

MHA/OHA HIIN Antibiotic Stewardship/MDRO Collaborative

Sept. 12, 2017







Reminders



- For best sound quality, dial in at 1-800-791-2345 and enter code 11076
- Please use the chat box to ask questions!

Housekeeping

- Education Credit
 - Nursing Education Credit 1 hour
 - Pharmacy Education Credit 0.1
 - Pharmacists, please list your license number on the signin sheet to receive credit

Agenda

- Welcome
- Presentation:
 - A Community Health System's Journey into Antimicrobial Stewardship – Sherri Jobin, PharmD, BCPS, HealthEast
- Questions/discussion
- Resources & ASP 101 reminders
- Wrap-up



A COMMUNITY HEALTH SYSTEM'S JOURNEY INTO ANTIMICROBIAL STEWARDSHIP

Sherri Jobin, PharmD, BCPS

Antimicrobial Stewardship Program (ASP) Co-Chair



OBJECTIVES

Upon completion of this presentation participants should be able to:

- 1. Analyze antimicrobial stewardship elements in their organization as they compare to the Joint Commission requirements
- 2. Describe tools that can be utilized for antimicrobial stewardship education
- 3. Summarize the HealthEast learnings and areas for improvement



HISTORY OF HEALTHEAST (HE)

- HealthEast (HE) established in 1986; joined Fairview Health Services 6/1/2017
- Four hospitals in St. Paul, MN working as one system
 - St. John's, St. Joseph's, and Woodwinds Hospitals (STACHs)
 - Bethesda Hospital (LTACH)
- 14 Primary Care Clinics
- One Antimicrobial Stewardship Program Committee reports to P and T Committee
- One Infection Prevention and Control Committee reports to Med Exec Committee
- One Pharmacy and Therapeutics Committee reports to Med Exec Committee



HE ANTIBIOTIC SUBCOMMITTEE HISTORY

- Antibiotic Subcommittee of Pharmacy and Therapeutics Committee
 - Annual meetings started in 1990s to present
 - Antibiogram review, trending, and distribution of printed antibiograms with cost of ABX
 - Antibiotic Expenses
 - Drug Shortages
 - Formulary Review new drugs, drug class reviews, automatic substitutions, deletions
 - Policy development and review: aminoglycosides and vancomycin
 - MUEs
 - ID physician(s), pharmacist(s), pharmacy student(s), microbiologist, MDs attended



HE ANTIBIOTIC SUBCOMMITTEE HISTORY: "ID ROUNDS"

- 2001: St. Paul Infectious Disease Associates (SPIDA) proposed a joint project with HealthEast to meet with clinical pharmacists to review patients on specific antibiotics, who had positive blood or spinal fluid cultures, or who had significant pathogens
- Evaluate and analyze antibiotic regimens for primary care providers
- Note left or call made with recommendations to: change antibiotics, dose, frequency, to order additional labs or to consult a specialist such as ID, pulmonary, renal
- "ID Rounds" born at HealthEast and continue to this day; policy and procedures developed since to outline inclusion criteria, documentation, and necessary information to discuss with ID provider; 1:1 education/collaboration



HE ANTIBIOTIC SUBCOMMITTEE HISTORY CONT'D

- Evidence-based order sets "owned" by ABX subcommittee starting in 2003
 (CAP/Aspiration pneumonia, cellulitis, pyelonephritis, neutropenic fever, HIV in pregnant patient)
- SCIP guidelines in 2005; timing of ABX in surgical prophylaxis
- Renal dosing policy developed in 2005 (primarily included antibiotics)
- IV to PO Policy developed 2007 (primarily included antibiotics)
- ID Rounds continued at STACHS and expanded to LTACH in 2007
 - Staff pharmacists started to participate in rounds over next few years
 - 2012 transitioned ID Rounds responsibility from clinical pharmacy coordinators to staff pharmacists at all sites
- Conversion to EPIC in 2014
- Antimicrobial Stewardship Requirements 2017



ANTIMICROBIAL STEWARDSHIP **REQUIREMENTS EFFECTIVE 1/1/17**





R3 Supplemental Report January 2017

Antimicrobial Stewardship Requirements for Hospitals

Standard MM.09.01.01

The hospital has an antimicrobial stewardship program based on current scientific literature.

Element(s) of Performance for MM.09.01.01

- Leaders establish antimicrobial stewardship as an organizational priority. (See also LD.01.03.01, EP 5) Note: Examples of leadership commitment to an antimicrobial stewardship program are as follows:
 - Accountability documents - Budget plans
 - Infection prevention plans
 - Performance improvement plans
 - Strategic plans
 - Using the electronic health record to collect antimicrobial stewardship data
- The hospital educates staff and licensed independent practitioners involved in antimicrobial ordering, dispensing, administration, and monitoring about antimicrobial resistance and antimicrobial stewardship practices. Education occurs upon hire or granting of initial privileges and periodically thereafter, based
- 3. The hospital educates patients, and their families as needed, regarding the appropriate use of antimicrobial medications, including antibiotics. (For more information on patient education, refer to
 - Note: Examples of educational tools that can be used for patients and families includes the Centers for Disease Control and Prevention's Get Smart document, "Viruses or Bacteria-What's got you sick? at http://www.cdc.gov/getsmart/community/downloads/getsmart-chart.pdf, and the Centers for Disease Control and Prevention's Get Smart document, Antibiotic Patient Education Fact Sheet for Hospitalized Patients at http://www.cdc.gov/getsmart/healthcare/index.html.
- The hospital has an antimicrobial stewardship multidisciplinary team that includes the following members, when available in the setting:
 - Infectious disease physician Infection preventionist(s)
 - Pharmacist(s)
- Practitioner

Note 1: Part-time or consultant staff are acceptable as members of the antimicrobial stewardship

Note 2: Telehealth staff are acceptable as members of the antimicrobial stewardship multidisciplinary

Antimicrobial Stewardship Requirements for Hospitals

- The hospital's antimicrobial stewardship program includes the following core elements: - Leadership commitment: Dedicating necessary human, financial, and information technology
- Accountability: Appointing a single leader responsible for program outcomes. Experience with successful programs show that a physician leader is effective.
- Drug expertise: Appointing a single pharmacist leader responsible for working to improve antibiotic
- Action: Implementing recommended actions, such as systemic evaluation of ongoing treatment need,
- after a set period of initial treatment (for example, "antibiotic time out" after 48 hours). - Tracking: Monitoring the antimicrobial stewardship program, which may include information on
- antibiotic prescribing and resistance patterns.
- Reporting: Regularly reporting information on the antimicrobial stewardship program, which may include information on antibiotic use and resistance, to doctors, nurses, and relevant staff.
- Education: Educating practitioners, staff, and patients on the antimicrobial program, which may include information about resistance and optimal prescribing.

(See also IC.02.01.01, EP 1 and NPSG.07.03.01, EP 5)

Note: These core elements were cited from the Centers for Disease Control and Prevention's Core Elements of Hospital Antibiotic Stewardship Programs

(http://www.cdc.gov/getsmart/healthcare/pdfs/core-elements.pdf). The Joint Commission recommends that organizations use this document when designing their antimicrobial stewardship program

- 6. The hospital's antimicrobial stewardship program uses organization-approved multidisciplinary protocols (for example, policies and procedures). Note: Examples of protocols are as follows:
 - Antibiotic Formulary Restrictions
 - Assessment of Appropriateness of Antibiotics for Community-Acquired Pneumonia
 - Assessment of Appropriateness of Antibiotics for Skin and Soft Tissue infections
 - Assessment of Appropriateness of Antibiotics for Urinary Tract Infections
 - Care of the Patient with Clostridium difficile (c.-diff) - Guidelines for Antimicrobial Use in Adults
- Guidelines for Antimicrobial Use in Pediatrics - Plan for Parenteral to Oral Antibiotic Conversion
- Preauthorization Requirements for Specific Antimicrobials
- Use of Prophylactic Antibiotics
- 7. The hospital collects, analyzes, and reports data on its antimicrobial stewardship program. Note: Examples of topics to collect and analyze data on may include evaluation of the antimicrobial stewardship program, antimicrobial prescribing patterns, and antimicrobial resistance patterns
- 8. The hospital takes action on improvement opportunities identified in its antimicrobial stewardship program. (See also MM.08.01.01, EP 6)

https://www.jointcommission.org/assets/1/6/New Antimicrobial Stewardship Standard.pdf



WHAT IS ANTIMICROBIAL STEWARDSHIP?

SHEA/IDSA/PIDS Policy Statement

Policy Statement on Antimicrobial Stewardship by the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), and the Pediatric Infectious Diseases Society (PIDS)

Infection Control and Hospital Epidemiology vol. 33 no. 4 March 15, 2012 322-327.

Coordinated interventions designed to improve and measure appropriate use of (antibiotic) agents by promoting the selection of the optimal (antibiotic) drug regimen including dosing, duration of therapy and route of administration. The major objectives of antimicrobial stewardship are to achieve best clinical outcomes related to antimicrobial use while minimizing toxicity and other adverse events, thereby limiting the selective pressure on bacterial populations that drives the emergence of antimicrobial-resistant strains. Antimicrobial stewardship may also reduce excessive costs attributable to suboptimal antimicrobial use.



ANTIMICROBIAL STEWARDSHIP REQUIREMENTS EFFECTIVE 1/1/17

JOINT COMMISSION ELEMENTS OF PERFORMANCE

- 1. Leaders establish that antimicrobial stewardship is an organizational priority
- 2. Education of staff and licensed independent practitioners
- 3. Education of patients and families
- 4. Antimicrobial Stewardship Multidisciplinary Team
 - Infectious Disease Physician
 - Infection Preventionist(s)
 - Pharmacist(s)
 - Practitioner

https://www.jointcommission.org/assets/1/6/New_Antimicrobial_Stewardship_Standard.pdf



ANTIMICROBIAL STEWARDSHIP REQUIREMENTS EFFECTIVE 1/1/17

5. CORE ELEMENTS OF ANTIMICROBIAL STEWARDSHIP

- Leadership Commitment
- Accountability
- Drug Expertise
- Action
- Tracking
- Reporting
- Education



ANTIMICROBIAL STEWARDSHIP REQUIREMENTS EFFECTIVE 1/1/17

ELEMENTS OF PERFORMANCE CONTINUED

- 6. Hospital ASP uses multidisciplinary protocols/policies
- 7. Hospital collects, analyzes and reports data on its antimicrobial stewardship program
- 8. Hospital takes action on improvement opportunities identified in its ASP



GAP ANALYSIS: HEALTHEAST

2017 CMS/Joint Commission Antimicrobial Stewardship Program Requirements Gap Analysis

XXXXXX, 4th Year Pharm D. Candidate/Sherri Jobin, Pharm D, BCPS (9/16) Updated by Sherri Jobin, PharmD, BCPS 10/16, 4/17, 5/17, 6/17, (8/17)

Summary

CMS recently proposed a rule to promote antimicrobial stewardship in (critical access) hospitals; however, the final rule has yet to be published. The Joint Commission's Antimicrobial Stewardship Standard will take effect on January 1st, 2017. Regulations/requirements between the two organizations differ slightly, but both encompass the 7 CDC Core Elements of Hospital Antimicrobial Stewardship Programs, which include:

- -Leadership Commitment
- -Accountability
- -Drug Expertise
- -Action
- -Tracking
- -Reporting
- -Education



GAP ANALYSIS: HEALTHEAST

2017 CMS/Joint Commission Antimicrobial Stewardship Program Requirements Gap Analysis

CMS requirement	Joint Commission requirement	Examples of Implementation	Current status at HealthEast	Gaps Identified	Possible Solutions
"Guidance on best practices is available from several organizations including IDSA, SHEA, and CDC"	The hospital's antimicrobial steward- ship program includes the following core elements: -Leadership commitment: Dedicating necessary human, financial, and information technology resources.	-Formal statements that the facility supports efforts to improve and monitor antibiotic use -Including stewardship related duties in job descriptions and annual performance reviews -Ensuring staff from relevant departments are given sufficient time to contribute to stewardship activities -Supporting training and education -Ensuring participation from	-ASP subcommittee of the P and T Committee	None	-None, but consider formal statements that the facility supports efforts to improve and monitor antibiotic use 8/17 Leadership Commitment Statement obtained



GAP ANALYSIS: INITIAL RESPONSE

Antibiotic Subcommittee renamed Antimicrobial Stewardship Program (ASP)

ASP charter developed

ASP committee membership expanded:

Infection Preventionist, IT, MDs, Pharmacy residents/students, RN, Quality

Frequency of ASP changed from annually to quarterly



GAP ANALYSIS: ELEMENTS OF PERFORMANCE

- 2. Education of staff and licensed independent practitioners (gap identified)
- 3. Education of patients and families (gap identified)
- 4. Antimicrobial Stewardship Multidisciplinary Team
 - Infectious Disease Physician
 - Infection Preventionist(s) (gap identified)
 - Pharmacist(s)
 - Practitioner



GAP ANALYSIS: CORE ELEMENTS

5. Core Elements

- Leadership Commitment (gap identified)
- Accountability ID physician
- Drug Expertise Pharmacist
- Action ex) Systemic evaluation of ongoing treatment need; antibiotic timeout after 48 hours, required documentation of dose, indication and duration; review policy and standing order sets (gap identified)
- Tracking Monitor antibiotic prescribing: indication, drug, dose, duration; performance of time-outs, antibiograms, HAIs, SSIs, DOT (gap identified)
- Reporting P and T committee, med exec, newsletters, MD, RN, RPh meetings
- Education MDs, RNs, RPh, Patient (gap identified)



GAP ANALYSIS

Elements of Performance continued

- 6. Hospital ASP uses multidisciplinary protocols/policies
 - Guidelines, (AMG/Vanco), order set review, policies (IV to PO/renal dosing/auto-sub), SOPs (ID rounds)
- 7. Hospital collects, analyzes and reports data on its antimicrobial stewardship program
 - HAI, SSI, antibiograms, antibiotic expenses, shortages, non-formulary utilization, antimicrobial annual cost
- 8. Hospital takes action on improvement opportunities identified in its ASP



ADDRESSING THE GAP: CORE ELEMENTS

Leadership Commitment Statement



HealthEast Care System Antimicrobial Stewardship Program Leadership Commitment Statement

August 25, 2017

The HealthEast Care System commits to creating a culture that promotes antimicrobial stewardship through the implementation of initiatives to optimize patient care and safety throughout the health system. Leadership (s committed to ensuring the implementation of the Center for Disease Control and Prevention (CDC) Core Elements for Antimicrobial Stewardship Programs (ASP). The seven core elements for ASP include leadership commitment, accountability, drug expertise, action, tracking, reporting, and education.

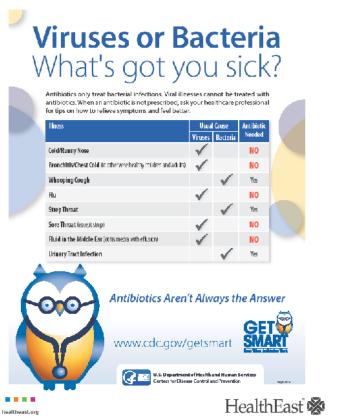
HealthEast leadership supports the efforts of the HealthEast Antimicrobial Stewardship (ASP) Committee. The ASP Committee will be an interdisciplinary team that develops and implements initiatives to ensure appropriate use of antimicrobial agents, develops strategies to proactively optimize antimicrobial use and improve patient outcomes, oversees implementation and utilization of computer-based surveillance to track ASP interventions, antimicrobial resistance patterns, antimicrobial use, expenses, and shortages. Susceptibility antibiograms will be reviewed. Evidence-based standing orders will be utilized. Policies, procedures, guidelines and standard operating procedures related to antimicrobials will be evaluated and updated to ensure compliance with the Core Elements. Educational tools will be developed for patients, family members, physicians, pharmacists, and nursing.



ADDRESSING THE GAP: PATIENT/FAMILY EDUCATION



Placed in all patient admission/experience folders/packets





ADDRESSING THE GAP: EDUCATION OF PATIENTS' FAMILIES, PUBLIC, AND EMPLOYEES OF HOSPITAL

Posters placed in waiting areas, lobbies, near elevators, etc.











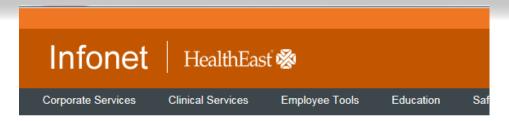






ADDRESSING THE GAP: PHYSICIAN EDUCATION





Home > For Physicians > Departments

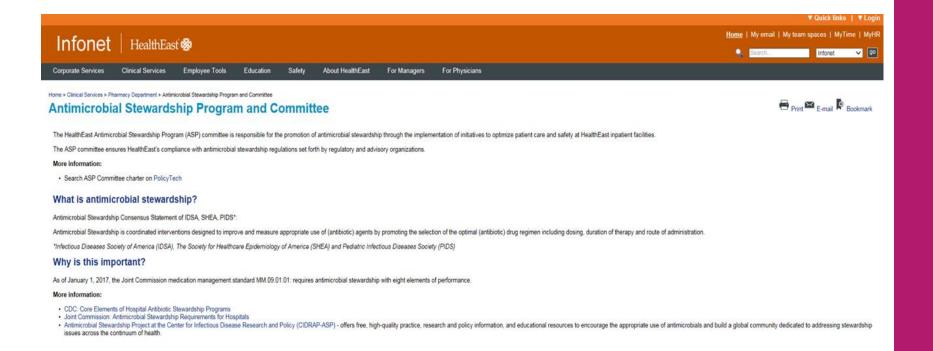
Departments

- Anesthesia
- Bioethics
- Compliance
- Credentialing
- · Dictation/Transcription
- Emergency
- · Heart Care
- Hospitalists
- Laboratory
- Ob/Gyn
- Pain Center
 - Pain Center referral form
- · Pulmonary and Critical Care
- Pharmacy
 - Antimicrobial Stewardship NEW!
- · Research and Education
- Spine Care
 - · Spine Center referral form
- · Spiritual Care
- Surgery and Trauma

For updates to this page, contact Infonet Administrator. Last modified on Thursday, April 13, 2017 9:46 AM



ASP RESOURCE PAGE





ADDRESSING THE GAP: PHYSICIAN EDUCATION

- CMS and JC information re: ASP requirements presented at all MD clinical councils
- WHO guidelines of post-op ABX no longer being required also brought to councils
- Newsletter articles



HEALTHEAST PROGRESS NOTES

ANTIMICROBIAL STEWARDSHIP

The HealthEast Antimi crobial Stewardship Program (ASP) committee is responsible for the promotion of antimicrobial stewardship through the implementation of initiatives to optimize patient care and safety at HealthEast inpatient facilities. The ASP committee ensures HealthEast's compliance with antimicrobial stewardship regulations set forth by regulatory and advisory organizations.

Antimicrobial stewardship refers to coordinated interventions designed to improve and measure appropriate use of antibiotic agents by promoting the selection of the optimal antibiotic drug regimen including dosing, duration of therapy and route of administration.



ADDRESSING THE GAP: PHYSICIAN, PHARMACIST, AND HOSPITAL STAFF EDUCATION





1st Quarter 2017

P & T Newsletter

Antimicrobial Stewardship Program (ASP)

The antibiotics with the highest total expense are daptom yein, vancom yein, piperacillin/tazobactam, ertapenem and isavuconazonium. Antibiotics that are experiencing supply problems include cefepime, ceftazidime and cefotetan. Ceftazidime/avibactam (Avycaz) was added to formulary with restriction to Infectious Disease. Vernlidy (tenofovir alafenamide furn arate) was added to formulary; cefixime was added with restriction for ED Sexual Assault Treatment order set. Auto-substitutions in the antibiotic class were reviewed and had several revisions.



ADDRESSING THE GAP: NURSING EDUCATION



ASP articles placed in nursing newsletters, ASP discussed at nursing committees, orientation, and at quarterly education

Antimicrobial Stewardship

What is antimicrobial stewardship?

Antimicrobial stewardship is the promotion of appropriate use of antibiotic therapy to prevent drug resistance, to preserve the effectiveness of antimicrobials, and to prevent or reduce adverse events associated with antibiotic use.

This is accomplished by selecting the most appropriate antibiotic, antiviral or antifungal for an indication, the appropriate dose, duration and route of administration.

Why is this important to nursing?

As of January 1, 2017, the Joint Commission medication management standard MM.09.01.01 now requires an antimicrobial stewardship program based on current scientific literature with eight elements of performance.

What can nursing do to help?

- Clarify and confirm patient allergies and reactions to aid in appropriate antibiotic selection.
- Confirm the antibiotic is necessary; what is the indication for the drug?
- Evaluate culture results.
- Ask about the duration of antibiotic therapy. Is there a stop date or duration of antibiotic therapy?
- Suggest changing from IV to PO if patient is able to tolerate oral therapy.
- Report any side effects or adverse reactions to antibiotics.
- Ask physician or pharmacists questions about indication, duration, route and patient cultures as needed.
 Also see the Antimicrobial Stewardship Information link for more information:

 $\underline{https://infonet.healtheast.org/clinicalservices/pharmacy/2125-antimicrobial-stewardship-program.html}$



ADDRESSING THE GAP: PHARMACIST EDUCATION

- Pharmacy Weekly Update
 - Clinical guideline, policy, auto-substitution, order set updates
- P and T Newsletter
- Pharmacist and Pharmacy Team monthly meetings
- Infonet pharmacy page
- Team Space
- Orientation
- ID Rounds Documentation and Process Competency
 - Standard Operating Process for ID Rounds



ASP EDUCATION: PHARMACIST - INFONET AND TEAM SPACE INFORMATION



Pharmacy Clinical Resources

Formulary reference documents

· Antibiotic formulary 2017

Miscellaneous resources

· Antibiogram (short-term acutes and Bethesda)

Standard work

- · Cycle counts
- . ID rounds documentation NEW!
- ID rounds documentation St. Joseph's NEW!
- ID rounds I-Vent documentation NEW!
- Insulin restocking
- IV room shift cleaning
- · Neonate methadone
- · Preparation of alteplase (TPA) for stroke patients

Resources for Pharmacy staff

- · 2016 Pharmacy Annual Report
- · All newsletters
- · Orientation tools
- Antimicrobial Stewardship NEW!

Welcome to the HealthEast Pharmacy Team Space!





INFECTION PREVENTION AND CONTROL'S ROLE IN ASP

- ASP Committee member
- Identifies, monitors and reports MDRO trends; tracks newly emerging resistance
- Monitors, analyzes and reports HAIs
- Partners with healthcare personnel to achieve highly compliant standard and transmission-based precautions practices aims at preventing cross transmission of pathogens
- Implements best practice bundle to reduce the risk of device or surgical procedure associated HAIs
- Incorporates stewardship activities into annual infection prevention risk assessment, based on the facility antibiogram, outbreak investigations, and antimicrobial/microbe focus reviews
- Partners with Environmental Services with proper cleaning protocols
- Monitors hand hygiene compliance and reports to frontline staff



INFECTION PREVENTION AND CONTROL'S ROLE IN ASP



Health alerts and advisories

IPC Resources

JC/CMS Survey readiness

Policies and procedures

Shared initiatives

Surveillance data



Home > Clinical Services > Infection Prevention and Control

Infection Prevention and Control

The Infection Prevention and Control/Epidemiology Department provides epidemiologic expertise in infection prevention and control through education, assessment, investigation and consultation.

- Purpose: To provide timely and easily accessible information that can assist with protecting patients and health care personnel from adverse events caused by infectious agents.
- Goal: To improve the quality and safety of health care through the practice of infection prevention and control and the application of health care epidemiology in all settings.
- Mission: To minimize the risk of infection and promote the safety of patients, visitors and health care workers through prevention.



FUTURE OPPORTUNITIES

- Improved documentation of ID rounds in Epic
- Tracking days of therapy (DOT)
- Continued education of healthcare professionals

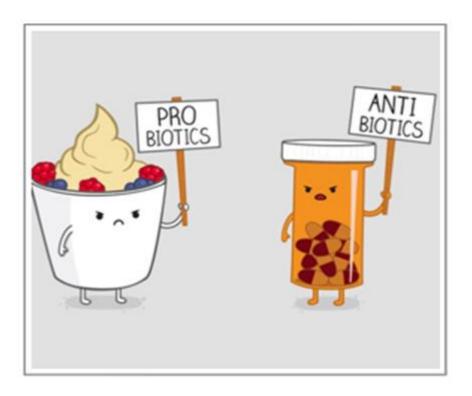


SUCCESSES

- Close working relationship with ID providers
- Other providers ask for and/or anticipate/expect ID Rounds to be completed
- Historical high acceptance rate of ID Rounds recommendations (94%)
- Development of Antimicrobial Stewardship Program Handbook that holds ASP-related documents for ease of locating for Joint Commission (Joe Dula's presentation 12/16)
- Education documents developed; future education plans
- ASP resource page developed and available from different sections on Infonet
- Indications for antibiotics to be required at order entry



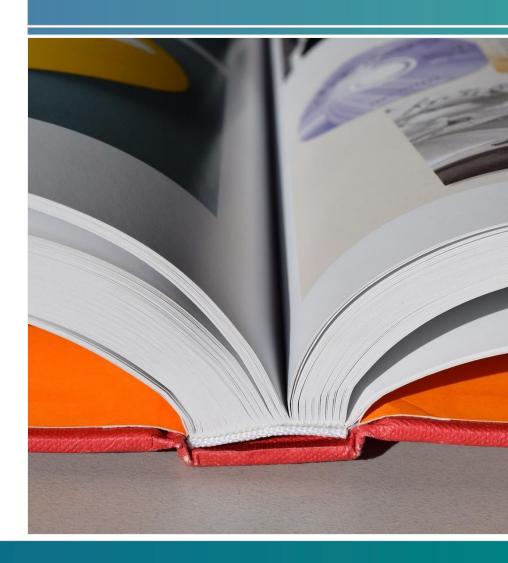
QUESTIONS?







Resources & ASP 101 Reminders

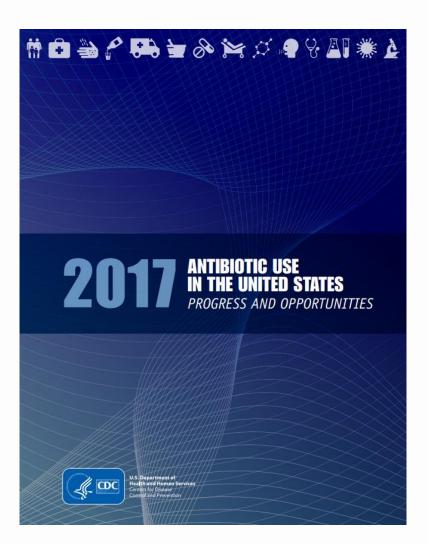


Stoplight Tracking Tool

	Antimicrobial Stewardship Program (ASP) CY 2017										
Last Update {insert date}		June July August Sept. O. Fill in the chart for each month on implementation of each cor not complete; sellow = in or completed	to track progress re element. red =									
Leadership Support												
	Formal written statement of ASP from facility leadership		A	1:164 11: D	()	CD)	757 3/	17				
Accountability	Budgeted ASP financial support		An	imicrobial Stewardship Pr	ogram (A	SP) (Y 20	01/				
	facility					_	_					
Drug Expertise		ist Update {insert date}				June	July	August	Sept.	Oct. N	ov. D	ec.
	Pharmacist leader responsible for working to improve antibiotic use wi facility (e.g. antibiogram driving formulary selection)					Fill in th	he chart f	or each mon	th to track	progress o	n impleme	entation
Actions to support optimal	Key support for ASP (e.g. Clinicians, IP/Epi, Quality, lab, IT, Nursing, ar					of each	core ele	ment. red =	not comp	ete:	= in prog	gress:
ATB use									n = comple			
Policies	Policy that requires prescribers to document in EMR the dose, duration	eadership Support		The state of the s				g- 0.0	pic			
	indication for all prescribed antibiotics Facility-specific treatment recommendations, based on national guideling	77	Formal mais	en statement of ASP from facility leadership		T	T		T			
	local susceptibility, to assist with antibiotic slection for common clinics	œ				+	+	_		-	_	
	conditions (e.g. care pathway for sepsis/clostridium difficile, bacterial		Budgeted A	SP financial support								
	pneumonia, UTI, and etc.)	ccountability										
Broad Interventions	Antibiotic time out within 48 hours of ATB initiation to review appropr		Physician le	ader responsible for program outcomes of ASP activitie	s within facility							
	of therapy Specified agents require special approval by physician or pharmacist puse (e.g. Colistin)	rug Expertise										
	Prospective specified ATB audit with provider specific feedback (e.g. approved ATB with CDI)	-		eader responsible for working to improve antibiotic use driving formulary selection)	within facility (e.g.							
Pharmacy-Driven	Auto conversion from IV to oral ATB in appropriate situations		Key suppor	for ASP (e.g. Clinicians, IP/Epi, Quality, lab, IT, Nursi	ng, and etc.)							
	Dose adjustment during organ disfuntion Dose optimization (pharmacokinetics/pharmacodynamics) to optimize treatment of organisms with reduced susceptibility	ctions to support optimal ATB										
	Automatic alerts in situations where therapy might be unnecessarily dup	olicies		equires prescribers to document in EMR the dose, dura	tion and indication	T	T					
	Time-sensitive automatic stop orders for specified antibiotics	nicles		ribed antibiotics	doit, and marcadon							
		C 25		ific treatment recommendations, based on national guid	-E 111	+	+	+		_	_	
Diagnosis and Infection Specific Interventions	Specific interventions in place to ensure optimal use of antibiotics to tr following common infections:											
specific interventions	Community-acquired pneumonia			, to assist with antibiotic slection for common clinical co								
	Urinary Tract Infection		pathway for	sepsis/clostridium difficile, bacterial pneumonia, UTI, a	nd etc.)							
	Skin and soft tissue infections											
	Surgical Prophylaxis	road Interventions	Antibiotic tir	ne out within 48 hours of ATB initiation to review appro	priateness of							
	Empiric treatment of MRSA		therapy									
	Non CDI antibiotics in new cases of CDI			ents require special approval by physician or pharmacis	t prior to use (e a	1						
Prescribing, use, and	Culture-proven invasive (e.g. blood stream) infections		Colistin)									
resistance				specified ATB audit with provider specific feedback (e	σ use of annroved	1	_					
Process Measures	AS Program monitors adherence to a documentation policy (dose, dura		ATB with C		b. ale of approved							
	AS Program monitors adherence to facility-specific treatment recomme AS Program monitors compliance with one or more of the specific inter	narmage Drivon				+	+	_	_	_	-	
measures	Facility tracks rates of CDI infection	narmacy-Driven		sion from IV to oral ATB in appropriate situations		1	_	-				
ATB consumption monitored	Facility produces an antibiogram and adjusts formulary recommendatio	-		nent during organ disfuntion	-201							
at the facility or unit level	Counts of ATBs administered to patients per day (Days of Therapy; DI	Dose optimizati		ration (pharmacokinetics/pharmacodynamics) to optimiz	te the treatment of							_
	Number of grams of antibiotics used (Defined Daily Dose; DDD)		organisms v	ith reduced susceptibility								
Reporting Information to Staff on Improving Antibiotic Use and Resistance	Direct expenditure for antibiotics (purchasing costs)		Automatic a	lerts in situations where therapy might be unnecessarily	duplicative							
	AS Program shares facility specific reports on ATB use with providers			II								
	Current antibiogram is distributed to prescribers at facility											
	Prescribers receive direct, personalized communication about how they can improve their ATB prescribing											
Education	Improve their ALD prescribing			1								
	AS Program provides education to clinicians and other relevant staff on improving ATB prescribing			Available at http://	hanana ma	hacn	itala	ora/a	uali+	na+	ont	
				- AVOUODIP OI NTTD://	WWWW INN	いいへり	111115	OIIIIIIII	m	-111111	P/111-	

Available at http://www.mnhospitals.org/quality-patientsafety/quality-patient-safety-initiatives/antibiotic-stewardship

CDC Antibiotic Stewardship Report



EVERYONE HAS A ROLE TO PLAY IN IMPROVING ANTIBIOTIC USE



Healthcare providers

- $\hfill \Box$ Follow clinical guidelines when prescribing antibiotics.
- Use the right antibiotic, at the right dose, for the right duration, and at the right time.
- Talk to patients and families about when antibiotics are and are not needed, and discuss possible harms such as allergic reactions, Clostridium difficile (C. difficile), and antibiotic-resistant infections.
 - Ask patients if they have ever had a C. difficile infection, and tailor antibiotic treatment accordingly.
- Be aware of antibiotic resistance patterns in your facility and community; use the data to inform prescribing.
- Follow hand hygiene and other infection prevention measures with every patient.



Patients and families

- Talk to your healthcare provider about when antibiotics will and won't help, and ask about antibiotic resistance.
- Talk to your healthcare provider about how to relieve symptoms.
- Ask what infection an antibiotic is treating, how long antibiotics are needed, and what side effects might happen.
 - Take antibiotics only when prescribed and exactly as prescribed.
 - Don't save an antibiotic for later or share the drugs with someone else.
- Insist that everyone cleans their hands before touching you.
- Stay healthy and keep others healthy by cleaning hands, covering coughs, staying home when sick, and getting recommended vaccines.



Health systems, hospitals, clinics, and nursing homes

- Adopt and implement antibiotic stewardship policies and strategies, including CDC's Core Elements of Antibiotic Stewardship.
- Designate staff members to coordinate antibiotic stewardship activities.
- Monitor antibiotic prescribing data to identify areas for improvement, and assess the impact of antibiotic stewardship efforts.
- Educate staff about antibiotic resistance and strategies to optimize antibiotic prescribing.



Healthcare quality organizations

- Develop and implement standards requiring antibiotic stewardship programs and practices.
- Develop and adopt standards measuring the success of antibiotic stewardship programs and practices.



Health insurance companies

- Incentivize implementation of antibiotic stewardship programs and practices.
- Use clinical performance data on quality measures for appropriate prescribing, such as the Healthcare Effectiveness Data and Information Set (HEDIS®)



Healthcare provider professional organizations

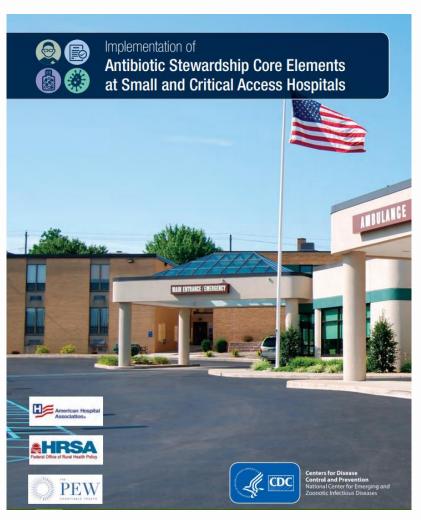
- Create and share clinical practice guidelines for the diagnosis and management of common conditions.
- Incorporate antibiotic stewardship principles into antibiotic use quidelines.
- Provide continuing medical education opportunities about antibiotic stewardship for members.
- Bolster national, local, and regional initiatives
 promoting appropriate antibiotic prescribing and use.
- Highlight new research and technologies to support antibiotic stewardship.



Federal, state, and local health

- Set expectations for the implementation of antibiotic stewardship activities across the spectrum of health care.
- Provide data and tools to help guide stewardship activities.
- Connect local stakeholders and coalitions.
- Support partners, healthcare providers, and patients through development and dissemination of educational resources.
- Support innovations and research, such as diagnostic test development, that facilitate optimal antihiotic use.

New CDC Implementation Guide



Core Elements 1 and 2: Leadership Commitment/Accountability

Leadership commitment by hospital executives and board trustees in small and critical access hospitals is important to ensuring allocation of the necessary resources to support antibiotic stewardship programs. Obtaining leadership commitment from the chief medical officer (CMO), pharmacy director, and nursing leaders can facilitate physician, pharmacist, infection preventionist, and nurse engagement to implement stewardship initiatives to create a strong and sustainable program.

Examples of implementation strategies:

- Designate a physician (e.g.,CMO) in the C-suite or individual that reports to C-suite to be accountable for the outcomes of the antibiotic stewardship program.
- Approve a policy for the creation and/or expansion of the antibiotic stewardship program
 to include all core elements.
- Integrate stewardship activities into ongoing quality improvement and/or patient safety
 efforts in the hospital (e.g., efforts to improve sepsis management)
- Create a reporting structure for the stewardship program to ensure that information
 on stewardship activities and outcomes is shared with facility leadership and the hospital
 board (e.g., semi-annual stewardship update at the board meeting).
- Issue a formal board-approved statement on the importance of the antibiotic stewardship program and include in the hospital's annual report.
- Issue a statement from the hospital leadership (e.g., medical, pharmacy and nursing) to all providers and patients highlighting the hospital's commitment to improving antibiotic use.
- Support training for hospital stewardship leaders on antibiotic stewardship through on-line or in-person courses.

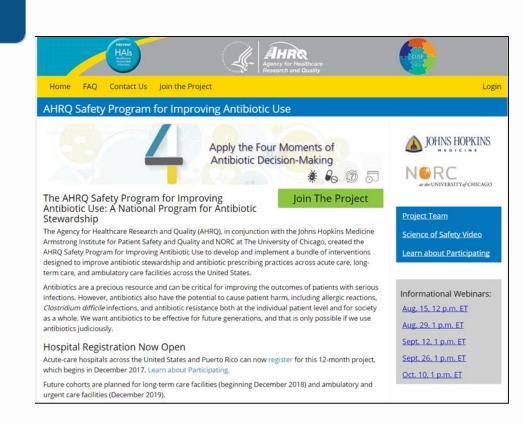


https://www.cdc.gov/getsmart/healthcare/pdfs/core-elements-small-critical.pdf

AHRQ Safety Program for Improving Antibiotic Use

Participant benefits:

- NO cost to participate!
- Entire facility or individual units able to participate
- Access to 1:1 coaching from national experts
- Access webinars, e-learning modules, and toolkits to support effective ASP
- Access patient and family educational materials about antibiotic use
- Create an ASP that works for your facility



AHRQ Safety Program for Improving Antibiotic Use

August 2017 registration opens 3 month baseline data collection (Jan – Mar)

December 2017 first cohort begins 9 month intervention period (Apr – Dec)

For more information or to register for an informational webinar, visit

www.safetyprogram4antibioticstewardship.org

ASP 101 Reminders

MHA/OHA Acute Care ASP 101 Implementation Timeline

Phase 1: CDC Core Elements 1-3

Action Items

July 2017

June 2017

Events

 June 20 - ASP 101 Kick off webinar - overview of ASP initiative across the continuum of care Homework Review Kansas DOH ASP Toolkit for Rural and Critical Access Hospitals pg. 1-14 	 July 11 - MHA/OHA collaborative webinar "Leveraging the EMR to Promote ASP activities" (Register online) □ Develop an ASP team □ Draft a leadership ASP statement of support (example provided) Due □ ASP team in place □ Leadership ASP statement of support for your facility 				
Phase 2: CDC Core Element 4					
August 2017	September 2017				
Events	Action Items				
 Aug. 8 - ASP 101 Sharing call and presentation, "TJC ASP Lessons Learned" (Register online) Homework Review Kansas DOH ASP Toolkit for Rural and Critical 	 Sept. 12 - MHA/OHA Collaborative Webinar (Register online) Based on the facility ASP statement of support draft an ASP policy that supports optimal antibiotic use (example provided) 				
Access Hospitals Pg. 15-24	Due ☐ Facility specific ASP policy and procedure				

ASP 101 Resources – CDC Core Element 4

Homework

- Review ASP Toolkit for Rural and Critical Access Hospitals pages 15-24
- Action Item: Using the sample provided create an ASP policy that supports optimal antibiotic use.
 - Utilize specific interventions that can be divided into three categories: broad, pharmacy driven, and infection and syndrome specific.
 - <u>Caution:</u> Avoid implementing too many policies and interventions simultaneously
 - Prioritize interventions based on the needs of the hospital as defines by measures of overall use and other tracking and reporting metrics (example: increased rates of Healthcare Onset CDI)

Supplemental Resources

- OHA/MHA ASP Collaborative kick-off webinar recording on building your ASP binder: https://www.youtube.com/watch?v=o2eqTW6lMRg&feature=youtu.be
- ASP Policy Example:

 http://www.wsha.org/wp-content/uploads/Antimicrobial-Stewardship ASP Policy and Procedure Sample.pdf
 - ASP Program Evaluation Checklist: https://www.va.gov/oig/pubs/VAOIG-15-04247-111.pdf

Thank you for joining us!

Next Webinar:

"Antibiotic Use and Resistance Tracking and Reporting Strategies"

Tuesday, October 10 at 11:30am CST/ 12:30pm EST

Register online:

https://zoom.us/webinar/register/466c27072ad 403ca8c34be5db4a05ad8