

## TABLES

**eTable 1: Survey of ICU and ID Healthcare Professionals Knowledge, Attitudes and Practices for MDR-GNB Infections and Antimicrobial Susceptibility Testing**

Domain	Question	Measure
Knowledge	Familiarity with treatment of MDR-GNB: <ul style="list-style-type: none"> <li>Bloodstream infection</li> <li>Hospital-acquired pneumonia</li> <li>Urinary tract infection</li> </ul>	4 point scale from <i>Not familiar</i> to <i>extremely familiar</i> <sup>a</sup>
Knowledge	Awareness of following for MDR-GNB: <ul style="list-style-type: none"> <li>Resistance mechanisms expressed Standard commercial susceptibility testing methods used at NYP (e.g., Vitek).</li> <li>Specialized susceptibility testing methods used at NYP (e.g., Etest).</li> <li>Definition for <i>Contact Isolation</i> used at NYP</li> </ul>	3 options: <i>Aware</i> , <i>Not aware</i> , and <i>Not sure</i> <sup>b</sup>
Knowledge	Following statements true or false: <ul style="list-style-type: none"> <li>Standard commercial antimicrobial susceptibility testing for MDR-GNB may be inaccurate.</li> <li>Carbapenem agents are ineffective therapy for GNB expressing extended spectrum <math>\beta</math>-lactamases.</li> </ul>	3 options: <i>True</i> , <i>False</i> , <i>Not sure</i> <sup>c</sup>

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- Tigecycline is treatment option for hospital-associated pneumonia caused by MDR-*Pseudomonas aeruginosa*.
  - Carbapenem-resistant *Klebsiella* spp. are usually susceptible to quinolone antibiotics.
  - Quinolone antibiotics exhibit concentration-dependent killing.
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Attitude  (Agreement)	Agree or disagree with following: <ul style="list-style-type: none"> <li>• Antimicrobial susceptibility testing is useful when caring for patient infected with MDR-GNB</li> <li>• MDR-GNB infections are a serious problem in ICUs in the U.S.</li> <li>• MDR-GNB infections are a serious problem in ICUs at NYP.</li> <li>• Limiting use of broad-spectrum antibiotics in ICUs decreases antimicrobial resistance.</li> <li>• Placing ICU patients colonized/infected with MDR-GNB on <i>Contact Isolation</i> decreases antimicrobial resistance.</li> </ul>	4 point scale from  <i>Strongly disagree</i> to  <i>Strongly agree</i> <sup>d</sup>
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Attitude  (Self-efficacy)	Confident in ability to do the following <ul style="list-style-type: none"> <li>• Use antimicrobial resistance patterns in the ICU to guide empiric antibiotic therapy.</li> <li>• Interpret results of standard commercial susceptibility tests for MDR-GNB.</li> </ul>	4 point scale from <i>Not confident</i> to <i>Extremely confident</i> <sup>e</sup>
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- Interpret results of specialized susceptibility tests for MDR-GNB.
  - Use literature to determine optimal treatment strategies for MDR-GNB.
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Attitude  (Outcome expectancy)	Importance of following in improving outcomes of MDR-GNB infection	4 point scale from <i>Not Important</i> to <i>Very Important</i> <sup>f</sup>
	<ul style="list-style-type: none"> <li>• Results of susceptibility testing.</li> <li>• Requiring approval for restricted antibiotics.</li> <li>• Infectious disease consults.</li> <li>• Clinical pharmacist consults.</li> </ul>	

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Attitude  (Outcome expectancy)	Perceptions of importance to guide management:	4 point scale from <i>Not Important</i> to <i>Very Important</i> <sup>f</sup>
	<ul style="list-style-type: none"> <li>• Literature searches.</li> <li>• Formal lectures.</li> <li>• Clinical pharmacist consults.</li> <li>• Infectious disease consults.</li> <li>• Educational materials from pharmaceutical industry.</li> <li>• Web-based resources specific to NYP (e.g., local formulary, antibiograms).</li> <li>• Other web-based resources available through NYP (e.g., <i>Up-to-date</i>, Micromedex).</li> <li>• Outside web-based resources (e.g., Johns Hopkins guide, MD consult).</li> </ul>	

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Practices	Practices when treating MDR-GNB infections:	4 point scale from <i>Never</i> to <i>Almost always</i> <sup>g</sup>
	<ul style="list-style-type: none"> <li>• Request specialized susceptibility tests.</li> <li>• Modify treatment based on susceptibility tests.</li> <li>• Request infectious disease consults.</li> <li>• Treat with combination therapy.</li> </ul>	

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Abbreviations in Table: MDR, multidrug-resistant; GNB, gram-negative bacilli; ICU, intensive care unit; ID, infectious diseases; NYP, NewYork-Presbyterian Hospital.

<sup>a</sup> Dichotomized: Not familiar/Somewhat familiar vs. Very/extremely familiar

<sup>b</sup> Dichotomized: Aware vs. Not aware/Not sure

<sup>c</sup> Dichotomized: True vs. False and Not sure

<sup>d</sup> Dichotomized: Strongly disagree and Disagree vs. Agree and Strongly agree

<sup>e</sup> Dichotomized: Not confident and Somewhat confident vs. Very confident and Extremely confident

<sup>f</sup> Dichotomized: Not Important and Minimally Important vs. Moderately Important and Very Important

<sup>g</sup> Dichotomized: Never and Sometimes vs. Often and Almost always