This will be an Interactive Session!

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I’ve been charged with developing an ASP. Now what?

Helpful resources and personal experience

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Disclosures

• None
Today’s Discussants

• Kevin Hsueh MD
• Michael Durkin MD MPH
• Caline Mattar MD
• Erin Rachmiel, PharmD BCPS
<table>
<thead>
<tr>
<th>Role</th>
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<tbody>
<tr>
<td>Pharmacist</td>
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<tr>
<td>Nurse</td>
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<td>Physician</td>
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<td>Infection Prevention &amp; Control</td>
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<tr>
<td>Administrator</td>
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<tr>
<td>Other</td>
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Where to start?

- **Educate yourself**
- **TJC**
  - https://www.jcrinc.com/antimicrobial-stewardship-toolkit/
- **CDC**
  - https://www.cdc.gov/antibiotic-use/healthcare/implementaion/core-elements-small-critical.html
  - https://www.cdc.gov/antibiotic-use/healthcare/programs.html
- **IDSA**
  - https://www.idsociety.org/Guidelines/Patient_Care/IDSA_Practice_Guidelines/Antimicrobial_Agent_Use/Implementing_an_Antibiotic_Stewardship_Program/
Additional Resources

• SHEA
  • https://www.shea-online.org/index.php/practice-resources/priority-topics/antimicrobial-stewardship

• National Quality Forum
  • http://www.qualityforum.org/NQP_Antibiotic_Stewardship_.aspx

• ASHP

• ACCP
  • www.accp.com
Even More Resources

• Certificate Programs: MAD-ID, SIDP
• Meetings
• Published reports of community hospital experience
• Networking
Key Steps (in my experience)

- Physician Champion/Partner
- Develop Relationships
  - Administrative support
  - Build a team
- Choose Attainable Goals
- Report Data
- Be Visible
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Does your ASP have a physician champion?

Yes, we have an ID physician champion.

Yes, we have a physician champion who is not an ID specialist.

No, we do not have a physician champion.
Find a Champion

- ID physician
- CMO
- Hospitalist
- Off site
- Administrator

- Strong leadership skills
- Assertive
- Good politician
- Effective communicator
- Uses evidence-based knowledge
- Respected by the medical staff
- Respected by hospital administration
- Familiar with stakeholder needs
- Experienced clinician who sees patients

Creating Change: Using an Antimicrobial Stewardship Program to Improve Antimicrobial Usage. 2012 JCR Ohl CA Available at: https://www.jcrinc.com/antimicrobial-stewardship-toolkit/
Key Steps (in my experience)

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Who are the members of your ASP?
Build a Team

- Physician champion / Pharmacist
- Microbiology lab
- Infection Prevention
- Nursing
- Pharmacists
- Administrator / Quality Improvement
- IT
- Hospitalist
- ED
- Resident
Ground Work

• Relationship building (ID & Pharmacy)

• Education for pharmacists
  • ID presentation to pharmacists
  • ASP Continuing Education offered
  • Set up daily rounds with ID team

• Adjustment to pharmacy staffing model

• IT support

• Announcement to staff
Key Steps (in my experience)

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Choose Attainable Goals

- Identified areas for improvement – Piperacillin/Tazobactam & Vancomycin use
- Developed appropriate use guidelines & monitoring guidelines
- Prepared pharmacy team to begin official AS monitoring
- Figure out data needs and how to monitor

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- Goff DA, Kullar R, Bauer KA, et al. Eight habits of highly effective antimicrobial stewardship programs to meet the joint commission standards for hospitals. CID 2017;64(8):1134-9
Designing the Details

• Daily Work
  • Pharmacist patient review
  • Pharmacist rounds with ID physician
  • Pharmacist interventions/documentation

• Support Work
  • Pharmacist Co-chair: Paperwork, coordinated projects, disseminate information, develop tools, collect data
  • Co-chair weekly lunch meeting (ID physician and Pharmacy Clinical Coordinator): Reviewed progress, goals, monitoring, agenda, developed tools, etc
  • Monthly meeting with larger team: shared progress, goals, initiatives, received feedback, asked for support

• AS Pharmacist vs Utilizing pharmacy staff
  • Ohl CA, Dodds Ashley ES. Antimicrobial Stewardship Programs in Community Hospitals: The Evidence Base and Case Studies. CID 2011:53(suppl1):S23-S26
Key Steps (in my experience)

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- Report Data
- Be Visible
Gather Data

• Some is better than none

• Talk with other departments/committees
  • Quality department
  • Lab
  • Infection Prevention

• IT help

• Drug purchase data
• Drug administration data
  • Doses dispensed
  • Dispensing Machines
  • eMAR

• Lab data
• Interventions

https://www.jcrinc.com/antimicrobial-stewardship-toolkit/
Key Steps (in my experience)

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- Choose Attainable Goals
- Report Data
- Be Visible
Be Visible!

- Shared drive with ASP tools
- Table tent initiatives to support appropriate use guidelines
- Present at conferences
- Antimicrobial Stewardship Week
- Report data
  - Quality committee
  - Med Exec committee
  - P&T
  - Infection Prevention
  - C-suite
CDC guidelines for ASP in critical access hospitals

• Core 1-2: Leadership Commitment/accountability
  • Champion identification
  • Policy for creation of ASP
  • Integration of ASP with QI activities
  • Leadership update- reporting
  • Support from hospital leadership

• Remote consultations/telemedicine/multi-hospital collaborations → MO stewardship collaborative

• Stewardship requirements in contracts with external pharmacies
CDC guidelines for ASP in critical access hospitals

• Core 3: Drug expertise
  • Pharmacy leader on-site → ASP as part of his/her responsibilities
  • Physician leader for support
  • Access to training courses

• Core 4: Action
  • High-yield interventions: CAP-UTIs-SSTIs
    • Limit duration of therapy
    • Empiric therapy guidance
  • Review daily antibiotic regimens to avoid double coverage
  • Review Culture results daily and opportunities for de-escalation
  • IV to PO switch opportunities
  • Patient Education about adverse effects-C diff
  • Involvement of nursing staff in antibiotic timeout after 48 hours of therapy
CDC guidelines for ASP in critical access hospitals

- Core 5: Tracking
  - Submit data on antibiotic use to CDC NHSH ASU
  - Monitor adherence to local guidelines
  - Monitor IV-PO conversion and missed opportunities

- Core 6: Reporting
  - Regular reports to the board, QI committees etc
  - Provider-specific reports
  - Distribution of data to staff via email ..
CDC guidelines for ASP in critical access hospitals

- Core 7: Education
  - Regular updates on ASP and resistance
  - At least annual update for all staff
  - One-on-One provider education
  - Incorporation into orientation for new hires
  - Patient Education material-Patient stories
What have we learned from other settings?

• Antimicrobial Resistance is on the rise globally
  • Many low and middle income countries have started stewardship initiatives

• Some initiatives:
  • In hospitals where there are no microbiology labs
  • No pharmacists on staff
  • No formal infection prevention programs
Diagnostic challenges

• In hospitals where Microbiology is not readily available:
  • No in-house micro testing

• Easy targets for ASP:
  • IV to PO conversion protocols

  • Guidelines for most common encountered inpatient infections based on the available surveillance data (SSTIs-UTIs-HAPs etc)

  • Short training curricula on antibiotic prescribing for different categories of providers, and for new hires thereafter.

  • If a pharmacist is available, audit and feedback processes based on existing guidelines as above for specific conditions or select broad-spectrum antimicrobials (carbapenems- Daptomycin etc..)
Limited Human Resources

- If there is no ID physician on staff, and/or a restricted number of providers who can perform stewardship
  - Identify one physician champion to support the ASP program
  - Consensus building on the importance of stewardship
  - Staff training on basic concepts of antibiotic use and on the role of the ASP pharmacist/nurse
  - Increase ownership of ASP amongst prescribers, by frequent meetings and updates → track progress and successes

- Checklists in the EHR which include de-escalation protocols, IV to PO switches
What topics would you like addressed during the presentation on multidrug resistant organisms?
Questions?

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