



## The role rapid diagnostics play in antimicrobial stewardship

In a study conducted at The Johns Hopkins Hospital, it was demonstrated that guidelines for management of community-acquired pneumonia could promote the use of shorter courses of therapy, saving money and promoting patient safety:

### Guidelines on the Management of Community-Acquired Pneumonia in Adults, as Recommended by the IDSA/ATS:<sup>5</sup>

- **Diagnostic Tests for Etiology:** Patients with severe Community Acquired Pneumonia (CAP) should have blood samples drawn for culture, urinary antigen tests for *Legionella pneumophila* and *Streptococcus pneumoniae* performed, and expectorated sputum samples collected for culture.
- **Pathogen-directed Therapy:** Patients with CAP should be investigated for specific pathogens that would significantly alter standard (empirical) management decisions. (Strong recommendation; level II evidence.) The spectrum of antibiotic therapy can be broadened, narrowed, or completely altered on the basis of diagnostic testing.

### Tools to help you with antimicrobial stewardship.

- An example of an educational tool that can be used for patients and families includes the Centers for Disease Control and Prevention's Get Smart document, "Viruses or Bacteria—What's got you sick? at <http://www.cdc.gov/getsmart/community/downloads/getsmart-chart.pdf>;
- The core elements were cited from the Centers for Disease Control and Prevention's Core Elements of Hospital Antibiotic Stewardship Program (<http://www.cdc.gov/getsmart/healthcare/pdfs/core-elements.pdf>). The Joint Commission recommends that organizations use this document when designing their antimicrobial stewardship program.<sup>7</sup>
- To learn more about antimicrobial stewardship, visit [TestTargetTreat.com](http://TestTargetTreat.com).

Don't wait to prioritize antimicrobial stewardship in your facility!

**TEST TARGET TREAT™**

The educational Antimicrobial Stewardship initiative from Alere.  
How will rapid diagnostics benefit your patients?  
Discover more at [TestTargetTreat.com](http://TestTargetTreat.com) today.

### Order Information

Product Name	Quantity Per Unit	Order Number
Alere BinaxNOW® <i>S. pneumoniae</i>	22 test kit	710-000
Alere BinaxNOW® <i>Legionella</i>	22 test kit	852-000
<i>C. DIFF QUIK CHEK COMPLETE</i> ®	25 test kit	30525C
	50 test kit	30550C
<b>Alere® i</b> Strep A	24 test kit	733-000
Acceava® Strep A	50 test kit	92001
BinaxNOW® Strep A	25 test kit	730-025
Clearview® Exact II Strep A	30 test kit	92002
<b>Alere® i</b> Influenza A & B	24 test kit	425-024
<b>Alere® i</b> RSV	24 test kit	435-000
Alere® Influenza A & B	25 test kit	412-000
Alere® BinaxNOW® Influenza A & B	22 test kit Waived	416-022
	22 test kit Moderate	416-000
Alere® PBP2a SA Culture Colony Test	25 test kit	893000

1. New Antimicrobial Stewardship Standard. The Joint Commission. 22 June 2016
2. "CMS Issues Proposed Rule that Prohibits Discrimination, Reduces Hospital – Acquired Conditions, and Promotes Antibiotic Stewardship." CMS. gov. U.S. Centers for Medicare& Medicaid Services. 13 June 2016. Web. 21 March 2017.
3. Dortch M. Prioritizing Antimicrobial Stewardship. The Source Q1 2017; 12 (1):14-6.
4. Save Money with Antibiotic Stewardship. Get Smart about Antibiotics Week. Centers for Disease Control and Prevention. 2016
5. Mandell LA. Infectious Disease Society of America/American Thoracic Society Consensus Guidelines on the Management of Community-Acquired Pneumonia in Adults. Clinical Infectious Diseases. 2007;44(2):S27-72.
6. Viruses or Bacteria What's got you sick? [www.cdc.gov/getsmart](http://www.cdc.gov/getsmart). US Department of Health and Human Services Centers for Disease Control and Prevention. Web.2016 (aka get smart chart)
7. CDC. Core Elements of Hospital Antibiotic Stewardship Programs. Atlanta, GA: US Department of Health and Human Services, CDC; 2014.
8. "MRSA in Healthcare Settings." [www.cdc.gov](http://www.cdc.gov). CDC Infection Control in Healthcare. 3 October 2009. Web.5 November 2009.
9. Roger Sorde, MD; Vicenc, Falco, MD; Michael Lowak, MD; Eva Domingo, MD; Adelaida Ferrer, MD; Joaquin Burgos, MD; Mireia Puig, MD; Evelyn Cabral, MD; Oscar Len, MD; Albert Pahissa, MD Arch Intern Med. Published online September 27, 2010. doi:10.1001/archinternmed.2010.347.

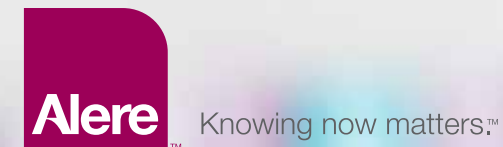
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## Antimicrobial Stewardship

How prepared is your facility?





## Is your facility prepared with an antimicrobial stewardship program?

In June of 2016, new Antimicrobial Stewardship Standards were proposed and accepted, effective January 1, 2017. This means Antimicrobial Stewardship Standards are a Joint Commission requirement, supported by evidence-based national guidelines.

Review all 8 elements at: [http://www.jointcommission.org/assets/1/6/HAP-CAH\\_Antimicrobial\\_Prepub.pdf](http://www.jointcommission.org/assets/1/6/HAP-CAH_Antimicrobial_Prepub.pdf).<sup>1</sup>

- Examples of protocols are as follows:
  - Antibiotic Formulary Restrictions
  - Assessment of Appropriateness of Antibiotics for Community- Acquired Pneumonia
  - Assessment of Appropriateness of Antibiotics for Skin and Soft Tissue Infections
  - Assessment of Appropriateness of Antibiotics for Urinary Tract Infections
  - Care of the Patient with Clostridium difficile (C. diff.)
  - Guidelines for Antimicrobial Use in Adults
  - Guidelines for Antimicrobial Use in Pediatrics
  - Plan for Parenteral to Oral Antibiotic Conversion
  - Preauthorization Requirements for Specific Antimicrobials
  - Use of Prophylactic Antibiotics

## What's next?

In June 2016, the Centers for Medicare & Medicaid Services (CMS) also announced that it is proposing to update the requirements that hospitals and critical access hospitals (CAHs) must meet to participate in Medicare and Medicaid. The proposed changes to the requirements, formally called the Conditions of Participation, would reflect current standards of practice and support improvements in quality of care by:

- Reducing the incidence of hospital-acquired conditions (including healthcare-associated infections)
  - Improving the use of antibiotics (including the potential for reduced antibiotic resistance)
- Under the proposed rule, hospitals and CAHs would be required to:
- Have hospital-wide infection prevention and control and antibiotic stewardship programs for the surveillance, prevention, and control of health-care-associated infections and other infectious diseases, and for the appropriate use of antibiotics.
  - Designate leaders of the infection prevention and control program and the antibiotic stewardship program respectively, who are qualified through education, training, experience, or certification. This requirement allows for flexibility in staffing in order to suit the needs of each hospital or CAH.



<sup>1</sup>CMS hasn't stated an expected timeline, but the comment period has passed and proposed rule is in development. After the final rule is published, CMS has 3 years to publish the final rule. However, a public affairs specialist for CMS expects them to publish the rule as expeditiously as possible.

## Alere Solutions



### Alere BinaxNOW® Legionella Urinary Antigen Card, Alere BinaxNOW® Streptococcus pneumoniae Antigen Card Community-Acquired Pneumonia Urinary Antigen Testing

Community-acquired pneumonia (CAP) is often treated empirically with broad-spectrum antibiotics due to the delay in results from traditional diagnostic methods. This can expose patients unnecessarily to high-risk antibiotics that negatively impact patient health.<sup>8</sup>

- Optimizing patient management based on diagnosis of *Legionella* or *S. pneumoniae* has a major impact on the cost of care, including 50% reduction in duration of intravenous antibiotics and 35% decrease in length of stay.
- When its findings are positive the pneumococcal urinary antigen test is a useful tool in the treatment of adult patients, allowing the clinician to optimize antimicrobial therapy, resulting in good clinical outcomes.<sup>9</sup>



### Alere™ i Molecular. In minutes.™

Available **Alere™ i** Tests  
**Alere™ i** Influenza A & B CLIA-WAIVED  
**Alere™ i** RSV CLIA-WAIVED  
**Alere™ i** Strep A CLIA-WAIVED

- Rapid molecular assays significantly reduce unnecessary antibiotic use by enabling physicians to base treatment decisions on real-time test results for Influenza, RSV, and Strep A.



### C. difficile C. difficile Testing

Toxin detection is a necessary part of *C. difficile* disease diagnosis combined with a sensitive screen for the bacteria. Molecular testing doesn't target active toxin production and may mistake colonized patients as acute *C. difficile* infections if used stand-alone.<sup>8</sup>

- GDH antigen testing rules out *C. diff.* with sensitivity equal to PCR.<sup>8</sup> Simultaneously detect and differentiate GDH antigen and the disease-causing toxins in less than 30 minutes with the *C. DIFF QUIK CHEK COMPLETE*® Test.



### PBP2a SA Culture Colony Test MRSA Testing

Alere™ PBP2a SA Culture Colony Test can provide results up to 24 hours sooner than traditional methods in isolates of *S. aureus*.

- Rapid MRSA testing aids in reducing use of vancomycin and permits cost effective patient management decisions.

