Physician Engagement, Team-based Approach and Best Practices for Antibiotic Stewardship

Arkansas Antimicrobial Stewardship Collaborative

Nov. 8, 2018

Marsha Crader, PharmD
Disclosures

- Marsha Crader, PharmD has no conflicts of interest to report
Outline

- Members of the team
- Building the team
- Engaging the team
- Re-energizing the team
- Prescriber engagement
Members of the Team

**Hospitals**
- Lead physician
- Lead pharmacist
- Clinicians
- Infection prevention
- Quality
- Microbiology
- Information technology
- Nursing

**Nursing Homes**
- Medical director
- Director of nursing
- Consultant pharmacist
- Infection prevention coordinator
- Consultant laboratory
Building the Team

- **Identify a leader or co-leaders**
  - Usually on-site, team player, well-respected, organized/stays on task, appropriately assertive, willing to learn, etc.

- **Incorporate multiple disciplines**
  - Utilize required team members but extend team outreach as needed
  - Utilize all prescriber specialties or utilize as needed

- **Develop team structure**
  - Accountability
  - Overarching goals
Engaging the Team

- **Belief in the need for change**
- **Common cause → clear goal**
  - Meet regulatory requirements
  - Do not try to tackle too many projects at one time
- **Roles and responsibilities**
  - Everyone has a role (e.g., hub and spoke)
  - Truly work as a team
  - Spokesperson
- **Visible plan, progress and results**
  - Share plans/successes and market them throughout the facility
- **Time for brainstorming outside of meeting discussions**
Re-energizing the Team

- “We have met the regulatory requirements ... now what?”
- “We had a success, but how do we maintain where we are at and improve from here?”

Always go back to your model for improvement
Model for Improvement

Ongoing PDSA Cycle

ACT
- What changes are to be made?
- Next cycle?

PLAN
- Objective
- Questions and Predictions (why)
- Plan to carry out the cycle (who, what, where, when)

STUDY
- Complete the analysis of the data
- Compare data to predictions
- Summarize what was learned

DO
- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data

Teamwork

CREATE

DECIDE

INITIATE

UNDERSTAND
Re-energizing the Team: Other Factors

- “We have competing efforts ... how can I continue to push forward?”
  - **Remember overarching goals**
    - Remember successes and create goals that can truly impact patient care
    - Review outcomes data over time
      - Quicker response example: process improvements
      - Slower response example: resistance rates
  - **Extend your reach**
    - Utilize different members of the health care team
    - Justify additional resources
  - **Think outside the box**
    - Join a collaborative
    - Engage areas impacting antibiotic prescribing and resistance outside of your facility
      - Hospitals, clinics, nursing homes, LTACs, dentists, etc.
Prescriber Engagement: Initial and Ongoing Components

- **Belief in the need for change**
  - Local resistance data
  - Prescriber report cards

- **Common goal(s)**
  - Primary goal → improving patient care

- **Shared vision**
  - Participation with initial planning
  - Goals should incorporate prescriber actions

- **Early and ongoing successes**
  - Low-hanging fruit targeted first
  - Improvements communicated
    - Patient care (e.g., individual stories, resistance rates)
    - Process improvements without patient harm (e.g., less antibiotics without increased re-admissions)
Prescriber Engagement: Key Essentials

- **Communicate relevant information**
  - Be up front and explain the “why’s” (e.g., documentation of diagnosis and duration)
  - Provide initial and ongoing education
  - Keep messages concise and deliver them often
  - Make progress and results visible and audible
  - Generate light, not heat, with data
  - Find out what prescribers want and need to know/understand
Prescriber Engagement: Key Essentials

- **Change the culture**
  - Identify prescriber champions throughout departments and specialties of the facility
  - Increase awareness of resistance and changing antibiotic prescribing practices
    - Instruct prescribers that antimicrobial stewardship is needed in every facet of health care
    - Guide CME choices
  - Make the right thing easy to try and to do ... hardwire what you can
  - Communicate, communicate, communicate
  - Be a physician partner
    - Do not just state the problem and how to fix it, but be a part of the solution!
    - Leaders and day-to-day staff need to be available and gain the confidence of prescribers

- **Never give up**
Nonprescriber Engagement

- Although prescribers are key players in practice change, do not exclude engagement of nurses, pharmacists, lab/microbiology personnel, etc.
Data Comparison: Pharmacy Survey Data Versus NHSN Data

Special Thanks to Corey Lance, PharmD
Overall Discrepancies Between 2017 Pharmacist Survey and NHSN Data

Number of NHSN and Pharmacist Survey Discrepancies Between Survey Respondents

Number of Respondents

Number of Discrepancies per Facility

- 0: 3
- 1: 8
- 2: 6
- 3: 7
- 4: 2
- 5: 2
- 6: 1
- 7: 0

Overall Discrepancies Between 2017 Pharmacist Survey and NHSN Data
Pharmacy Survey and NHSN Data Discrepancies by Number of Years with an Implemented Antimicrobial Stewardship Program (ASP)
### Specific Items with Discrepancies Between Pharmacist Survey and NHSN Data

| ASP Intervention/Activity                | NHSN | Pharmacy Survey | Number of Facilities with Discrepancies |
|--------------------------------..........|------|----------------|----------------------------------------|
| Institutional Specific ID Guidelines    | 21   | 9              | 16 Yes 14 No                            | 13 |
| Antibiotic Restriction/Approval          | 17   | 13             | 17 Yes 13 No                            | 12 |
| 48-72hr Antibiotic Timeout*             | 12   | 18             | 9 Yes 20 No                             | 11 |
| ASP dedicated FTE/Salary Support        | 11   | 19             | 21 Yes 9 No                             | 9  |
| Prospective Audit with Feedback         | 26   | 4              | 19 Yes 11 No                            | 9  |
| Sharing Antibiotic Usage Data with Prescribers* | 17   | 11             | 25 Yes 5 No                             | 9  |
| Providing Antimicrobial Stewardship Education to Prescribers | 28   | 2              | 25 Yes 5 No                             | 5  |

* - 1 Blank answer in Pharmacy Survey  
* - 2 Blank answers in NHSN  

Total number of facilities included = 30 (5 facilities were not reporting to NHSN)
References

Centers for Disease Control and Prevention
• The Core Elements of Hospital Antibiotic Stewardship Programs
  https://www.cdc.gov/antibiotic-use/healthcare/pdfs/checklist.pdf
• Implementation of Antibiotic Stewardship Core Elements at Small and Critical Access Hospitals
  https://www.cdc.gov/antibiotic-use/healthcare/implement/core-elements-small-critical.html
• The Core Elements of Antibiotic Stewardship for Nursing Home
  https://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html

National Quality Partners Playbook: Antibiotic Stewardship in Acute Care
• http://www.qualityforum.org/Publications/2016/05/National_Quality_Partners_Playbook__Antibiotic_Stewardship_in_Acute_Care.aspx

Minnesotan Department of Health: Antimicrobial Stewardship Programs
• http://www.health.state.mn.us/divs/idepc/dtopics/antibioticresistance/hcp/asp/index.html

Arkansas Health Care Foundation Quality Partners Antibiotic Stewardship Program Implementation Guide

Illinois Department of Health: Antimicrobial Stewardship and Core Elements: Where to Start

Centers for Disease Control and Prevention: Antibiotic Stewardship: Where to Start

Centers for Medicare and Medicaid: Plan-Do-Study-Act Cycle Template

Arkansas Department of Health: 2017 Arkansas Pharmacist Antimicrobial Stewardship Practice and Needs Assessment
Panel Discussion

Special Thanks to

Baxter Regional Medical Center
Chicot Memorial
Little Rock Post Acute and Rehab
Making a Case for Antibiotic Stewardship

- Aside from regulation/requirements, how have you made AS a priority?
- How do you use data/outcomes to drive improvement/additional resource allocation?
- How do you connect your work to patient outcomes?
Team Based Approach

- What does your AS team look like?
- How do you improve communication between your team members (in-house or reference lab, doctor, staff, etc)?
- How do you prioritize your antibiotic stewardship improvement work?
- Give an example of how your team has used data to create improvement or change?
- How do you sustain improvement?
Physician Engagement

- Hospital- Do you have a physician champion, and how did you identify/engage them in stewardship? What is their role in prioritization and decision-making? How do you educate- general education, day to day opportunities for teaching/learning, in-service, one on one?

- NH- How do you engage the physician in stewardship activities? What kind of advice would you give nursing home staff trying to engage their physicians in stewardship activities?

- Both- What external resources do your physicians know they can utilize, such as the consultation line (UAMS)?
Microbiology

- Hospital: How do you make a case for better testing and more rapid results? Do you share the data with leadership and frontline staff?

- NH: Do NHs use the same reference lab company or do they vary? How do you communicate/engage with your reference lab about result accuracy/timing and improvement opportunities? What is your turn-around time for blood/urine cultures and tool samples for CDI?
The annual survey process can be time consuming because it requires investigation and collaboration of many disciplines in an organization.

How do you work together to ensure your survey responses are accurate?

What do you do when you come to a question you’re not sure about?