Poke-Biotic Go
An innovative approach to antibiotic education

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DDH
What is Antimicrobial Stewardship (AMS)?

- A systematic approach to ensure the most appropriate use of antibiotics

- How?
  - Surveillance
  - Policing prescribing
  - Restriction of broad spectrum antibiotics
  - EDUCATION
Education
Innovative education

• Aim: Provide fun & effective AMS education
• How?
  • Lectures
  • Tutorials
  • Practical cases
  • Gamification
What is gamification?

• Application of game-design elements and game principles in non-game contexts
• Eg FitBit®

• Game play attracts & focuses attention
• Repeatability
• Competitive nature
• Motivation with prizes
Poke-Biotic GO

- Based on 2016 “Pokemon Go”
- Players (doctors/nurses) find the hidden antibiotics
- Players use antibiotics to kill bacteria (aka pharmacists)
- AWW event - Monday to Thursday, prizes on Friday
Poke Biotic Go

How to play

1. Find some antibiotics. They are everywhere! Don’t get too greedy, leave some for the other trainers.

2. Once you’ve found some antibiotics, time to find and battle some bacteria/bugs. Bacteria look a lot like pharmacists, but they have a picture of a bug on their back.

3. Time to battle! Use the most appropriate antibiotic to defeat the bug. Extra points for using the ideal antibiotic and being SUPER EFFECTIVE!

4. You can only battle the same bug once each day.

5. Watch out, bugs can develop resistance over time! You can find a “susceptibility” token to test a bug's sensitivity.

6. The trainer with the most points wins!
Easy right!? 

- 24 bugs  
- 30 antibiotics  
- “Inducible antibiotic resistance”
Bugs
Antibiotics
<table>
<thead>
<tr>
<th>Bug</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pseudomonas Aeruginosa</em></td>
<td>Cefepime (3)</td>
<td>Ciprofloxacin (3)</td>
<td><strong>Colistin</strong></td>
<td><strong>Colistin</strong></td>
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<tr>
<td></td>
<td>Ceftazidime (3)</td>
<td>Colistin</td>
<td>Gentamicin (3)</td>
<td>Gentamicin (3)</td>
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<td></td>
<td>Ciprofloxacin (3)</td>
<td>Gentamicin (3)</td>
<td>Meropenem (3)</td>
<td>Meropenem (3)</td>
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<td></td>
<td><strong>Colistin</strong></td>
<td>Meropenem (3)</td>
<td><strong>Piptaz</strong> (3)</td>
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<td>Gentamicin (3)</td>
<td><strong>Meropenem</strong></td>
<td><strong>Vancomycin</strong></td>
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<td><strong>Piptaz</strong> (3)</td>
<td><strong>Vancomycin</strong></td>
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<tr>
<td><em>Staphylococcus Aureus (MSSA)</em></td>
<td><strong>Augmentin</strong> (3)</td>
<td>Augmentin (3)</td>
<td>Cefepime (3)</td>
<td>Cefepime (3)</td>
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<td>Bactrim</td>
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<td><strong>Ceftaroline</strong></td>
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<td>Cefalexin/cefazolin (3)</td>
<td>Cefepime (3)</td>
<td><strong>Ceftaroline</strong></td>
<td>Daptomycin (3)</td>
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<td>Daptomycin</td>
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<td>Doxycycline (3)</td>
<td><strong>Linezolid</strong></td>
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<td>Doxycycline</td>
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<td>Flucloxacillin (3)</td>
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Team Zoya

Team Sally
Benefits

• Problem based learning
• Duration and self directed learning (not only players)
• Inter-professional collaboration
• Finding sources of information for learning

“I interacted with doctors, without trying to resolve an issue”

“I have gained more antibiotic knowledge in one week, than I did in 4 years of Uni!”

“Can we do it again next year!”

“I thought it was going to be a waste of time. That was until Tuesday, when I observed unprecedented engagement”
Acknowledgments

• Aimee Petersen, NSW Health
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• Toowoomba Hospital Pharmacists
Questions?