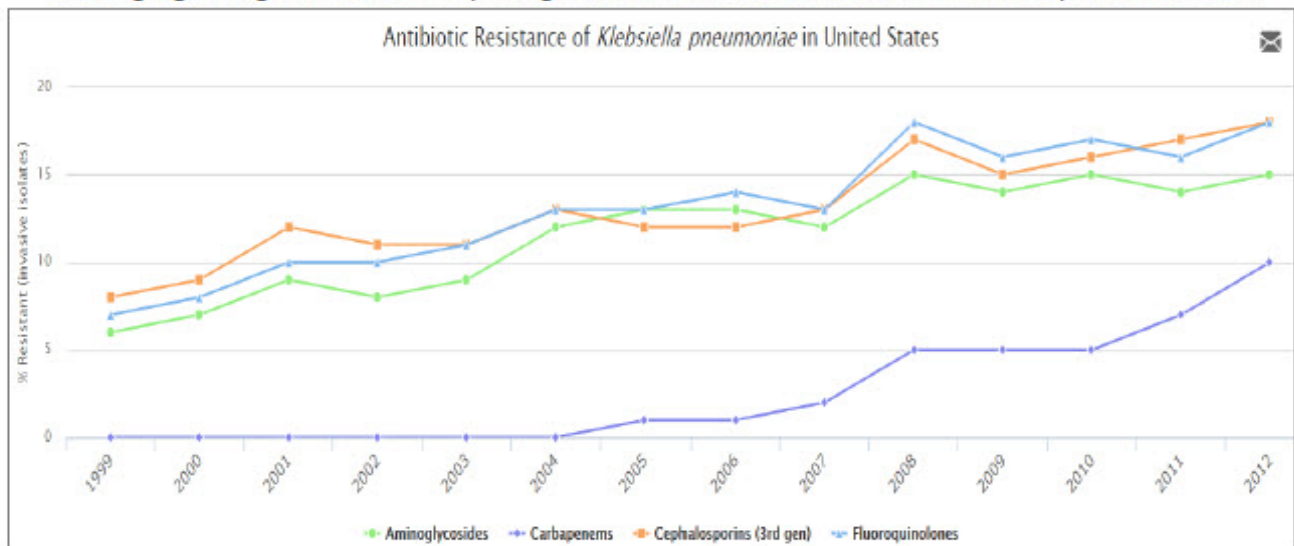


Example 7.1 Sharp Coronado Hospital and Villa Long Term Care Education for Physicians (1 of 2)

Sharp Coronado Hospital: Antimicrobial Stewardship Program (ASP) | 2016

I. The threat of antibiotic resistance:

- Improving the use of antibiotics is an important patient safety and public health goal
- In the US, ~23,000 deaths occur annually as a direct result of antibiotic-resistant infections
- Per the CDC, 20-50% of all antibiotics prescribed acute care hospitals in the U.S. are either unnecessary or inappropriate (up to 70% in LTC).
- The way we use antibiotics today or in one patient directly impacts how effective they will be tomorrow or in another patient; they are a shared resource.
- Decades of overprescribing and misuse have resulted in bacteria that are increasingly resistant, creating a growing threat of new superbugs that are difficult, and sometimes even impossible to treat.



II. **Antimicrobial Stewardship Programs (ASP)** are now mandated for both acute and long-term care facilities. ASPs optimize antimicrobial use, improve patient outcomes, and reduce *C.difficile* infections and antimicrobial resistance, while controlling antimicrobial costs.

III. Sharp Coronado ASP members:

- Michael Butera, MD, ID specialist
- Bridget Olson, RPh, ID/ASP Pharmacist
- Lindsay Schimpf, RN, Infection Preventionist
- Kenneth Warm, MD, Hospitalist
- Roger Oen, MD, Hospitalist

IV. **Sharp’s System Antibiotic Review Committee (SARC):** is composed of ID physicians, clinical coordinators, and ID pharmacists from all Sharp sites, a microbiologist, information systems representative and the system clinical coordinator.

For more information about this example contact Bridget Olson, ID/ASP Pharmacist at Bridget.Olson@sharp.com

Example 7.1 Sharp Coronado Hospital and Villa Long Term Care Education for Physicians
(2 of 2)

Sharp Coronado Hospital: Antimicrobial Stewardship Program (ASP) | 2016

V. **ASP Strategies to Optimize Antibiotic Use:**

- **Prospective reviews**—with ID physician oversight, pharmacists review therapy for all patients on antibiotics. Initially and after 48 hours of therapy, interventions address:
 - Is antibiotic indicated?
 - Appropriate antibiotic(s), dose, and route?
 - De-escalation to a more targeted antibiotic
 - Duration of therapy
 - Formulary restriction and pre-authorization
- An **Antimicrobial formulary** has been established by SARC for the purpose of preserving antimicrobials for MDRO infections, nuanced spectrum, dosing or safety concerns, the availability of alternative agents and/or limited cost-benefit.
 - **'ID Restricted'** - requires pre-authorization from ID or ASP representative
 - **'ID Review'** - must meet approved criteria approved by SARC
- **Antimicrobial treatment algorithms** have been researched and vetted at SARC to help standardize treatment based on the latest research and published IDSA guidelines. Algorithms are available for treatment of:
 - *C.difficile* infections (CDI)
 - Urinary tract infections
 - Skin & soft tissue infections
 - Respiratory tract infections
 - Severe Sepsis
 - Intra-abdominal infection algorithm (to be completed in 2017)
- **Fluoroquinolones (FQ)** use has been specifically targeted by ASPs for reduction:
 - A black boxed warning was issued by the FDA regarding the use of FQ due to their association with disabling and potentially permanent side effects of the tendons, muscles, joints, nerves, and CNS. Other options are recommended for treatment of acute bacterial sinusitis, acute exacerbation of chronic bronchitis, and uncomplicated urinary tract infections.
 - Bacterial resistance formation and association with CDI provide more motivation for minimizing FQ use.
- ***C.difficile* Reduction initiatives:**
 - Antimicrobial Stewardship: to reduce the use of unnecessary antimicrobials
 - Reduction in the intensity of acid suppression for GI prophylaxis: PPI → H2 antagonists
 - Probiotic therapy is added to all antimicrobial courses + 1 additional week

For more information about this example contact Bridget Olson, ID/ASP Pharmacist at Bridget.Olson@sharp.com