inpatient services

a. *If no,* who handles ID issues? *(Check all that apply)*
[ ] 1) Non-VA external ID physicians
[ ] 2) Another VA facility's ID physicians via E-Consult or telemedicine
[ ] 3) Non-ID trained (VA or non-VA) physician with interest in ID
[ ] 4) Clinical Pharmacist/Clinical Pharmacy Specialist
[ ] 5) No one in particular handles ID related issues
[ ] 6) Unsure who handles ID related issues
[ ] 7) Other *If other,* 7a) Please specify _____

13. Does your facility have an Emergency Department (ED)? ( ) Yes ( ) No

a. *If yes,* who staffs your main ED?

Check all that apply each line	**Full time VA**	**Part time VA**	**Non VA staff (WOC, Fee/Contract, Other)**	**None**
1) Emergency physician	☐	☐	☐	☐
2) Internal medicine physician	☐	☐	☐	☐
3) Family practice physician	☐	☐	☐	☐
4) Other physician	☐	☐	☐	☐
5) Resident physician	☐	☐	☐	☐
6) Mid-level provider	☐	☐	☐	☐
7) Other provider	☐	☐	☐	☐

If other provider, 7a) Please specify _____

b. Is there a Clinical Pharmacist/Clinical Pharmacy Specialist dedicated to staff the ED?
(Please include, VA, Non VA, WOC, and Fee/ Contract) ( ) Yes ( ) No

14. Does your facility offer intravenous (IV) home antimicrobial infusion? ( ) Yes ( ) No
If yes,
a. What is the specialty of the Manager/Director for the Intravenous (IV) home antimicrobial infusion program? *(Check all that apply)*
[ ] 1) General Internist
[ ] 2) Hospitalist
[ ] 3) ID Physician
[ ] 4) Other Physician
[ ] 5) Clinical Pharmacist/Clinical Pharmacy Specialist
[ ] 6) Home Coordinator
[ ] 7) Other *If other,* 7a) Please specify _____

b. Who are the members of the IV home antimicrobial infusion program? *(Check all that apply)*
[ ] 1) VA pharmacy/VA nursing
[ ] 2) VA pharmacy/Contract nursing
a. *If* VA pharmacy/Contract nursing, are services: *(Check all that apply)*
[ ] 1) Contracted year to year
[ ] 2) Contracted patient to patient
[ ] 3) Other *If other,* a) Please specify _____
[ ] 3) Contract pharmacy/VA nursing
a. *If* Contract pharmacy/VA nursing, are services: *(Check all that apply)*
[ ] 1) Contracted year to year
[ ] 2) Contracted patient to patient
[ ] 3) Other *If other,* a) Please specify _____

[ ] 4) Contract pharmacy/contract nursing
a. *If* Contract pharmacy/contract nursing, are services: *(Check all that apply)*
[ ] 1) Contracted year to year
[ ] 2) Contracted patient to patient
[ ] 3) Other *If other,* a) Please specify _____
[ ] 5) Other *If other,* 5a) Please specify _____

15. Does your facility have an on-site microbiology laboratory? ( ) Yes ( ) No

If yes, **answer the following questions:** *Mark one each line*	**Yes**	**No**
a. Does your facility's laboratory service have a director with a doctoral degree who is trained in microbiology?	☐	☐
b. **Does your facility's microbiology laboratory** selectively report susceptibility to antimicrobial agents? (i.e., suppress reporting for some tests)	☐	☐
c. **Does your facility's microbiology laboratory** report Minimum Inhibitory Concentration (MICs) for all organisms?	☐	☐
d. **Does your facility's microbiology laboratory** report MICs for selected organisms?	☐	☐

d1. *If yes*, which organisms? *(Check all that apply)*
[ ] a) Staphylococcus aureus
[ ] b) Streptococcus pneumoniae
[ ] c) Pseudomonas aeruginosa
[ ] d) Enterobacteriaceae
[ ] e) Other *If other,* e1) Please specify _____

16. Are yearly updated Antibiograms available to all providers? ( ) Yes ( ) No
If yes,
a. How are the data reported? *(Check all that apply)*
[ ] 1) Outpatient
[ ] 2) Inpatient - whole house
[ ] 3) Inpatient - unit specific
[ ] 4) Inpatient/Outpatient combined
[ ] 5) Other *If other,* 5a) Please specify _____
b. How are the data disseminated? *(Check all that apply)*
[ ] 1) Facility Intranet
[ ] 2) Pocket card reference
[ ] 3) Posted at charting locations
[ ] 4) Other *If other,* 4a) Please specify _____

Section III: Antimicrobial Stewardship Policy

17. Does your facility have a formal written policy that establishes an AS program?
( ) Yes ( ) No ( ) In development
If yes,
a. How many years has the policy been in place? ( ) <1 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 or more years
b. Does the policy address inpatient antibiotic use? ( ) Yes ( ) No ( ) In development ( ) No inpatient services
c. Does the policy address outpatient antibiotic use? ( ) Yes ( ) No ( ) In development
d. Who approved this policy? *(Check all that apply)*
[ ] 1) Local Pharmacy and Therapeutics (P&T) Committee
[ ] 2) Clinical Executive Board
[ ] 3) Chief of Staff
[ ] 4) Other *If other,* 4a) Please specify _____

If no or in development,

e. Is there an informal policy for antimicrobial stewardship? ( ) Yes ( ) No

If yes,

e1) How many years has the policy been in place? ( ) <1 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 or more years ( ) Unknown

e2) Does the policy address inpatient antibiotic use? ( ) Yes ( ) No ( ) No inpatient services

e3) Does the policy address outpatient antibiotic use? ( ) Yes ( ) No

Check one	**Yes**	**No**
18. Does your facility participate in a formal AS collaborative with non-VA facilities in your geographic region?	☐	☐

Section IV: Antimicrobial Stewardship (AS) Personnel

19. Does your facility have an AS team? ( ) Yes ( ) No ( ) In development

(Antimicrobial Stewardship (AS) Team: For the purposes of the survey, an AS team is defined as a multi-disciplinary group that is composed of at least a physician and Clinical Pharmacist/Clinical Pharmacy Specialist who routinely meet (daily or several times a week) to discuss patient-specific and/or facility-specific AS components.)

If yes,

a. How many years has the team been in existence?
( ) less than 1 year ( ) 1 year to 2 years ( ) 2 years to 3 years ( ) more than 3 years

b. Does the AS team work in or consult in the acute medical/surgical setting?
( ) Yes ( ) No ( ) No inpatients at this facility

c. Does the AS team work in or consult in the outpatient setting? ( ) Yes ( ) No

d. Does the AS team work in or consult in the Community Living Center setting?
( ) Yes ( ) No ( ) No Community Living Center

e. Does the AS team work in or consult in the Dialysis Center setting? ( ) Yes ( ) No ( ) No Dialysis Center

19f. Please tell us about the AS team members' activities and their time effort.
For each member of the team, please note whether they have daily or periodic involvement with AS activities, as well as the percentage of time they spend on AS tasks.

If "No Involvement," enter NA for b. workload credit, and c. % FTEE

19f. Please provide information for the AS team members' activities and time effort.	**a) Team member involvement** *(Choose one)* ( ) Daily Involvement ( ) Periodic Involvement ( ) No Involvement ( ) NA	**b) Is Workload credit captured?** *(Choose one)* ( ) Yes ( ) No ( ) NA	**c) % of FTEE time designated for stewardship** *(Choose one)* 0% 1-10% 11-20% 21-30% 31-40% 41-50% 51-60% 61-70% 71-80% 81-90% 91-100% NA
1) ID Physician			
2) ID Fellow			
3) Medical Resident			
4) Medical Student			
5) Clinical Pharmacist/Clinical Pharmacy Specialist			
6) Pharmacy Resident (PGY1)			
7) Pharmacy Resident (PGY2)			

19f. Please provide information for the AS team members' activities and time effort.	**a) Team member involvement** *(Choose one)* ( ) Daily Involvement ( ) Periodic Involvement ( ) No Involvement ( ) NA	**b) Is Workload credit captured?** *(Choose one)* ( ) Yes ( ) No ( ) NA	**c) % of FTEE time designated for stewardship** *(Choose one)* 0% 1-10% 11-20% 21-30% 31-40% 41-50% 51-60% 61-70% 71-80% 81-90% 91-100% NA
8) Pharmacy Student			
9) MDRO Coordinator			
10) Infection Control Practitioner			
11) Outpatient Provider			
12) Clinical Microbiology Lab Director or Lab Staff			
13) Information Technology Staff			
14) Hospital Administration			

19f5d) If the AS team includes a lead Clinical Pharmacist/Clinical Pharmacy Specialist (CP/CPS), does he/she have ID training? ( ) Yes ( ) No ( ) No lead Clinical Pharmacist/Specialist

19f5d1. If the CP/CPS has ID training, please check the training that applies.
- [ ] a) Current BPS certification in Pharmacotherapy **with** added Qualifications in Infectious Diseases BCPS-AQID
- [ ] b) Current BPS certification in Pharmacotherapy **without** BCPS-AQID
- [ ] c) Completed an ASHP accredited specialty residency (PGY2) in ID
- [ ] d) Completed an ASHP accredited general residency (PGYI)
- [ ] e) Completed an ACCP accredited fellowship in ID
- [ ] f) Completed other (i.e., Critical care, etc.) accredited post graduate program
- [ ] g) SIDP certification
- [ ] h) MAD-ID certification
- [ ] i) Over 10 years experience as a CP/CPS for ID issues
- [ ] j) None of the above

19g. Who typically oversees the day-to-day operations of the AS team? *(Check all that apply)*
- [ ] 1) Clinical Pharmacist/Clinical Pharmacy Specialist
- [ ] 2) Pharmacy resident
- [ ] 3) ID attending
- [ ] 4) ID fellow
- [ ] 5) Other physician
- [ ] 6) Other *If other,* 6a) Please specify _____

19h. Under whose authority does the AS team function? *(Check all that apply)*
- [ ] 1) P&T Committee
- [ ] 2) Chief of Pharmacy
- [ ] 3) Chief of Medicine
- [ ] 4) Chief of ID
- [ ] 5) Chief of Staff
- [ ] 6) Infection Control Committee
- [ ] 7) Quality Management

[ ] 8) Other *If other,* 8a) Please specify _____

Section V: Antimicrobial Stewardship Activities

20. Does your facility have a written policy to promote substitution of oral antibiotics for parenteral antibiotics? (i.e., an IV to PO Conversion policy) ( ) Yes ( ) No *(If no, skip to Q20c)*

If yes,

a. What year did the policy begin?

( ) Before 2000 ( ) 2000 ( ) 2001 ( ) 2002 ( ) 2003 ( ) 2004 ( ) 2005
( ) 2006 ( ) 2007 ( ) 2008 ( ) 2009 ( ) 2010 ( ) 2011 ( ) 2012

b. Is this policy approved by the local P&T committee? ( ) Yes ( ) No ( ) Unknown

If no,

c. Does your facility have an informal policy to promote substitution of oral antibiotics for parenteral antibiotics (i.e., an IV to PO conversion Policy)? ( ) Yes ( ) No

21. *If an IV to PO conversion policy exists,* is the AS team authorized to unilaterally (without primary physician approval) change the route of therapy? ( ) Yes ( ) No ( ) No policy

If yes,

a. Who makes the changes? *(Check all that apply)*

[ ] 1) Physician
[ ] 2) Nurse Practitioner/Physician Assistant (NP/PA)
[ ] 3) Clinical Pharmacist/Clinical Pharmacy Specialist
[ ] 4) Other *If other,* 4a) Please specify _____

b. Which parenteral drugs are covered by the IV to PO conversion policy?	Yes	No
1) Azithromycin	☐	☐
2) Ciprofloxacin	☐	☐
3) Levofloxacin	☐	☐
4) Moxifloxacin	☐	☐
5) Clindamycin	☐	☐
6) Linezolid	☐	☐
7) Metronidazole	☐	☐
8) Minocycline	☐	☐
9) Doxycycline	☐	☐
10) Fluconazole	☐	☐
11) Rifampin	☐	☐
12) Trimethoprim/Sulfamethoxazole	☐	☐
13) Other _____	☐	☐

If other, 13a) Please specify _____

22. Does your facility restrict the use of antibiotic agents? ( ) Yes ( ) No *(If no, skip to Q23)*

If yes,

a. Please tell us how your facility restricts the use of the following agents?

Check all that apply each line	No restrictions	ID use only	Prior approval	Prospective audit for continued use	Local criteria for use	*If other restriction-* Please specify
1) Daptomycin	☐	☐	☐	☐	☐	☐ _____
2) Linezolid	☐	☐	☐	☐	☐	☐ _____
3) Vancomycin	☐	☐	☐	☐	☐	☐ _____

Check all that apply each line	**No restrictions**	**ID use only**	**Prior approval**	**Prospective audit for continued use**	**Local criteria for use**	***If other restriction-*** **Please specify**
4) Tigecycline	☐	☐	☐	☐	☐	☐ _____
5) Ceftaroline	☐	☐	☐	☐	☐	☐ _____
6) Imipenem	☐	☐	☐	☐	☐	☐ _____
7) Meropenem	☐	☐	☐	☐	☐	☐ _____
8) Doripenem	☐	☐	☐	☐	☐	☐ _____
9) Ertapenem	☐	☐	☐	☐	☐	☐ _____
10) Piperacillin/Tazobactam	☐	☐	☐	☐	☐	☐ _____
11) Ticarcillin/Clavulanate	☐	☐	☐	☐	☐	☐ _____
12) Cefepime	☐	☐	☐	☐	☐	☐ _____
13) Ceftazidime	☐	☐	☐	☐	☐	☐ _____
14) Aztreonam	☐	☐	☐	☐	☐	☐ _____
15) Caspofungin	☐	☐	☐	☐	☐	☐ _____
16) Micafungin	☐	☐	☐	☐	☐	☐ _____
17) Anidulafungin	☐	☐	☐	☐	☐	☐ _____
18) Voriconazole	☐	☐	☐	☐	☐	☐ _____
19) Parenteral Fluconazole	☐	☐	☐	☐	☐	☐ _____
20) Posaconazole	☐	☐	☐	☐	☐	☐ _____
21) Lipid-based ampho B	☐	☐	☐	☐	☐	☐ _____
22) Ciprofloxacin	☐	☐	☐	☐	☐	☐ _____
23) Levofloxacin	☐	☐	☐	☐	☐	☐ _____
24) Moxifloxacin	☐	☐	☐	☐	☐	☐ _____
25) Amikacin	☐	☐	☐	☐	☐	☐ _____
26) Gentamicin	☐	☐	☐	☐	☐	☐ _____
27) Tobramycin	☐	☐	☐	☐	☐	☐ _____
28) Colistin	☐	☐	☐	☐	☐	☐ _____
29) Other	☐	☐	☐	☐	☐	☐ _____

If other agent, 29a) Please specify _____

23. For antimicrobial agents that require prior approval, what mechanism is in place for urgent approvals?
(Check all that apply)
[ ] a. Written consultation in CPRS
[ ] b. Telephone consultation with Clinical Pharmacist/Clinical Pharmacy Specialist (CP/CPS) or ID provider
[ ] c. Face-to- face encounter with Clinical Pharmacist/Clinical Pharmacy Specialist (CP/CPS) or ID provider
[ ] d. No antimicrobial agents require approval *(Skip to Q24)*

Check all that apply each line	**ID Clinical Pharmacist/ Clinical Pharmacy Specialist**	**Other Clinical Pharmacist/ Clinical Pharmacy Specialist**	**ID Physician**	**ID Fellow**	**Other Physician**	**Other**	**NA**
23e. Who approves use during weekday normal working hours?	□	□	□	□	□	□	□
23f. Who approves use during nights and/or weekends?	□	□	□	□	□	□	□

24. Which of the following, if any, antimicrobial order forms/sets are available in CPRS for specific agents?
(Check all that apply)
[ ] a. Vancomycin
[ ] b. Aminoglycosides
[ ] c. Piperacillin/tazobactam
[ ] d. Cefepime
[ ] e. Meropenem
[ ] f. Imipenem
[ ] g. Ciprofloxacin
[ ] h. Moxifloxacin
[ ] i. Other *If other,* i1) Please specify _____
[ ] j. None of the above

25. Are written clinical pathways/antimicrobial therapy guidelines available for any specific conditions?
( ) Yes ( ) No
If yes,
a. Which inpatient conditions? *(Check all that apply)*
[ ] 1) Community acquired pneumonia
[ ] 2) Hospital acquired or health care associated pneumonia
[ ] 3) Skin and soft tissue infection
[ ] 4) Urinary tract infection
[ ] 5) *Clostridium difficile* colitis
[ ] 6) Surgical Prophylaxis
[ ] 7) No inpatient services
[ ] 8) Other *If other,* 8a) Please specify _____
[ ] 9) None
b. Which outpatient conditions? *(Check all that apply)*
[ ] 1) Community acquired pneumonia
[ ] 2) Upper respiratory tract infection
[ ] 3) Skin and soft tissue infection
[ ] 4) Urinary tract infection
[ ] 5) *Clostridium difficile* colitis
[ ] 6) Surgical Prophylaxis
[ ] 7) Other *If other,* 7a) Please specify _____
[ ] 8) None
c. Were these guidelines developed by the AS Team and/or ID Service? ( ) Yes ( ) No
d. How are these guidelines disseminated?
[ ] 1) Email
[ ] 2) Web site
[ ] 3) Pathways built into CPRS
[ ] 4) Other *If other,* 4a) Please specify _____

26. Does your facility provide dose optimization by pharmacokinetics and pharmacodynamics for any antimicrobial? ( ) Yes, upon request ( ) Yes, per protocol ( ) No

a. *If yes*, for which agents? *(Check all that apply)*

[ ] 1) Vancomycin
[ ] 2) Aminoglycosides
[ ] 3) Extended infusion of piperacillin/tazobactam or other β-lactam
[ ] 4) Other *If other,* 4a) Please specify _____

27. Independent of vancomycin or aminoglycoside pharmacokinetic dosing protocols, does the AS team unilaterally (without primary physician approval) change the **dosing** of antimicrobial therapy?
( ) Yes/always ( ) Yes/usually ( ) Yes/seldom ( ) No ( ) NA

If yes,

a. Who makes the changes? *(Check all that apply)*

[ ] 1) Physician
[ ] 2) Nurse Practitioner/Physician Assistant (NP/PA)
[ ] 3) Clinical Pharmacist/Clinical Pharmacy Specialist
[ ] 4) Other *If other,* 4a) Please specify _____

b. How are the AS Team's interventions conveyed? *(Check all that apply)*

[ ] 1) Verbal communication
[ ] 2) CPRS note
[ ] 3) CPRS alert
[ ] 4) Email
[ ] 5) Other *If other*, 5a) Please specify _____

28. Independent of vancomycin or aminoglycoside pharmacokinetic dosing protocols, does the AS team unilaterally (without primary physician approval) change the **selection** of antimicrobial therapy?
( ) Yes/always ( ) Yes/usually ( ) Yes/seldom ( ) No ( ) NA

If yes,

a. Who makes the changes? *(Check all that apply)*

[ ] 1) Physician
[ ] 2) Nurse Practitioner/Physician Assistant (NP/PA)
[ ] 3) Clinical Pharmacist/Clinical Pharmacy Specialist
[ ] 4) Other *If other,* 4a) Please specify _____

b. How are the AS Team's interventions conveyed? *(Check all that apply)*

[ ] 1) Verbal communication
[ ] 2) CPRS note
[ ] 3) CPRS alert
[ ] 4) Email
[ ] 5) Other *If other*, 5a) Please specify _____

Check one	**Yes**	**No**
29. Does your facility have a policy/procedure for de-escalation of antimicrobials?	☐	☐

Check one	**Always**	**Usually**	**Sometimes**	**Seldom**	**Never**
30. How often does the AS team systematically review antimicrobial use for recommendations regarding de-escalation of antimicrobials?	☐	☐	☐	☐	☐

Check one	Yes	No
31. Is there a process for timely review of positive blood cultures by the AS team to assure appropriate therapy is being given? (e.g., within 48 hours)	☐	☐

32. Does your facility require automatic ID consults for certain conditions? ( ) Yes ( ) No
    a. *If yes*, for which conditions? *(Check all that apply)*
    [ ] 1) Any bacteremia
    [ ] 2) *S. aureus* bacteremia
    [ ] 3) Other *If other,* 3a) Please specify _____

33. Does your facility have guidelines for antimicrobial duration? ( ) Yes ( ) No
    a. *If yes*, how are the guidelines distributed to providers? *(Check all that apply)*
    [ ] 1) Facility Intranet
    [ ] 2) Pocket card/reference
    [ ] 3) At charting locations
    [ ] 4) Upon order entry in CPRS
    [ ] 5) Other *If other,* 5a) Please specify _____

34. Are there automatic stop orders in place for antimicrobial duration? ( ) Yes ( ) No
    a. *If yes,* which antimicrobials? *(Check all that apply)*
    [ ] 1) All
    [ ] 2) Azithromycin
    [ ] 3) Ciprofloxacin
    [ ] 4) Moxifloxacin
    [ ] 5) Levofloxacin
    [ ] 6) Vancomycin
    [ ] 7) Piperacillin/tazobactam
    [ ] 8) Ertapenem
    [ ] 9) Imipenem
    [ ] 10) Meropenem
    [ ] 11) Doripenem
    [ ] 12) Aminoglycosides
    [ ] 13) Other 13a) *If other,* Please specify _____

35. Are there educational programs for prudent antimicrobial use available to prescribers? ( ) Yes ( ) No
    If yes,
    a. Which programs?
    [ ] 1) In-person group presentations, (i.e., lecture) ( ) Yes ( ) No
        a) *If yes*, how often is this program available?
        ( ) Weekly ( ) Monthly ( ) Quarterly ( ) Annually ( ) As needed ( ) Other
        If other, 1) Please specify _____
    [ ] 2) Individual provider academic detailing ( ) Yes ( ) No
        a) *If yes*, how often is this program available?
        ( ) Weekly ( ) Monthly ( ) Quarterly ( ) Annually ( ) As needed ( ) Other
        If other, 1) Please specify _____
    [ ] 3) Webinars ( ) Yes ( ) No
        a) *If yes,* how often is this program available?
        ( ) Weekly ( ) Monthly ( ) Quarterly ( ) Annually ( ) As needed ( ) Other
        If other, 1) Please specify _____
    [ ] 4) VISN programs ( ) Yes ( ) No
        a) *If yes,* how often is this program available?
        ( ) Weekly ( ) Monthly ( ) Quarterly ( ) Annually ( ) As needed ( ) Other
        If other, 1) Please specify _____

[ ] 5) Other ( ) Yes ( ) No

If yes,

a) Please specify _____

b) How often is this program available?

( ) Weekly ( ) Monthly ( ) Quarterly ( ) Annually ( ) As needed ( ) Other

If other, 1) Please specify _____

36. Are other resources used to ensure that providers get up-to-date information on the principles of antibiotic use? *(Check all that apply)*

[ ] a. Email alerts
[ ] b. Newsletters
[ ] c. Pharmacy alerts
[ ] d. Other *If other,* d1) Please specify _____
[ ] e. No other resources are used

37. Does your facility have an antimicrobial cycling program? ( ) Yes ( ) No

a. *If yes,* please provide an example of what agents are cycled. _____

Check one	**Yes**	**No**
38. Does your facility have a policy/review for intervention to limit use of non-*C. difficile* directed antibiotic exposure in order to improve outcomes for patients with *Clostridium difficile* infection?	□	□

Section VI: Antimicrobial Stewardship Resources

Mark one each line	**Very helpful**	**Helpful**	**Neutral**	**Not very helpful**	**Not at all helpful**	**Not aware of National Events**
39. How helpful do you find AS Taskforce National Webinars?	□	□	□	□	□	□
40. How helpful do you find face-to-face AS Task force meetings?	□	□	□	□	□	□

Mark one each line	**Very likely**	**Likely**	**Neutral**	**Not very likely**	**Not at all likely**	**NA**
41. Because of an AS Taskforce training event, how likely is your facility to: a. Address a specific AS ethical dilemma	□	□	□	□	□	□
b. Prepare or update a facility AS business plan for approval	□	□	□	□	□	□
c. Prepare or update AS policy (e.g., IV to PO conversion)	□	□	□	□	□	□
d. Prepare or update a policy limiting Dual Anaerobic Coverage	□	□	□	□	□	□
e. Prepare or update a policy limiting non-*C. difficile* directed antibiotic exposure in order to improve outcomes for patients with *Clostridium difficile* infection	□	□	□	□	□	□

Select the helpfulness of the following **National** items: *Mark one each line*	**Very helpful**	**Helpful**	**Neutral**	**Not very helpful**	**Not at all helpful**	**Not aware of this National item**	**NA**
42. AS Taskforce's sample *IV to PO Conversion Policy* in developing or augmenting your local facility's IV to PO conversion policy	□	□	□	□	□	□	□
43. Antimicrobial Stewardship SharePoint site	□	□	□	□	□	□	□
44. AS Taskforce's sample *Avoidance of Double Anaerobic Coverage Policy* in developing or augmenting your local facility's Avoidance of Double Anaerobic Coverage policy	□	□	□	□	□	□	□
45. AS Taskforce's sample *Intervention to Improve Outcomes for Patients with* C. difficile *Infection Policy* in developing or augmenting your local facility's Intervention to Improve Outcomes for Patients with *C. difficile* Infection policy	□	□	□	□	□	□	□
46. AS Taskforce's sample *Business Plan for AS* in developing or augmenting your local facility's Business Plan for AS	□	□	□	□	□	□	□

47. What is the status of your facility's Business Plan for AS?
( ) Approved ( ) Denied ( ) In process ( ) Not developed

48. Which of the following tools, if any, does your facility use to facilitate stewardship activities?
(Check all that apply)
[ ] a. CPRS
[ ] b. VistA
[ ] c. Proprietary software (e.g., TheraDoc)
[ ] d. Administrative electronic database (e.g., Corporate Data Warehouse, VISN data warehouse)
[ ] e. Pathfinder/Essence
[ ] f. Other *If other,* f1) Please specify _____
[ ] g. None

Section VII: Outcomes

49. Does your facility provide any group or provider-specific feedback regarding patterns of antimicrobial use?
( ) Yes ( ) No
If yes,
a. How often is this provided?
( ) Daily
( ) Weekly
( ) Monthly
( ) Quarterly
( ) Annually
( ) As needed
( ) Other *If other,* a1) Please specify _____
b. How is it done? *(Check all that apply)*
[ ] 1) Email alerts
[ ] 2) Other written correspondence

[ ] 3) Verbal presentation
[ ] 4) SharePoint
[ ] 5) Dashboard on regional or national databases
[ ] 6) Other *If other,* 6a) Please specify _____

50. Does your facility generate any reports based on the clinical outcomes related to antimicrobial use?
( ) Yes ( ) No
If yes,
a. Which reports are generated? *(Check all that apply)*
[ ] 1) Adverse drug effect
[ ] 2) Average length of therapy
[ ] 3) *C. difficile* infection rates
[ ] 4) Antimicrobial resistance rates (independent of the antibiogram, e.g., Carbepenem-resistant gram negatives, extended-spectrum ß-lactamase producing organisms)
[ ] 5) Other *If other,* 5a) Please specify _____
b. How often is this done?
( ) Daily
( ) Weekly
( ) Monthly
( ) Quarterly
( ) Annually
( ) As needed
( ) Other *If other,* b1) Please specify _____
c. Are presentations of the results made to any of the following? *(Check all that apply)*
[ ] 1) Providers
[ ] 2) P&T committee
[ ] 3) Infection Control Committee
[ ] 4) Other parts of administration
[ ] 5) Other *If other,* 5a) Please specify _____
[ ] 6) No presentations are made

51. Which of the following measurements of antimicrobial utilization and outcomes does your facility use?
(Check all that apply)
[ ] a. Defined daily dose (DDD)
[ ] b. Days of therapy (DOT)
[ ] c. Antimicrobial expenditures
[ ] d. Analyses of antimicrobial susceptibilities independent of the facility Antibiograms (i.e., tracking specific bacterial resistance)
[ ] e. Diagnosis Related Group (DRG) length of stay
[ ] f. Other *If other,* f1) Please specify _____
[ ] g. None

52. Has the AS team or your facility done a Medication Usage Evaluation (MUE) for any antibiotic(s) in the last 2 years? ( ) Yes ( ) No
a. *If yes,* please list which antibiotic(s) _____

53. Which of the following measurements of home infusion outcomes, if any, does your facility use?
(Check all that apply)
[ ] a. Line infections
[ ] b. Antimicrobial toxicities
[ ] c. Follow-up arranged
[ ] d. Labs
[ ] e. None

d1) *If "Labs" is checked*, which of the following outcomes are measured? *(Check all that apply)*
[ ] a) Labs are ordered appropriately
[ ] b) Labs are obtained per orders
[ ] c) Labs are sent to the appropriate persons for review
[ ] d) Lab review completed in a timely manner (e.g., within 48 hours)
[ ] e) Appropriate action performed, if needed, based on the labs
[ ] f) None

Section VIII: Antimicrobial Stewardship Barriers

54. What types of support would be beneficial at your facility in achieving optimal antimicrobial use? *(Check all that apply)*
[ ] a. ID physician support
[ ] b. Pharmacy support
[ ] c. Administration support
[ ] d. Provider/prescriber buy-in
[ ] e. IT/data tools support
[ ] f. Educational tools support
[ ] g. Guidelines support
[ ] h. Other support *If other,* h1) Please specify _____

55. Please rank the individual services at your facility in their general receptiveness of antimicrobial stewardship - related interventions:

Mark one each line	**Very receptive**	**Receptive**	**Neutral**	**Not very receptive**	**Not at all receptive**	**No experience with that service**	**Service unavailable at facility**
a. Medicine (General)	☐	☐	☐	☐	☐	☐	☐
b. Medicine (ICU)	☐	☐	☐	☐	☐	☐	☐
c. Medicine (Subacute or Transitional Care)	☐	☐	☐	☐	☐	☐	☐
d. Community Living Center	☐	☐	☐	☐	☐	☐	☐
e. Emergency Department	☐	☐	☐	☐	☐	☐	☐
f. Surgery (General)	☐	☐	☐	☐	☐	☐	☐
g. Surgery (ICU)	☐	☐	☐	☐	☐	☐	☐
h. Orthopedic Surgery	☐	☐	☐	☐	☐	☐	☐
i. Cardiothoracic Surgery	☐	☐	☐	☐	☐	☐	☐
j. Neurosurgery	☐	☐	☐	☐	☐	☐	☐
k. Vascular Surgery	☐	☐	☐	☐	☐	☐	☐

Mark one each line	Very receptive	Receptive	Neutral	Not very receptive	Not at all receptive	No experience with that service	Service unavailable at facility
l. Urology	□	□	□	□	□	□	□
m. Otolaryngology	□	□	□	□	□	□	□
n. Neurology	□	□	□	□	□	□	□
o. Psychiatry	□	□	□	□	□	□	□
p. Dental	□	□	□	□	□	□	□
q. Ophthalmology/ Optometry	□	□	□	□	□	□	□
r. Gynecology	□	□	□	□	□	□	□

Section IX: Additional Comments

56. If desired, please add any additional comments and/or clarifications.

Thank you for your time and cooperation!