KHC Office Hours for Compass HQIC

November 24, 2021

COMPASS | HOSPITAL QUALITY IMPROVEMENT CONTRACTOR

Kansas Healthcare COLLABORATIVE

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Agenda

- Welcome and Announcements
- ***Antibiotic Stewardship – Practical Implementation for Kansas Facilities***
- Compass HQIC: Data and Program Updates
- Resources, Upcoming events and Next Steps

BE ANTIBIOTICS AWARE
SMART USE, BEST CARE

This is
U.S. Antibiotics Awareness Week
November 18-24

#BeAntibioticsAware
#UseAntibioticsWisely

November 24, 2021

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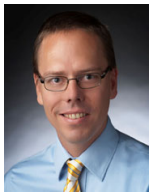
Presenters

Michele Clark
KHC Senior Director of Quality Initiatives & Special Projects



Eric Cook-Wiens
Data & Measurement Director

Heidi Courson
Quality Improvement Advisor

Erin McGuire
Quality Improvement Advisor

Special guests: KDHE HAI/AR Program

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Objectives

1. Review the state of antimicrobial stewardship programs in KS
2. Evidence in support of antimicrobial stewardship
3. Review the core elements of inpatient stewardship
4. Identify and strategize how to overcome stewardship challenges

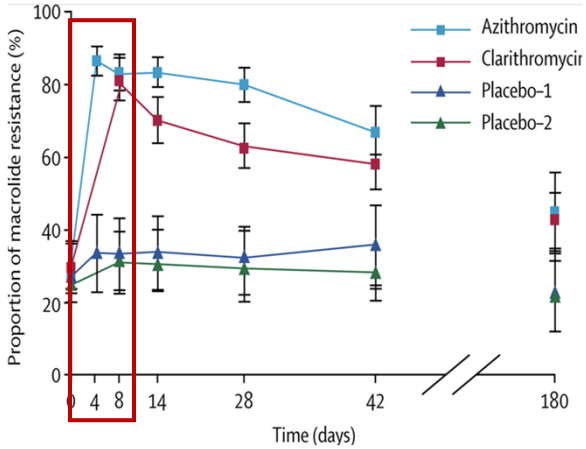
Why Focus on Antibiotics?

Antibiotic use contributes to:

- Antibiotic resistance (AR) : **use it AND lose it?**
  - In as quickly as 4 days, 3x increase resistance pneumococcus in throat swabs while on macrolide vs. control
  - AR = increased costs (MDROs compared to susceptible **prolong hospitalizations 24%, costs 29%**)
- Adverse events (e.g., #1 cause ED visits from meds)
- Collateral damage (e.g., *C.diff*)

Pennsylvania HealthCare Cost Containment Council. Jan 2010
http://www.phc4.org/reports/hai/10/docs/hai2010report.pdf
Maudlin et al. Antimicrobial Agents and Chemotherapy. 2010; 54(109-15.

Changes in macrolide-resistant pneumococcus while on macrolides compared to placebo (no abx)



Roberts et al. Clinical Infectious Diseases. 2009;49:1175-84.
Malhotra-Kumar S, et al Lancet 2007;369(9560):482-90.

Toll of Antimicrobial Resistance

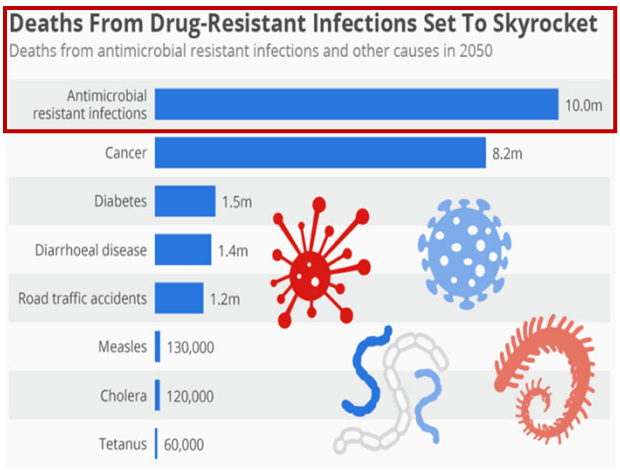
AR annually contributes to:

Deaths
- 35,000 (US)
- 700,000 (global)

Infections (MDROs)
- 2.8 million (US)
- 10 million (global)
- 453,000 *C.diff* infections → 30,000 deaths (US)

Costs
- $55 billion added costs (US)
- $100 trillion (global)

equiv. to a 2008 financial crisis every year



Worldbank; Smith R, Coast J., The true cost of antimicrobial resistance. BMJ 2013(346)
O'neill J. Tackling drug-resistant infections globally - AMR review. 2016; https://amr-review.org/sites/default/files/160518_Final%20paper_with%20cover.pdf
CDC Threats Report 2019; https://www.cdc.gov/drugresistance/pdf/threats-report/2019-ar-threats-report-508.pdf.

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Antibiotic Resistance Impact

Carbapenem Resistant Enterobacterales (CRE)
(e.g., E.coli, Klebsiella, Proteus, Enterobacter)

- 3-4 fold increased mortality (vs susceptible infections)
- 60% mortality for CRE BSI
- 2 fold higher risk discharge to SNF
- $22-66k per CRE infection (hospitals, $37k-83k societal costs)
- $130 million attributable HC costs

Gasink L., et al. ICHE 2009;30(12):1180-85
Tamma P., et al. CID 2017;64(3):257-64
Antonanzas F., et al. 2015;33(4):285-325
Bartsch S., et al. CID 2017;23(1):48:e9-48.

Carbapenem Resistant Acinetobacter baumannii (CRAB)

Ubiquitous in nature, can survive for surfaces on wks → prolonged outbreaks, patient-staff movements b/w HCWs
WHO critical pathogen for abx development

- 5 fold increase mortality risk
- 70% mortality for CRAB BSI (28-day)
- 50% Acinetobacter infections are MDR
- $130,000 (2016 est.) additional per infection

Nelson R., et al. ICHE 2016;37(10):1212-18.
Spellberg B., et al Nat Rev Drug Discov 2013;12:963
Kim T., et al. Medicine. 2018;97(43):e12984.

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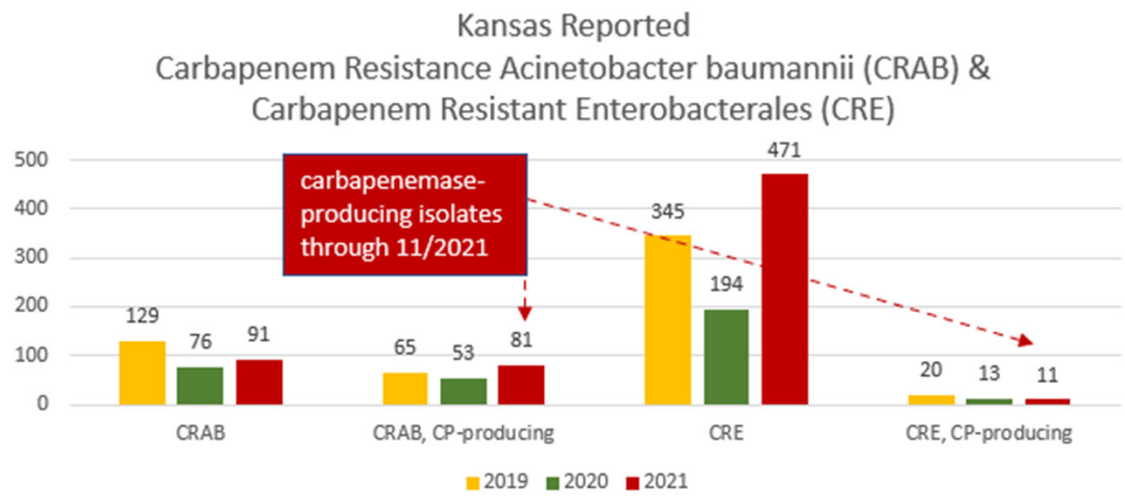
Regional Antibiotic Resistance Trends



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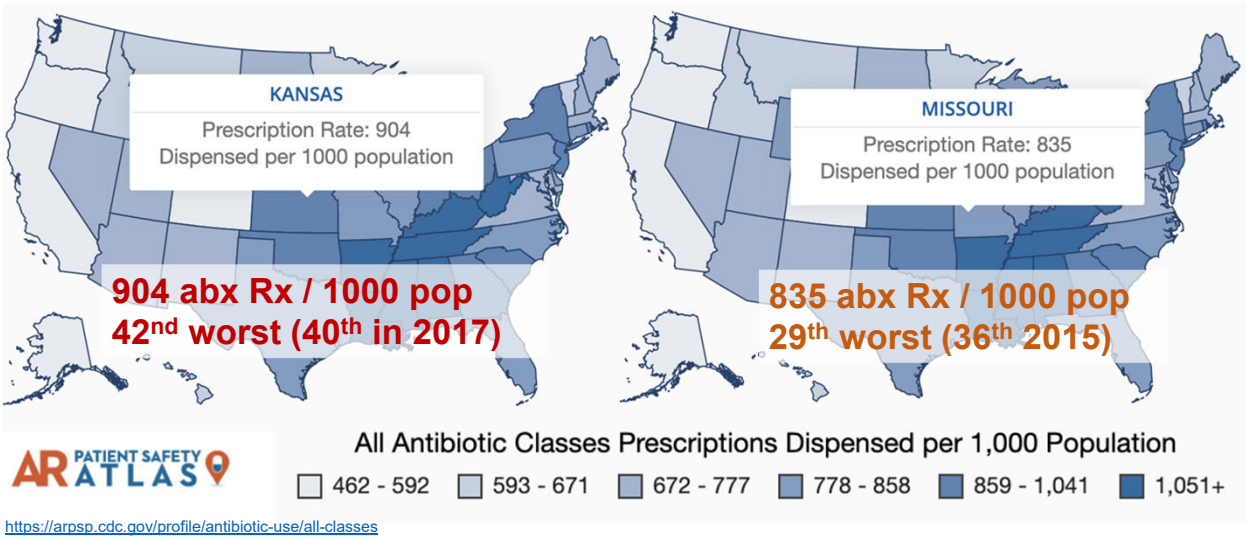
Current State(s): Outpatient Antibiotic Use



https://arpsp.cdc.gov/profile/antibiotic-use/all-classes

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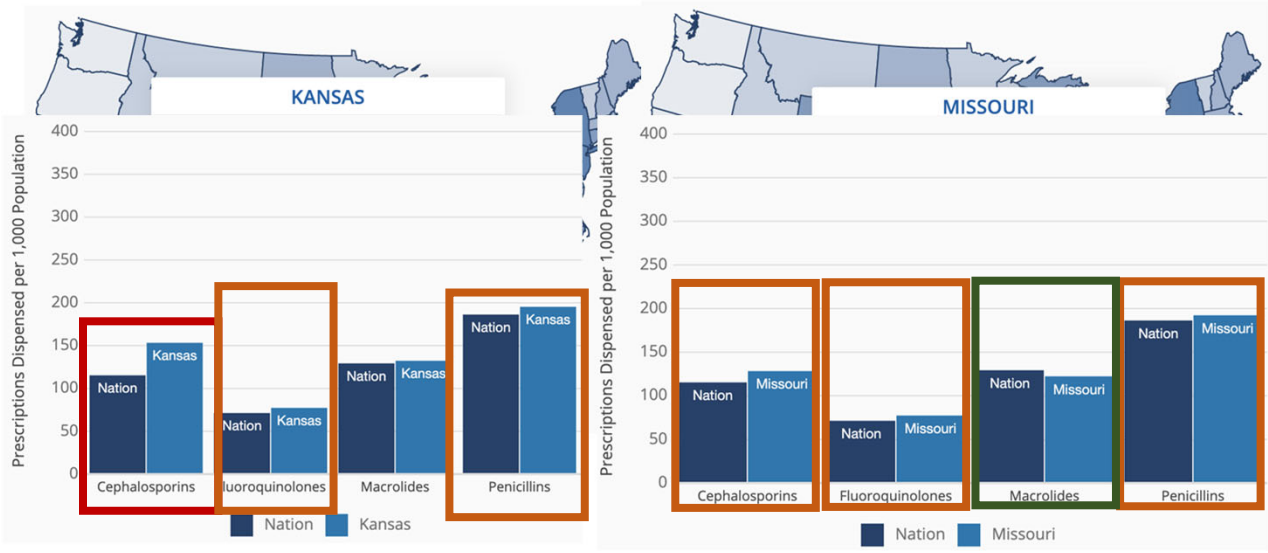
Current State(s): Outpatient Antibiotic Use



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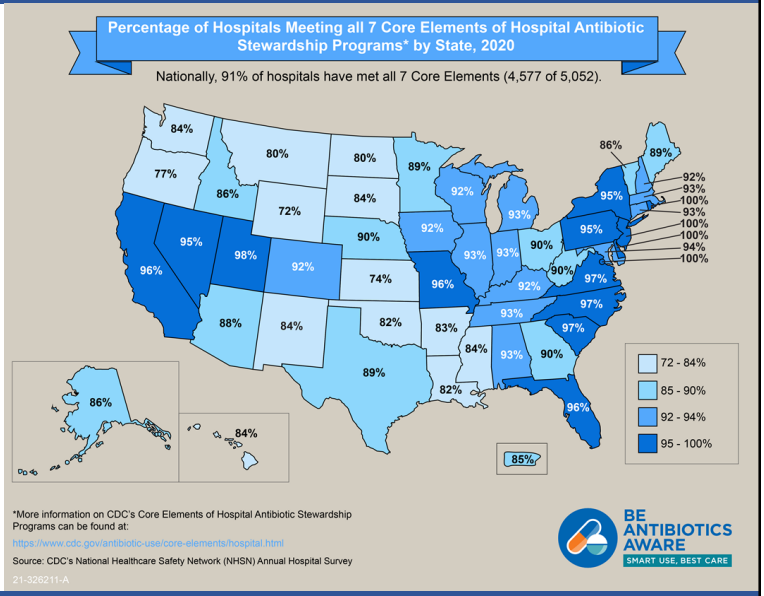
Current State(s): ASP Core Elements Fulfilled

7 Core Elements of a Hospital Antibiotic Stewardship Program

1. Hospital Leadership Commitment
2. Accountability
3. Pharmacy Expertise
4. Action: Implement Interventions to Improve Antibiotic Use
5. Tracking Antibiotic Use and Outcomes
6. Reporting Antibiotic Use and Outcomes
7. Education

CDC Resources:
Core Elements of Antibiotic Stewardship
https://www.cdc.gov/antibiotic-use/core-elements/index.html
- Hospital
- Outpatient
- Nursing Homes
- Small and Critical Access Hospitals
- Resource-limited Settings



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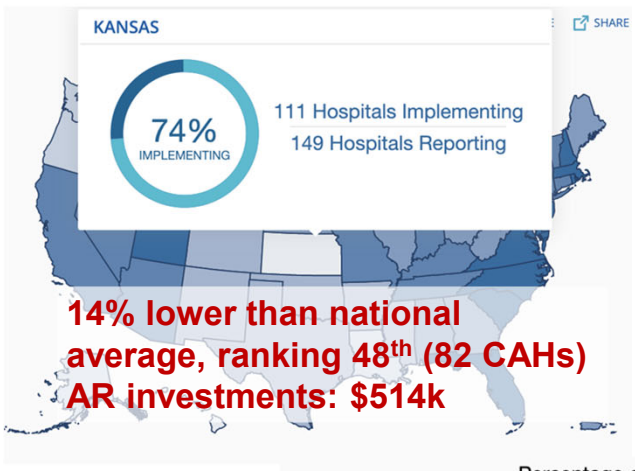
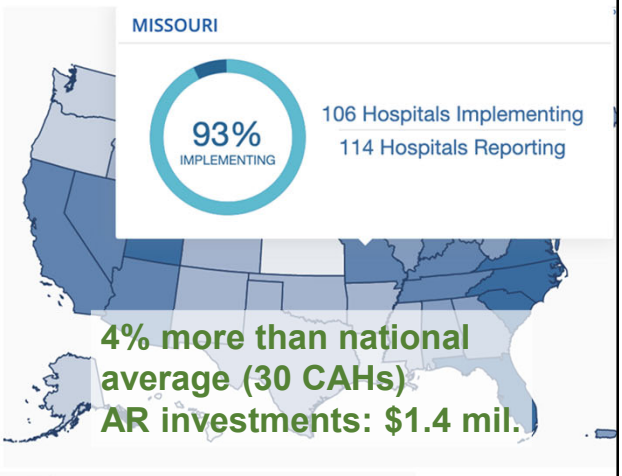
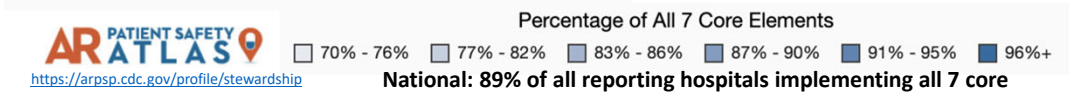
Current State(s): ASP Core Elements Fulfilled





14% lower than national average, ranking 48th (82 CAHs)
AR investments: $514k

4% more than national average (30 CAHs)
AR investments: $1.4 mil.



https://arpsp.cdc.gov/profile/stewardship

National: 89% of all reporting hospitals implementing all 7 core

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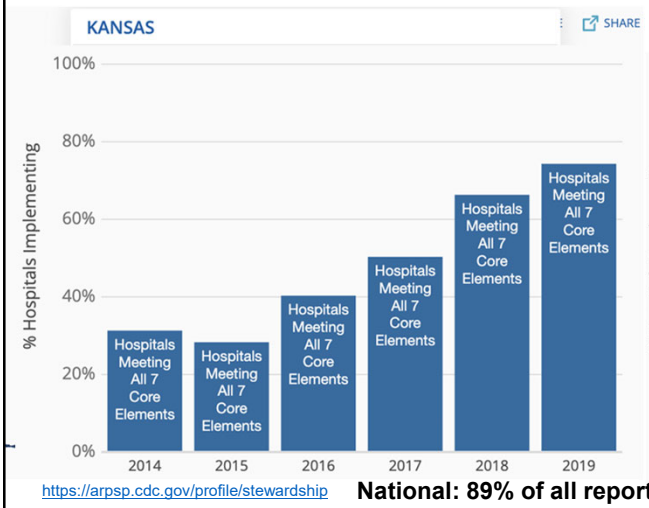
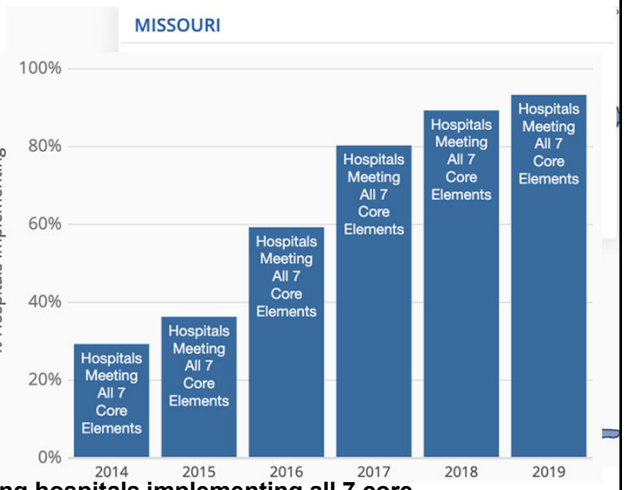
Current State(s): ASP Core Elements Fulfilled





https://arpsp.cdc.gov/profile/stewardship

National: 89% of all reporting hospitals implementing all 7 core

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How Much Could COVID-19 Drive AMR?

BACTERIAL coinfection in COVID-19 infected ....yet.... Received ANTIBIOTICS

3.5-3.9% in moderately ill	59.4%
8.3-14.3% severely ill	83.3%
34.5% critically ill	92.9%

How much **can** antibiotics increase antibiotic resistance?

Ceftriaxone	Fluoroquinolones	Carbapenems
↑ 15-fold ESBL*	↑ 8-fold ESBL	↑ 6-fold CRE
↑ 4-fold ampC*	↑ 4-fold CRE*	↑ 28-fold CRAB*

*ESBL=extended spectrum beta-lactam
*ampC=ampC beta-lactamase
*CRE=carbapenem resistant enterobacterales
*CRAB=carbapenem resistant *A.baumannii*

Langford et al. Microbiol Infect 2020
Feng Y et al. Am J Respir Crit Care Med 2020
Zhu X., et al Virus Res 2020
Goyal D et al Open Forum Infect Dis 2019
Zerr D et al Antimicrob. Agents & Chemotherapy 2016
Jeon M. et al . Diagn Microbiol Infect Dis 2008
Falagas J Antimicrob Chemother. 2007

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Evidence in Support of AS: Antibiotics & Savings

- 81% reported decrease in antibiotic use (60 programs, Cochrane)
- 22-36% reduction in antibiotic usage
- 25% average cost reduction (27/29 studies)
- $200,000 – 900,000 savings (large-medium hospitals)

Cochrane Database Syst Rev. 2005(4):CD003543.
Patel D., et al. Expert Review of Anti-Infective Therapy. 2008;6:209-22.

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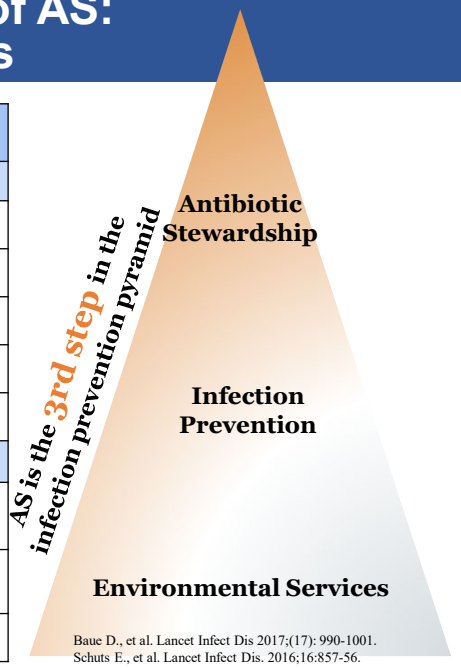
Evidence in Support of AS: AMR & Outcomes

Outcome	No. studies	% Reduction (IR, 95% CI range)
Meta-analysis of 32 studies of ASPs in 20 countries from 1960-2016		
MDR-Gram Negative Incid.	19	51% (0.49, 0.35-0.68)
CR-A.baumannii (CRAB)		56% (0.44, 0.17-1.13)
CR-K.pneumoniae (CRE)		48% (0.52, 0.13-2.09)
MRSA Infection & Colonization	17	37% (0.63, 0.45-0.88)
C.diff infections	11	32% (0.68, 0.53-0.88)
Systematic review of 145 studies		
Mortality (guideline-adherence empiric tx)	19	35% (0.65, 0.54-0.80)
Mortality (de-escalation interventions)	19	56% (0.44, 0.30-0.66)
Nephrotoxicity	13	50% (0.50, 0.29-0.80))



Baue D., et al. Lancet Infect Dis 2017;(17): 990-1001.
Schuts E., et al. Lancet Infect Dis. 2016;16:857-56.

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ASP Goals

Targets:

- Improve abx prescribing
- Measure prescribing
- Minimize mis-dx or delayed diagnostics contributing to abx overuse
- Ensure the right drug, right dose & right duration are selected when an abx is needed

Goals:

- More prudent abx use → less resistance
- Reduce adverse events
- Reduce morbidity
- Reduce mortality

Barlam T., et al . CID 2016; 15(62)(10): e51-77. 51
MacDougall C et al. Clin Micro Rev 2005; 18(4): 638-56
Dellit T., et al. CCID 2007; 44:159-177

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Core Element 1-2: Commitment & Accountability

Leadership support

Dedicate necessary human, financial, & IT resources

Owners, governing boards, admin., medical, pharmacy & nursing directors

Single greatest predictor of whether or not KS facilities have an established ASP

- Barriers
  - Financial/resources
  - Lack of awareness
- Goal of AS leader to emphasize value (costs + outcomes) & once est. important to remind leadership of AS values, gains

Barlam T et al CID 2016; 15(62):e51-77.
Kansas Department of Health and Environment. 2018 Hosp AS workshop survey. 2018, unpublished.

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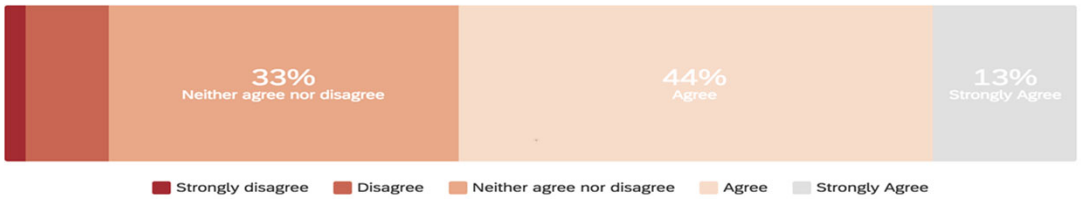
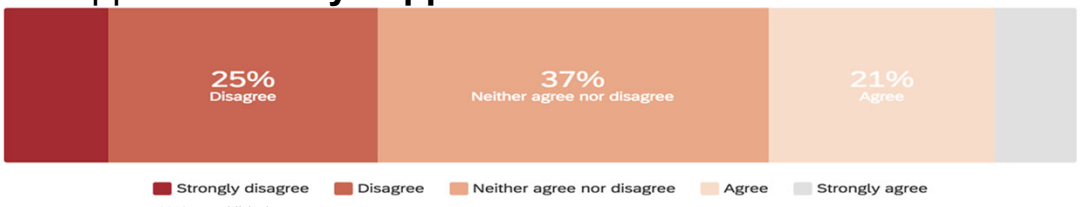
Challenges

- Kansas facilities perceptions of **leadership commitment**



- Support for **salary support** dedicated to AS activities



KDHE CAH ASP survey, 2018. Unpublished

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Core Elements 1-2: Accountability & Commitment

- ✔ Appoint the leader & co-leaders
  - Physician, APRN, PA, PharmDs
  - Practice managers, nurse managers
- ✔ Respected, esteemed
  - ID or abx knowledge
  - If/when co-led, ensure clearly delineated roles
  - Responsible for program management & outcomes
- ✔ Informal leaders
  - Influence peers' attitudes & behaviors
  - Can make or break your program

Barlam T et al CID 2016; 15(62):e51-77.
Flodgren G, Cochrane Database Syst Rev 2019;24;6.
Grol R et al Lancet 2003;362(9391):1225-30

Examples of ASP Accountability

- Oversight by governing body
- **Leadership training**
- Med director sets **standards for prescribing**
- Nursing director ensures nursing staff engaged, aware of ASP activities & goals
- Pharmacist reviews & audits
- Micro provides surveillance data (i.e., antibiogram)
- Hospital or clinical quality measures as AS goals

Examples of Commitment

Priority examples

- Leader given **time** to manage program & conduct interventions
- **Resource** allocation (staff, IT, marketing, education)
- **Formal statements** of commitment (e.g., include in annual reports)
- Appoint hospital or clinic executive to be **AS "champion"**, ensure med director participates

Other examples

- Set clear **expectations** for **leadership & staffing** (include in contracts, job descriptions upon hire) & **responsibilities & outcomes**
- **Create a culture** around optimal abx use (messages, newsletters, emails, ongoing communique)
- Allocation of **educational time & resources** to clinicians, staff, patients

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Social Media Toolkit:
https://www.khconline.org/files/USAAW-2020-images.zip

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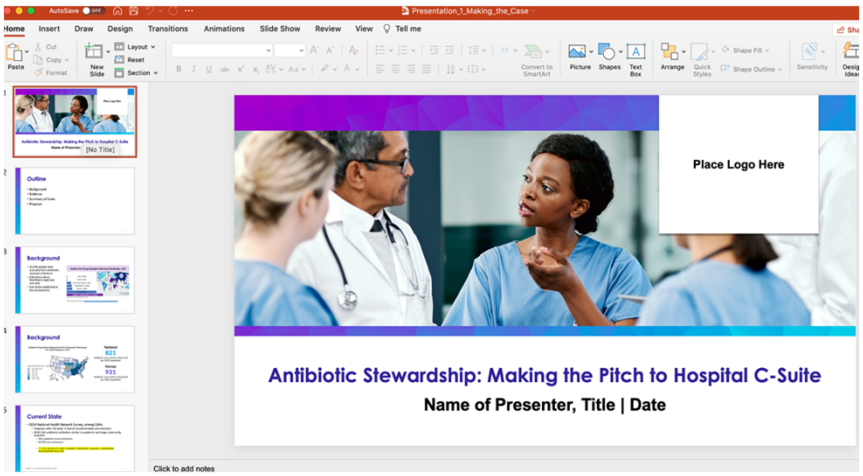
Tools: Presentation for Leadership



- State/local background, CMS regulations etc.
- Editable to your facility
- Costing estimators for ASP proposals
- Cost saving projections
- Goals / benefits to facility, individual, society

Download

https://www.kdheks.gov/epi/hai/CAH_Toolkit/Presentation_1_Making_the_Case.pptx

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Tools: Nudging

Commitment posters

- Accountability when faced with pressure during the visit
- 20% reduction in inappropriate abx (RCT of 5 clinics)

Meeker D et al JAMA. 2014;174(3):425-31.
Kufel W, Open Forum Infect Dis 2018;5(suppl1:S527.

English customizable poster: http://www.khconline.org/files/POSTER-UseAntibioticsWisely11x17.pdf
Spanish poster: https://www.khconline.org/files/POSTER-UseAntibioticsWisely24x36_SPANISH.pdf

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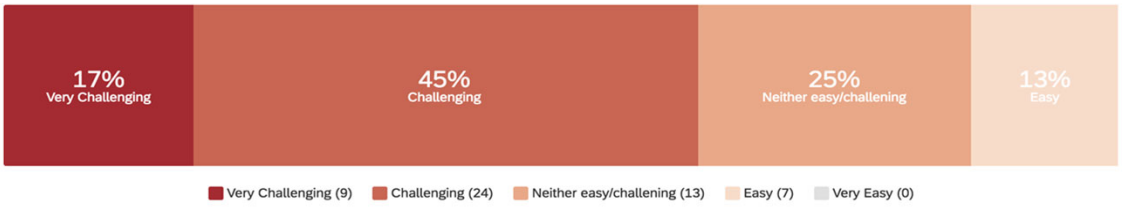
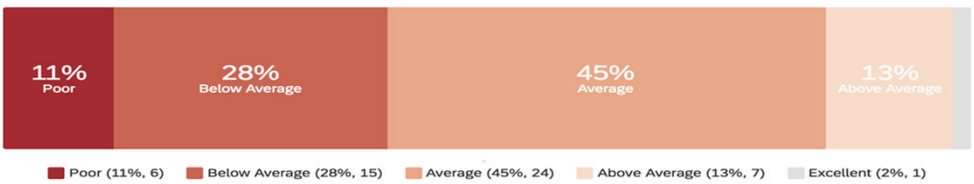
Challenges

- Kansas facilities perceptions of **establishing** an ASP



- Perceptions of **implementation**



KDHE CAH ASP survey, 2018. Unpublished

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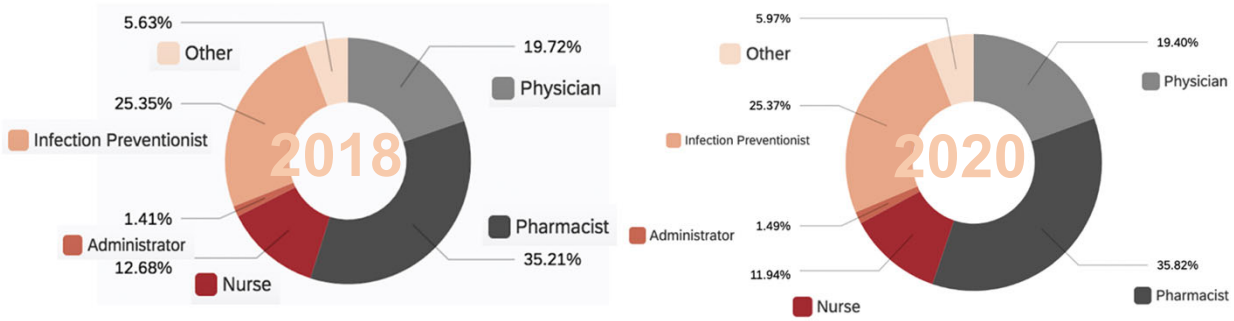
Core Element 3: Expertise

- Appoint a leader with antibiotic expertise, or dedicate education
- Challenges: a general shortage of infectious disease and pharmaceutical experts



Barlam T et al CID 2016; 15(62):e51-77.
Flodgren G, Cochrane Database Syst Rev 2019;24;6.
Grol R et al Lancet 2003;362(9391):1225-30
KDHE CAH ASP survey, 2018
KDHE IP ASP survey, 2020

Examples: Expertise

MAD-ID (Making a Difference in Infectious Disease Stewardship)

- 19 ACPE accredited CE available, online, teleconferencing, practical components included
- For more information, visit: https://mad-id.org/antimicrobial-stewardship-programs/

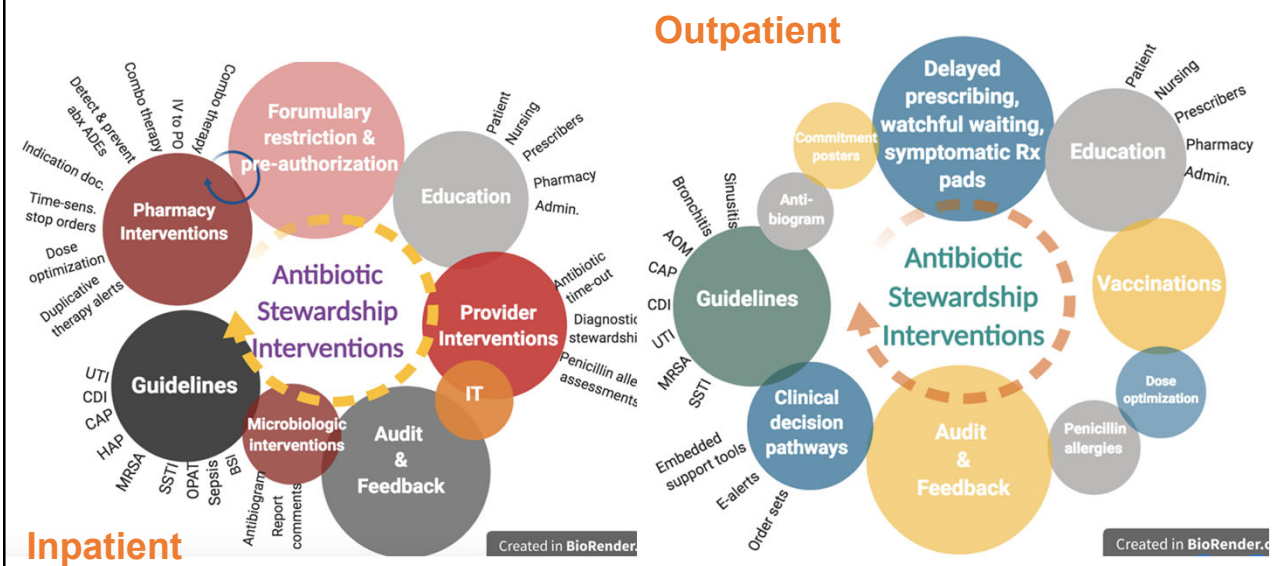
SIDP (Society of Infectious Diseases Pharmacists)

- Certificate program for pharmacists, 3 phases including skills component; 40-43 ACPE hours
- KDHE-KHC scholarship
  - In 2019, 29 Kansas pharmacists completed the SIDP Antibiotic Stewardship certification program.
  - In 2021, an additional 31 Kansas pharmacists are now pursuing SIDP Antibiotic Stewardship certification through KDHE-KHC tuition reimbursement program. Most recent awards were made in Spring 2021.
- For more information, visit: https://sidp.org/Stewardship-Certificate

CDC's Antibiotic Stewardship Training Series (for clinicians, free)

- Nine interactive, web-based modules can be taken in any order. Each module is <1 hour. CE is available.
- For more information, visit: https://www.train.org/cdctrain/training_plan/3697

Core Element 4: Action



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Core Element 4: Action

No one size fits all strategy or policies -overuse occurs as result of

- Policies
- Knowledge
- Awareness
- Culture

Facilities differ greatly in

- Provider types
- Culture, social norms, hierarchy
- Patient population
- Resistance patterns
- Resources, support

Barlam T et al CID 2016; 15(62):e51-77.
Flodgren G, Cochrane Database Syst Rev 2019;24;6.
Grol R et al Lancet 2003;362(9391):1225-30

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Tools:
Facility AU, Patient audits, Current State

Hospital Antibiotic Use

Last calendar year or last 12 months *(alternatively, start with one month)*

What are the 3 most common infections, or conditions, (i.e., asymptomatic bacteriuria, acute COPD exacerbation) for which patients are treated with antibiotics	1. _____ 2. _____ 3. _____
What proportion of **asymptomatic bacteriuria** cases are treated with an antibiotic	%
What are the 3 most common antibiotics prescribed for **UTIs** (including asymptomatic bacteriuria)	1. _____ 2. _____
What proportion of **acute bronci** with an antibiotic	
What proportion of **acute bronci** treated with an antibiotic	
What are the 3 most common an **bronchitis** (regardless of whethe	
What are the 3 most common an **community acquired pneumor**	
What are the 3 most common an **acquired pneumonia**	
What are the 3 most common an **or infected wounds** (and/or oth (**SSTIs**))	
Other infections a concern in yo What are the 3 most common an	
Other infections a concern in yo What are the 3 most common an	
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Infection	# cases	Antibiotic regimen most often prescribed		
		Antibiotic 1	Antibiotic 2	Antibiotic 3
Ex) UTI (catheter)	*Ex) 15/mo. (avg)*	**Drug:** *ceftriaxone* **Dose:** *1 gram* **Route:** *IV* **Duration:** *4 days*	**Drug:** *piperacillin/tazobactam** **Dose:** *4.5 g (1/4 Rx were 3.375 g)* **Route:** *IV* **Duration:** *5 days (average)*	**Drug:** *levofloxacin* **Dose:** *500 mg (2/3 Rx were 750) ** **Route:** *IV (1/3 Rx PO)* **Duration:** *7 days (average, including IV to PO conversion)*
		Drug: **Dose:** **Route:**	**Drug:** **Dose:** **Route:**	**Drug:** **Dose:** **Route:**

Summary of facility antibiotics	Number
Total number antibiotics reviewed	
Total number of data sources reviewed (in addition to antibiotic orders)	

Summary of facility antibiotic appropriateness	Number	%
Antibiotic appropriate based on clinical documentation		
Antibiotic appropriate for microbiologic data (and/or POC studies such as urinalysis, serologic, molecular studies, or other lab data)		
Antibiotic appropriate for imaging		
Antibiotic indication aligned with expectations outlined in facility policies/protocols (if applicable)		
Antibiotic indication aligned with CDC surveillance case definition		

Patient name/ date	Antibiotic (drug, dose, duration)	Indication for antibiotic	Clinical notes	Micro/ imaging results	Infection surveillance log	CDC Infection surveillance criteria met	Facility alignm there poli
ex) A, 1/1/20	*ex) Cipro 250 mg p.o. BID x 14 days*	*ex) UTI*	*ex) Urine catheter in place, cloudy urine*	*ex) UA packed WBC, UC<10k contamina nts*	*ex) UTI*	*ex) No*	*ex) No*
ex) B, 1/2/20	*ex) cefazolin*	*ex) cellulitis*	*ex) erythema, fevers*	*ex) n/a*	*ex) SSTI*	*ex) Yes*	*ex) Yes*

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Hospital Abx Use: https://www.kdheks.gov/epi/hai/CAH_Toolkit/Table_6_Hospital_Antibiotic_Use_historic.docx
Most Commonly Used Abx: https://www.kdheks.gov/epi/hai/CAH_Toolkit/Table_7_Most_Commonly_Used_Antibiotics.docx
Summary of Facility Abx: https://www.kdheks.gov/epi/hai/CAH_Toolkit/Table_11_Summary_of_Facility_Antibiotics.docx
Abx by patient: https://www.kdheks.gov/epi/hai/CAH_Toolkit/Table_10_Antibiotic_Tracking_By_Patient.docx

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Tools:
Facility Profile, Infection Profile

Last 12 months or last calendar year	Number
Licensed beds	
Admissions	
Patient days	
Average daily census	
Number of prescribers	
Clinical pharmacists (hours per month)	
Patient characteristics	**Average daily census**
Residents with indwelling urinary catheters	
Residents with pressure injury o Stage 1-2 o Stage 3-4 o Unstageable / unable to determine	
Patients admitted with acute on chronic foot or leg ulcers	

Last 12 months or last calendar year	Number
Clostridioides difficile	
Facility onset infections	
Community onset infections	
Numbers of non-duplicate isolates of following isolates:	
MDR Gram-Negative Bacteria	
Carbapenem-resistant *Enterobacterales* (*E. coli, Klebsiella spp., Morganella morganii,, Proteus spp., Providencia spp.*)	
Carbapenem-resistant *Pseudomonas aeruginosa*	
Carbapenem-resistant *Acinetobacter baumannii*	
ESBL *Enterobacterales*	
MDR Gram-Positive Bacteria	
Methicillin-Resistant *Staphylococcus aureus* (MRSA)	
MRSA	
Vancomycin-Resistant Enterococci (VRE)	
VRE	
Other drug-resistant gram-positives	
Penicillin-Resistant *Streptococcus pneumoniae* (non-meningeal MIC)	
Erythromycin-resistant group A *Streptococcus*	
Clindamycin-resistant group B *Streptococcus*	
Other MDROs of concern:	

Download

Facility profile: https://www.kdheks.gov/epi/hai/CAH_Toolkit/Table_12_Facility_Profile.docx
Infection Profile: https://www.kdheks.gov/epi/hai/CAH_Toolkit/Table_13_Facility_Infection_Profile.docx

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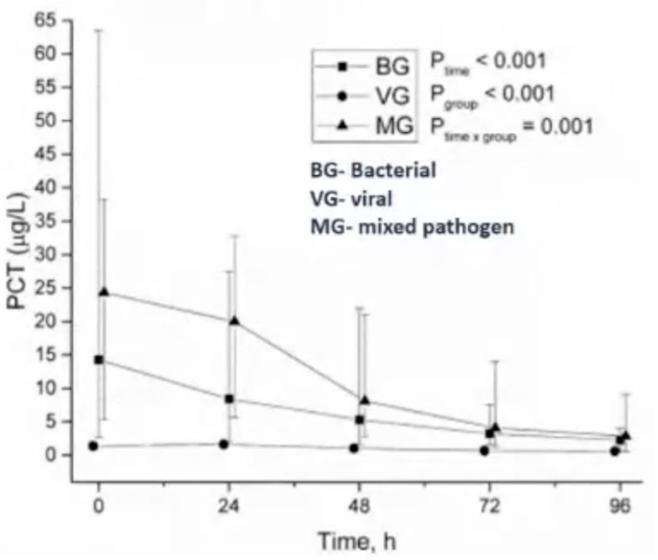
Diagnostic Stewardship: Procalcitonin (PCT)

Pneumonia, URI/LRTI, sepsis

- Viral = lower PCT
- Bacterial = elevated PCT & higher severity of disease
- 19-38% reduction in abx use w/ PCT algorithm
- 1.5-2.5 avg. lower abx days
- 2 meta-analysis (pna & sepsis) assoc w/ decreased mortality

** Abx should NOT be based solely on PCT, but in general PCT can serve as part of clinical context*

Rodriguez A., et al. J Infect 2016; 72:143-52.
Guan W., et al. NEJM 2020; 27(1): 157-75.
Agarwal R. et al CID 2011;53:379-87
Heyland D. et al. Crit Care Med. 2011;39:1792-9.
Schuetz P., et al Lancet Infect Dis 2018;18:95-107.
Newton J., et al Open Forum Infect Dis; 2019;6:ofr355.
Kyriazopoulou E. et al. Am J Resp Crit Care Med 2021(203): 202-10.



LRTI Initial Antibiotic Use Algorithm

PCT Value	<0.1 µg/L	0.1 - 0.24 µg/L	≥ 0.25-0.5 µg/L	>0.5 µg/L
Antibiotic Use Recommendation	Strongly Discouraged	Discouraged	Encouraged	Strongly Encouraged

- Consider alternative diagnosis
- Repeat PCT in 6-12 hours if antibiotics not begun and no clinical improvement
- If clinically unstable, immunosuppressed or high risk consider overruling (PSI Class IV-V, CURB>2, GOLD III or IV)

Repeat every 2-3 days to consider early antibiotic cessation
See Algorithm 2

https://www.unmc.edu/intmed/divisions/id/asp/procalcitonin-pct-guidance/index.html

Diagnostic Stewardship: PCT
Incorporating AS into COVID-19 activities

COVID-19 to distinguish bacterial co-infections

- PCT elev. in 6% COVID-19 admits
- PCT sig. more elevated w/ **bacterial co-infection (13.1** vs. 2.0, p=0.009, n=2443)
- High NPV if <0.5 ng/mL
- **27% reduction abx** incorporating PCT algorithm (p<0.001, n=2006)

TABLE 2 Mean procalcitonin levels in community-associated bacterial infections and sensitivity and specificity of initial procalcitonin values of 0.25 and 0.50 ng/ml for identifying community-associated bacterial infections

	Procalcitonin level (ng/ml)				Procalcitonin cutoff (ng/ml) of: 0.25				0.50			
Infection type	Mean	SD	*n*	*P* value[a]	Sensitivity	Specificity	PPV	NPV	Sensitivity	Specificity	PPV	NPV
All community-associated infections	13.16	51.19	148	0.0091	0.601	0.532	0.076	0.954	0.426	0.715	0.088	0.951
Bacteriuria	5.15	22.98	88	0.1428	0.568	0.527	0.043	0.970	0.363	0.710	0.045	0.967
Bacteremia	34.25	85.01	47	0.0125	0.681	0.528	0.027	0.988	0.553	0.712	0.036	0.988
Bacterial pneumonia	16.42	57.81	24	0.2345	0.708	0.526	0.015	0.995	0.500	0.709	0.017	0.993
No infection	2.00	15.26	2,295									

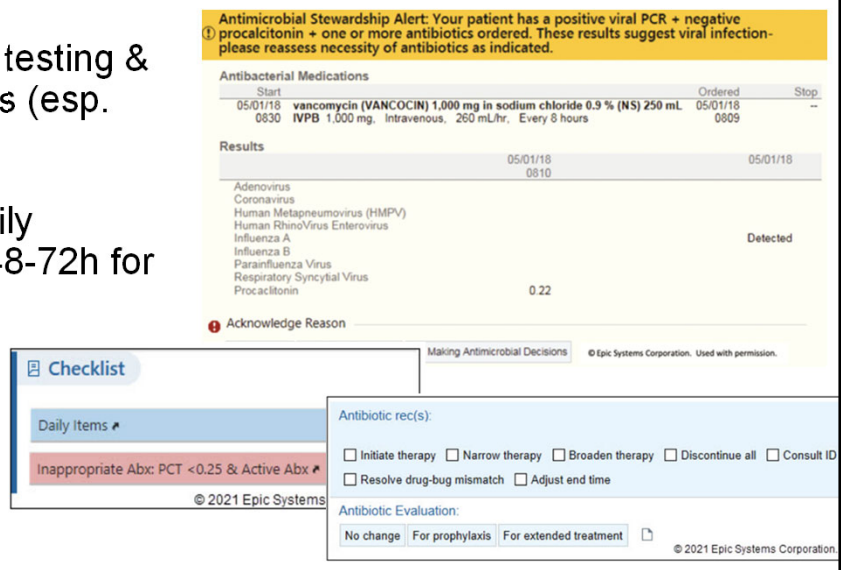
[a]Compared to noninfected patients' initial procalcitonin using 2-sided *t* test.

Chen N., et al. Lancet 2020;395;507-13.
May M., et al. AAC 2021;65:e02167-20
Heesom L., et al. J Antimicrob Resistance 2002;22:782-84..
Zheng Z., et al. J Infect 2020; 81(2): e16-25.
Tan et al, ID Week 2021

Clinical Decision Support

Alerts coupled w/ other testing & clinical decision supports (esp. **actionable** alerts)

Checklists added to daily pharmacists rounds or 48-72h for abx timeouts



Moradi T., et al. CID 2020;23;71(7): 1684-89
Watkins A., et al. Pharmacy; 2021;9:136..

Tools:
Policies for PCN allergies

[Facility] Antibiotic Stewardship Program – Penicillin Allergy Protocol

[Facility Logo]

SUBJECT: Penicillin allergy testing protocol
DATE: [effective date]
APPROVED BY: [Approving individual or committee]

Background
Up to 10% of patients report a penicillin allergy, however less than 1% have a true allergy (1, 2). Beyond avoiding more costly and newly approved antibiotics, beta-lactam avoidance in those with penicillin allergies has a significant impact on clinical outcomes. Those with penicillin allergies have been found to have higher treatment failure rates for certain infections, and are greater *C.diff* risk, as well as colonization with MRSA and VRE (2,3). Even for people with true IgE-mediated hypersensitivity allergies, reactions to third and fourth generation cephalosporins is less than 1% and only 1.6% to first generation cefazolin in two recent systematic reviews and meta-analysis of penicillin beta-lactam allergies (4). A caveat is cephalexin which still appears to have higher rates of penicillin-cross reactivity (12.9-14%) because it is chemically most similar to penicillin (4).

Policy
This policy outlines penicillin allergy testing indications and appropriateness, and specific criteria for the substitution and therapeutic interchange of medications as set forth by the Pharmacy and Therapeutics Committee, and the Antibiotic Stewardship (AS) Team.

Procedures
A. **Definitions**
a. **Infusion reaction:** Any reaction that occurs when a medication is administered over 15 minutes or greater via an intravenous or intramuscular route. When an infusion reaction is selected it does not preclude the patient from receiving the agent again after a risk-benefit analysis.
b. **Intolerance:** Difficulty taking a medication because of an adverse effect that is a non-immune-mediated hypersensitivity, or an adverse reaction that occurs because of the agent's mechanism of action (e.g., opioids resulting in constipation and subsequent nausea, vomiting). When intolerance is selected, it does not preclude the patient from receiving the agent again (6).
c. **Contraindication:** Any reason that exposure to a medication is not advisable (e.g. thrombocytopenia with heparin products). When contraindication is selected, it does not preclude the patient from receiving the agent after the contraindication period.
d. **Allergy:** An immune-mediated hypersensitivity response to an agent ranging from mild to severe and life-threating adverse reaction. Records of a medium to high severity reaction indicates that the patient should not be exposed to the agent again without a risk-benefit analysis (5).
e. **Reaction type:** A selection between allergy, infusion reaction, intolerance, contraindication, or food allergy/sensitivity.
f. **Reactions:** A condition or manifestation resulting from an administration of a medication, food, allergen, or other agent (e.g. anaphylaxis, palpitations, edema, etc.).

PCN allergies reported in up to 10% but <1% have true allergy
PCN can improve treatment outcome & narrow the antibiotic options, non-PCN may have greater risk C.diff infection, MRSA, VRE colonization

GI upset, nausea, diarrhea	• Not an allergy • Re-trial penicillin
Itching or rash	• Non-IgE mediated, cross-reaction unlikely • Use alternative penicillin, or any cephalosporin
Hives or Anaphylaxis	• Ig-E mediated, cross-reaction possible • Avoid all beta-lactams

Macy et al. CID 2017
Macy J. et al. Allergy 2014
Marchand-Austin 2014
Wybo 2014

Download

IV to PO Policy:
https://www.kdheks.gov/epi/hai/CAH_Toolkit/Template_4_ASP_IV_to_PO_Protocol.docx
PCN allergy Policy:
https://www.kdheks.gov/epi/hai/CAH_Toolkit/Template_5_ASP_PCN_Allergy_Protocol.docx

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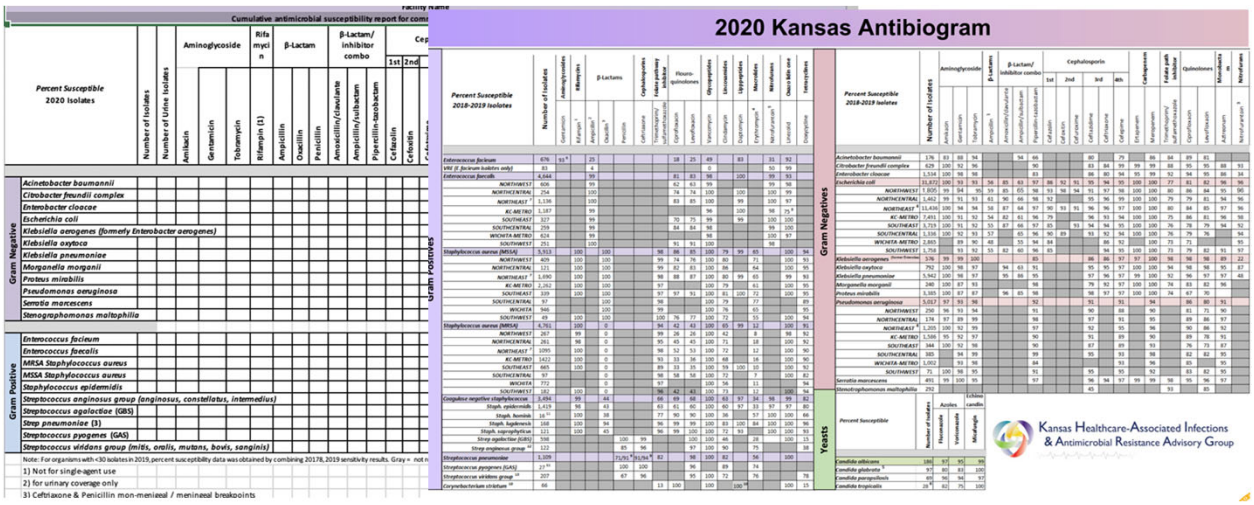
Tools:
Antibiogram and Kansas Antibiogram (by regions)



Download

Antibiogram Template: https://www.kdheks.gov/epi/hai/CAH_Toolkit/Spreadsheet_1_Antibiogram_Template.xlsx
Kansas Antibiogram (2020): https://www.kdheks.gov/epi/download/Entire_a_gram.pdf

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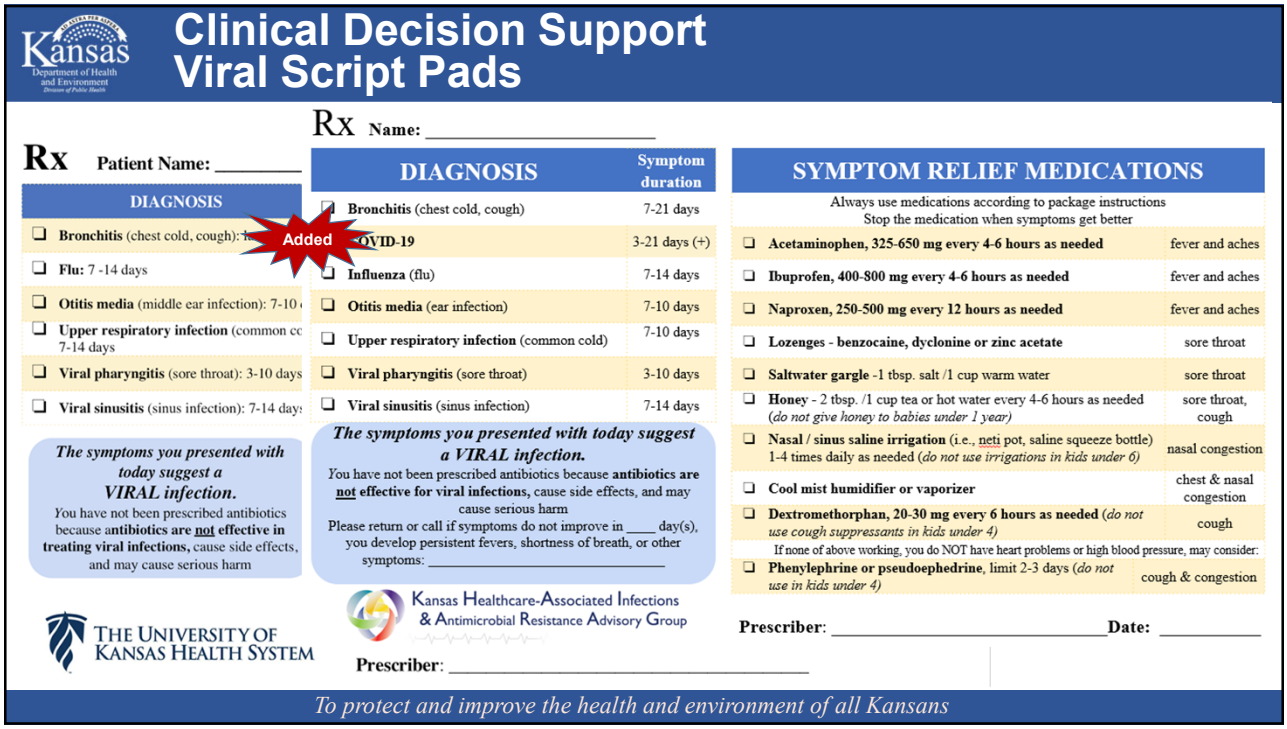
Kansas
Department of Health and Environment
Clinical Decision Support
Viral Script Pads
Rx Name:
Rx Patient Name:
DIAGNOSIS
Bronchitis (chest cold, cough): 7-21 days
Added
Flu: 7 -14 days
Otitis media (middle ear infection): 7-10
Upper respiratory infection (common cc 7-14 days
Viral pharyngitis (sore throat): 3-10 days
Viral sinusitis (sinus infection): 7-14 day
The symptoms you presented with today suggest a VIRAL infection.
You have not been prescribed antibiotics because antibiotics are not effective in treating viral infections, cause side effects, and may cause serious harm
THE UNIVERSITY OF KANSAS HEALTH SYSTEM
DIAGNOSIS
Symptom duration
Bronchitis (chest cold, cough) 7-21 days
COVID-19 3-21 days (+)
Influenza (flu) 7-14 days
Otitis media (ear infection) 7-10 days
Upper respiratory infection (common cold) 7-10 days
Viral pharyngitis (sore throat) 3-10 days
Viral sinusitis (sinus infection) 7-14 days
The symptoms you presented with today suggest a VIRAL infection.
You have not been prescribed antibiotics because antibiotics are not effective for viral infections, cause side effects, and may cause serious harm
Please return or call if symptoms do not improve in ____ day(s), you develop persistent fevers, shortness of breath, or other symptoms: _____
Kansas Healthcare-Associated Infections & Antimicrobial Resistance Advisory Group
Prescriber: _____
SYMPTOM RELIEF MEDICATIONS
Always use medications according to package instructions
Stop the medication when symptoms get better
Acetaminophen, 325-650 mg every 4-6 hours as needed fever and aches
Ibuprofen, 400-800 mg every 4-6 hours as needed fever and aches
Naproxen, 250-500 mg every 12 hours as needed fever and aches
Lozenges - benzocaine, dyclonine or zinc acetate sore throat
Saltwater gargle -1 tbsp. salt /1 cup warm water sore throat
Honey - 2 tbsp. /1 cup tea or hot water every 4-6 hours as needed (do not give honey to babies under 1 year) sore throat, cough
Nasal / sinus saline irrigation (i.e., neti pot, saline squeeze bottle) 1-4 times daily as needed (do not use irrigations in kids under 6) nasal congestion
Cool mist humidifier or vaporizer chest & nasal congestion
Dextromethorphan, 20-30 mg every 6 hours as needed (do not use cough suppressants in kids under 4) cough
If none of above working, you do NOT have heart problems or high blood pressure, may consider:
Phenylephrine or pseudoephedrine, limit 2-3 days (do not use in kids under 4) cough & congestion
Prescriber: _____ Date: _____
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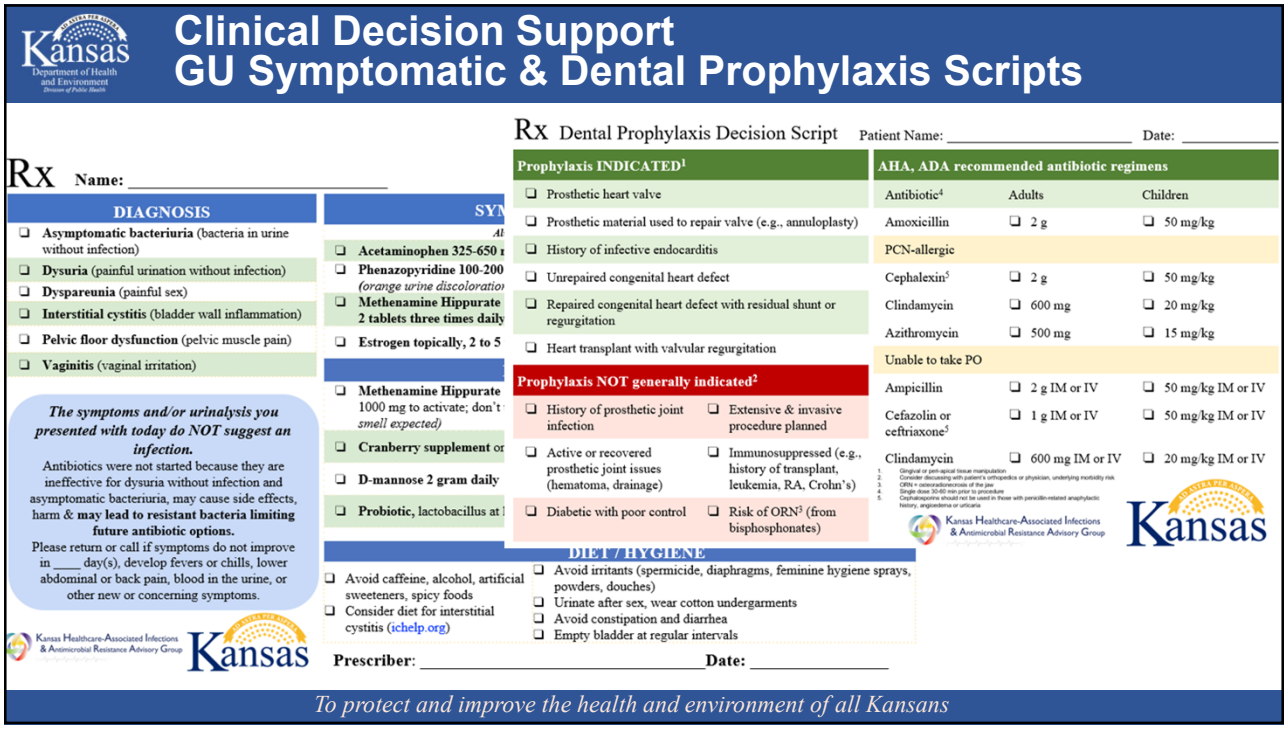
Kansas
Department of Health and Environment
Clinical Decision Support
GU Symptomatic & Dental Prophylaxis Scripts
Rx Name:
DIAGNOSIS
Asymptomatic bacteriuria (bacteria in urine without infection)
Dysuria (painful urination without infection)
Dyspareunia (painful sex)
Interstitial cystitis (bladder wall inflammation)
Pelvic floor dysfunction (pelvic muscle pain)
Vaginitis (vaginal irritation)
The symptoms and/or urinalysis you presented with today do NOT suggest an infection.
Antibiotics were not started because they are ineffective for dysuria without infection and asymptomatic bacteriuria, may cause side effects, harm & may lead to resistant bacteria limiting future antibiotic options.
Please return or call if symptoms do not improve in ____ day(s), develop fevers or chills, lower abdominal or back pain, blood in the urine, or other new or concerning symptoms.
Kansas Healthcare-Associated Infections & Antimicrobial Resistance Advisory Group
Kansas
Acetaminophen 325-650
Phenazopyridine 100-200
(orange urine discoloration
Methenamine Hippurate 2 tablets three times daily
Estrogen topically, 2 to 5
Methenamine Hippurate 1000 mg to activate; don't smell expected)
Cranberry supplement or
D-mannose 2 gram daily
Probiotic, lactobacillus at
Rx Dental Prophylaxis Decision Script
Patient Name: _____ Date: _____
Prophylaxis INDICATED1
Prosthetic heart valve
Prosthetic material used to repair valve (e.g., annuloplasty)
History of infective endocarditis
Unrepaired congenital heart defect
Repaired congenital heart defect with residual shunt or regurgitation
Heart transplant with valvular regurgitation
Prophylaxis NOT generally indicated2
History of prosthetic joint infection
Extensive & invasive procedure planned
Active or recovered prosthetic joint issues (hematoma, drainage)
Immunosuppressed (e.g., history of transplant, leukemia, RA, Crohn's)
Diabetic with poor control
Risk of ORN3 (from bisphosphonates)
AHA, ADA recommended antibiotic regimens
Antibiotic4 Adults Children
Amoxicillin 2 g 50 mg/kg
PCN-allergic
Cephalexin5 2 g 50 mg/kg
Clindamycin 600 mg 20 mg/kg
Azithromycin 500 mg 15 mg/kg
Unable to take PO
Ampicillin 2 g IM or IV 50 mg/kg IM or IV
Cefazolin or ceftriaxone5 1 g IM or IV 50 mg/kg IM or IV
Clindamycin 600 mg IM or IV 20 mg/kg IM or IV
Kansas Healthcare-Associated Infections & Antimicrobial Resistance Advisory Group
Kansas
DIET / HYGIENE
Avoid caffeine, alcohol, artificial sweeteners, spicy foods
Consider diet for interstitial cystitis (ichelp.org)
Avoid irritants (spermicide, diaphragms, feminine hygiene sprays, powders, douches)
Urinate after sex, wear cotton undergarments
Avoid constipation and diarrhea
Empty bladder at regular intervals
Prescriber: _____ Date: _____
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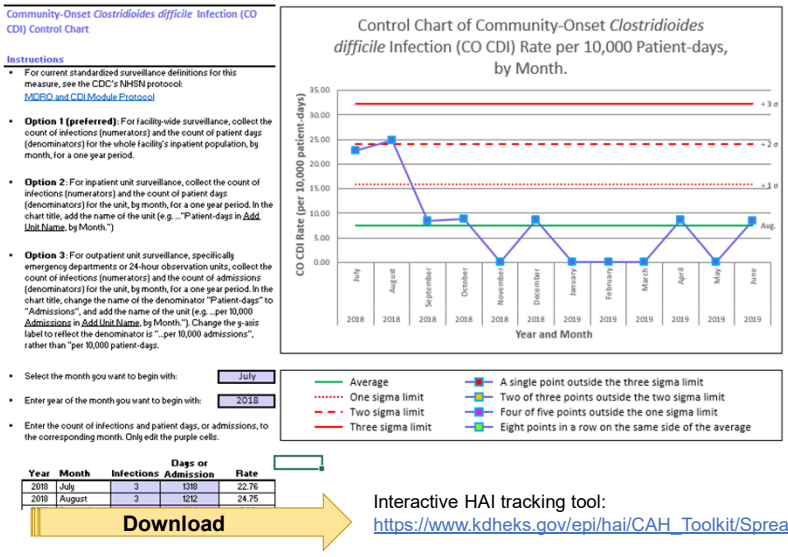
Core Element 5-6: Tracking & Reporting

Goal: determine whether interventions impacted abx, reduced resistance

- Peer comparison (e.g. compare 1 high priority condition such as rate of abx for acute bronchitis)
- Monitor adverse events (*C.diff* rates)
- Pharmacist audits abx use
- Micro provides surveillance data (e.g., antibiogram, local resistant rates)
- Outcome monitoring (antibiotic resistance, mortality, morbidity)

Tools: Interactive HAI Spreadsheets

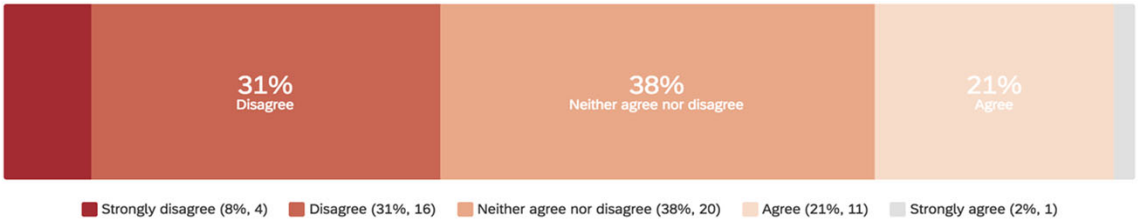


- Intro/step-by-step
- CAUTI
- UTIs
- Urinary utilization
- CLABSIs
- CVC utilization
- C.diff

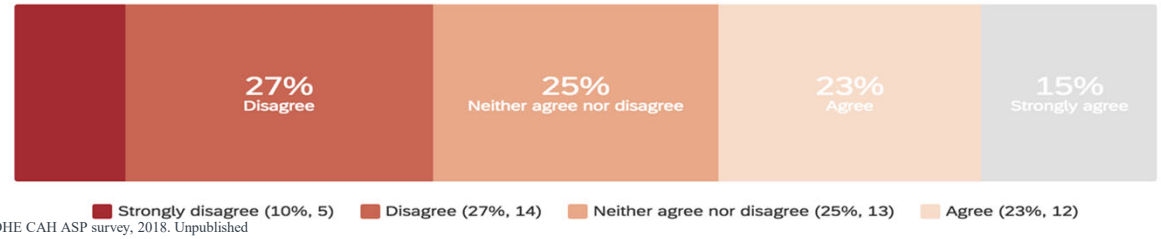
Interactive HAI tracking tool:
https://www.kdheks.gov/epi/hai/CAH_Toolkit/Spreadsheet_2_Interactive_HAI_Tracking_Tools.xlsx

Challenges

- Programs which regularly monitor abx prescribing / guideline adherence



- Monitor total abx consumption

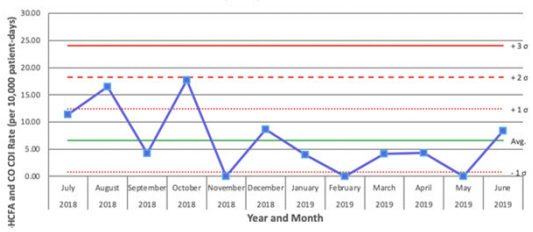


KDHE CAH ASP survey, 2018. Unpublished

Core Element 5-6: Tracking & Reporting

Reporting information on improvements (or worsening) antibiotic use and resistance

Control Chart of Community-Onset Healthcare Facility-Associated and Community-Onset *Clostridioides difficile* Infection (CO-HCFA and CO CDI) Rate per 10,000 Patient-days, by Month.



REPORT INFORMATION TRACKED TO PRESCRIBERS

FACILITY AT LARGE TRACKS/REPORTS ADVERSE EVENTS, COMPLICATIONS OF ABX

INCLUDE AS ACTIVITY GOALS & OUTCOMES IN QUALITY DASHBOARDS

REPORT TO LEADERSHIP REGULARLY STATUS OF PROGRAM, SUCCESS STORIES, CHANGES

INCLUDE AS PERFORMANCE MEASURES IN ANNUAL EVALUATIONS

Core Element 7: Education

- Education initiatives alone **without focusing on behavioral changes, social norms have small and non-sustained effects**
- Active more effective than passive (i.e., interactive didactics, small groups)
- One-on-one "academic detailing" is more resource intense although more influential
- Educate nursing staff (e.g., response to patients calls w/ URIs, setting expectations, avoiding unnecessary tests)
- Don't neglect patient education

Abbo et al CID 2013;57(5):631-38.
Grol & Grimshaw 2003
Fleming et al 2013

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Examples of Educational Activities

- Use data collected to educate clinicians
- Educational curriculum on regular basis (staff, patients, families)
- Allocate time + resources to clinician & nursing education
- Require stewardship & AR training to new hires
- Nursing director sets standards for assessing patient conditions (e.g., avoidance test of cure for C.diff, avoidance UA if asymptomatic)
- Nursing director sets standards for relaying patient information to clinicians (e.g., triaging phone calls, involved in rounds)

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Resources for Education

- CDC's Be Antibiotic Aware
  - Materials
  - CE for HCPs
- Midwest Antimicrobial Summit (MASC) quarterly One-Health regional approach
  - Sign-up email: MidwestASC@gmail.com

Materials: https://www.cdc.gov/antibiotic-use/training/materials.html
Training: https://www.cdc.gov/antibiotic-use/training/continuing-education.html

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Don't Forget the Social Determinants

- Physician-physician relationships
  - 3x as likely to prescribe guideline-aligned if clinic partners are aligned & 1.3 times more likely to prescribe poorly if share practice w poor prescribers
- Attitudes
  - "Comfort" of over-prescribing, broad spectrum abx feel "safer"
  - Resistance not felt applicable to locale or personal responsibility
- Litigious factors
- Patient pressures (may over-estimate)
- Time of day

Barlam et al. Infect Control Hosp Epidemiol. 2015;36(2):153-59
Butler et al. BMJ 1998:317;
Sharpiro Clin Ther 2002:24

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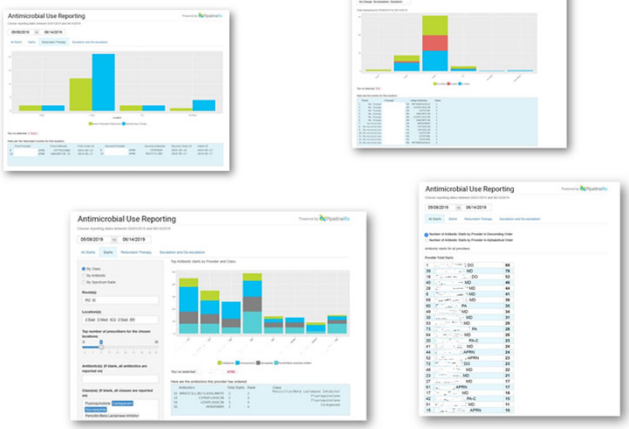
Antimicrobial Stewardship Efforts in KS

Join the fight against antimicrobial resistance and the emergence of superbugs!

Actionable Data
Utilizes the exact data elements necessary for ASP, as defined by the Federal Government and following national standards and guidelines.

Automated Process
Automates a typically manual and highly time-consuming process, eliminating data entry and potential for error.

Real-Time Integration
Automated data flow between your EHR and NHSN's AUR module.



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Poll Question 1

We are interested in gauging facility interest in a dedicated Antibiotic Stewardship Collaborative.

How interested in a dedicated series/collaborative to antibiotic stewardship?

- Very interested
- Somewhat interested
- Not interested at all

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Poll Question 2

Which of the following components/sectors would you be most interested in, if a stewardship collaborative is developed?
(select all that apply)

- Inpatient stewardship
- Critical access hospital-oriented stewardship
- Ambulatory stewardship
- Long-term care stewardship
- Real-world applications (practical interventions, how-to)
- Intervention assistance
- Diagnostic stewardship activities
- Tracking & reporting assistance
- COVID-19 incorporation of antibiotic stewardship
- Other (type in chat)

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Resources & More Information

KDHE wants to help with AS/AR, contact:

KDHE
Bryna Stacey
Bryna.Stacey@ks.gov

Kellie Wark
Kellie.wark@ks.gov
kwark@kumc.edu

Stephanie Lindemann
785-296-5588
Stephanie.Lindemann@ks.gov

24/7 Epidemiology Hotline
877-427-7317
kdhe.epihotline@ks.gov

Healthcare-Associated Infections & Antimicrobial Resistance Program

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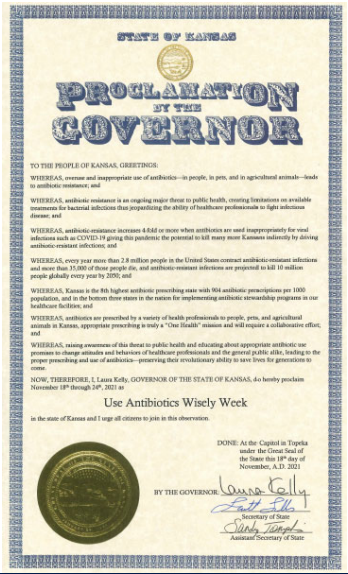
2021 Gubernatorial Proclamation: "Use Antibiotics Wisely Week"



STATE OF KANSAS

PROCLAMATION BY THE GOVERNOR

TO THE PEOPLE OF KANSAS, GREETINGS:

WHEREAS, overuse and inappropriate use of antibiotics—in people, in pets, and in agricultural animals—leads to antibiotic resistance; and

WHEREAS, antibiotic resistance is an ongoing major threat to public health, creating limitations on available treatments for bacterial infections thus jeopardizing the ability of healthcare professionals to fight infectious disease; and

WHEREAS, antibiotic-resistance increases 4-fold or more when antibiotics are used inappropriately for viral infections such as COVID-19 giving this pandemic the potential to kill many more Kansans indirectly by driving antibiotic-resistant infections; and

WHEREAS, every year more than 2.8 million people in the United States contract antibiotic-resistant infections and more than 35,000 of those people die, and antibiotic-resistant infections are projected to kill 10 million people globally every year by 2050; and

WHEREAS, Kansas is the 8th highest antibiotic prescribing state with 904 antibiotic prescriptions per 1000 population, and in the bottom three states in the nation for implementing antibiotic stewardship programs in our healthcare facilities; and

WHEREAS, antibiotics are prescribed by a variety of health professionals to people, pets, and agricultural animals in Kansas, appropriate prescribing is truly a "One Health" mission and will require a collaborative effort; and

WHEREAS, raising awareness of this threat to public health and educating about appropriate antibiotic use promises to change attitudes and behaviors of healthcare professionals and the general public alike, leading to the proper prescribing and use of antibiotics—preserving their revolutionary ability to save lives for generations to come.

NOW, THEREFORE, I, Laura Kelly, GOVERNOR OF THE STATE OF KANSAS, do hereby proclaim November 18th through 24th, 2021 as

Use Antibiotics Wisely Week

in the state of Kansas and I urge all citizens to join in this observation.

DONE: At the Capitol in Topeka under the Great Seal of the State this 18th day of November, A.D. 2021

BY THE GOVERNOR: Laura Kelly

Secretary of State

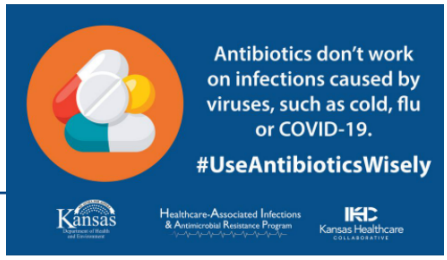
Assistant Secretary of State

November 18-24

Kansas Department of Health and Environment
November 17 at 7:57 PM

Taking antibiotics when they are not needed can hurt your health. It exposes you to adverse drug reactions and increases your risk of getting a future infection that resists antibiotic treatment. Learn more about how to use antibiotics wisely: https://bit.ly/3DzscBC.

#UseAntibioticsWisely
Kansas Healthcare Collaborative



Office of the Secretary
Curtis State Office Building
1000 SW Jackson St., Suite 540
Topeka, KS 66612-1367

Lee A. Norman, M.D., Secretary

Kansas Department of Health and Environment

For Immediate Release
Nov. 16, 2021

Governor Kelly and KDHE Ask Kansans to Use Antibiotics Wisely

TOPEKA – Governor Laura Kelly proclaimed Nov. 18–24 as Use Antibiotics Wisely Week in Kansas. The Kansas Department of Health and Environment (KDHE) is asking health care providers and Kansans to use antibiotics wisely to help protect from the threat of growing resistance. This one-week observance led by the Centers for Disease Control and Prevention (CDC) promotes awareness of antibiotic resistance (AR) and the importance of appropriate antibiotic prescribing and use across the United States.

"It will take everyone to do their part in ensuring the proper use of antibiotics," said Secretary Lee Norman, M.D., Kansas Department of Health and Environment. "Utilizing antibiotics only when appropriate will help decrease the amount of antibiotic resistance infections across the state, further protecting all Kansans."

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Antibiotic Stewardship

+ Help promote Antibiotic Stewardship in your facility and via social media
+ Posters in English and Spanish
+ Ready-to-go social media posts
+ More educational information

No-cost materials for download at:
www.UseAntibioticsWisely.org

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U.S. Antibiotics Awareness Week is Nov. 18-24

Be Antibiotics Aware Partner Toolkit

https://www.cdc.gov/antibiotic-use/week/toolkit.html

Check out CDC's USAAW Be Antibiotics Aware Partner toolkit anytime of the year! This toolkit contains key messages, social media content, graphics, and more to help you and your organization support your antibiotic stewardship programs.

BE ANTIBIOTICS AWARE
SMART USE, BEST CARE

To order select free print resources, call 800-CDC-INFO.

+ Patient Education Resources
+ Healthcare Professional Resources
+ Prescription Pads

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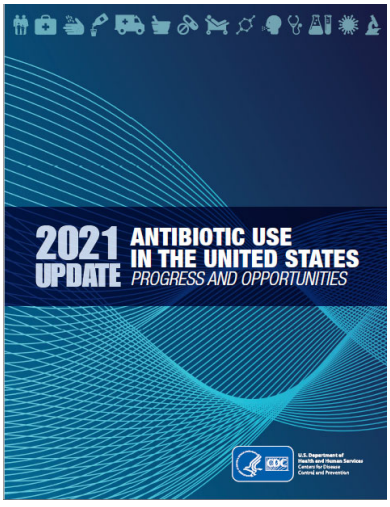
Antibiotic Use in the U.S., 2021 Update

Just Released!



The Centers for Disease Control and Prevention (CDC) has released its annual report which highlights how antibiotics are being used in the United States.

+ Progress on the U.S. National Action Plan for Combating Antibiotic-Resistant Bacteria (CARB)
+ Data for Action Across Health Care Settings
+ Data on Antibiotic Use and Examples of Stewardship
+ New and Updated Antibiotic Stewardship Resources
+ Antibiotic Stewardship in Action
+ Emerging Opportunities for Antibiotic Stewardship, including health equity and telehealth.

https://www.cdc.gov/antibiotic-use/stewardship-report/current.html

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Questions?

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KHC & Compass Network Updates

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Data Updates

+ Data are due at the end of the following month.
+ Data Refresh
  - Administrative Claims and NHSN transferred to QHi
  - QHi data are sent to Compass
  - Current Data Refresh: 11/9/2021
  - Next Refresh: on or around December 6

+ REMINDER: **FY 2021 administrative claims data is due**.

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Data Update

Compass HQIC Antibiotic Stewardship measures

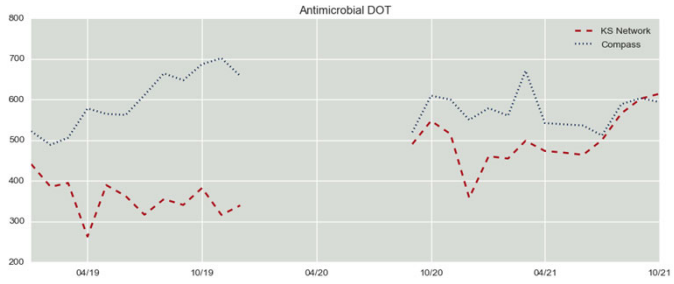
Data Sources	Key
Self-Reported (in Qhi)	*
Administrative Claims	**
NHSN	***

Antibiotic Stewardship			Numerator	Denominator	
RO	Carbapenem-resistant Enterobacteriaceae (CRE) Bacteriemia Rate	O	Total number of hospital-onset unique blood source CRE events among all inpatients in the facility	Inpatient days facility wide	***
OS	Antimicrobial Days of Therapy (DOT)	O	Aggregate sum of antimicrobial days for which any amount of a specific antimicrobial agent was administered to individual patients as documented in the patient record for observation, acute, SNF, Swing beds and OB inpatient days	Days present defined as the aggregate number of patients housed in a patient care location or facility anytime throughout a day during a calendar month	*

For more information see pages 12-14 of Compass HQIC Measurement Toolkit.

https://mcusercontent.com/267d3f6a0ee71c01eb1a0a387/files/109e393a-26db-3f23-b8c9-6a71d587837a/Compass_HQIC_Toolkit_V1.1_FINAL_10_1_2021.pdf

Preliminary data
11/12/2021



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Data Updates

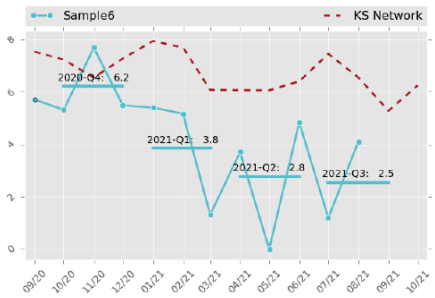
- Each month a few measures are selected for detailed plots
- If you wish to see more detailed plots each month, you can select which measures you get in your report. Just let your QIA know, or email ecook-wiens@khconline.org.

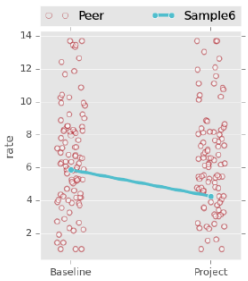
Unplanned, All-Cause, 30-Day Readmission to Same Hospital

Units	percent
Data Source	Self-report
Direction	Reduction is better

Current Status for Sample6

Baseline (Jan 19 - Dec 19)	5.86
Project (Sep 20 - Aug 21)	4.25
Improvement	27.5%





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QHi Review Session

MyQHi.org

Thursday, December 13, 2021
1:00 – 2:00 CT

Register here: https://cc.readytalk.com/r/ehvg9thsckod&eom

We will cover how to:

- Add New Users
- Select Measures
- Enter and Import Data
- Run Reports

Kansas Hospital ASSOCIATION

HEALTHWORKS KANSAS HOSPITAL ASSOCIATION

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HQIC learning events On-Demand

Visit education.ihconline.org for on-demand learning

Watch for more upcoming events in the Compass Navigator delivered to your inbox on the 1st of each month.

+ Let's ReBoot: Examining Strategies to Reset Culture + Practices Around CLABSI Reduction
+ Exploring Strategies to Prevent Hypoglycemia in Hospitalized Patients
+ Restart PFAC Tracks

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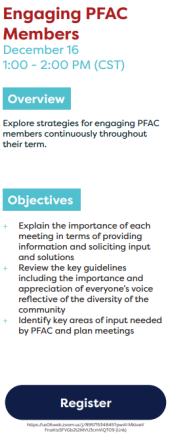
Establish New PFAC Track

Engaging PFAC Members

Past webinars that are part of this series can be viewed on-demand using iCompass Academy

+ October 21 (on demand)
+ November 4 (on demand)
+ **December 16 (1-2pm)**



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Coming Soon: Health Equity

Compass HQIC is currently planning:

+ Health equity focus group discussions (in December)
+ Readmissions and Equity Learning and Action Series with Dr. Amy Boutwell (Jan-May 2022)
+ Reassess progress in PFE & HEOA metrics in December
+ And more. . . Stay tuned!

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KHC Office Hours Resumes in 2022

Register once for all remaining sessions. Save recurring appointment to your e-calendar. Keep abreast of KHC program updates, learn from subject matter experts and peers.

+ **December 22**

KHC will soon email a new registration link to you for 2022 monthly events.

2021 KHC Office Hours registration link: https://us06web.zoom.us/webinar/register/WN_0SEpcyqyQgq-TIlGz4kvgQ

All sessions are held from 10 to 11 a.m. CT. Sessions will be recorded and posted to KHC Education Archive at www.khconline.org/archive.

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Now enrolling up to 8 facilities for 2022 project

Overdose Data to Action

KHC and KDHE are inviting applications from hospitals and clinics to join a clinical quality improvement project to prevent and decrease harms associated with controlled substances, such as opioids and Substance Use Disorder (SUD).

Eligible hospitals and clinics:

- *Serve a high-risk population*
- *Have a need for education, training, policy development and technical assistance around safe prescribing*

For more information, visit **www.khconline.org/od2a**
and contact Mandy Johnson, MBA, CRHCP
KHC Program Director
Desk: (316) 681-8200 | mjohnson@khconline.org

OD2A Project Goals Summary

1. Increase provider and health system awareness of and support for guidelines
2. Decrease high-risk opioid and/or high-risk controlled substance prescribing
3. Support development of clinical quality improvement around substance use disorder screening, referral, overdose management and linkage to care for patients presenting in the clinic or emergency department.

Project ends August 31, 2022

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Next Steps

- Plan to reboot/advance your Antibiotic Stewardship Programs.
- Review your Q.I. Work Plan. Consider goals for 2022.
- Schedule next coaching call (if not already set)
- Ensure Compass data entry is complete and timely.
- Watch your inbox for the Compass Navigator on December 1st.
  See hospital spotlight about St. Catherine Hospital's "Suits-to-Scrubs" initiative!

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Have Questions, Need Help?

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Connect with us on:

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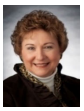

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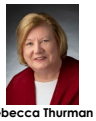

Rebecca Thurman
Quality Improvement Advisor

→ Find contact info, bios, and more at: **www.KHConline.org/staff**

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STATE OF KANSAS

PROCLAMATION BY THE GOVERNOR

TO THE PEOPLE OF KANSAS, GREETINGS:

WHEREAS, overuse and inappropriate use of antibiotics—in people, in pets, and in agricultural animals—leads to antibiotic resistance; and

WHEREAS, antibiotic resistance is an ongoing major threat to public health, creating limitations on available treatments for bacterial infections thus jeopardizing the ability of healthcare professionals to fight infectious disease; and

WHEREAS, antibiotic-resistance increases 4-fold or more when antibiotics are used inappropriately for viral infections such as COVID-19 giving this pandemic the potential to kill many more Kansans indirectly by driving antibiotic-resistant infections; and

WHEREAS, every year more than 2.8 million people in the United States contract antibiotic-resistant infections and more than 35,000 of those people die, and antibiotic-resistant infections are projected to kill 10 million people globally every year by 2050; and

WHEREAS, Kansas is the 8th highest antibiotic prescribing state with 904 antibiotic prescriptions per 1000 population, and in the bottom three states in the nation for implementing antibiotic stewardship programs in our healthcare facilities; and

WHEREAS, antibiotics are prescribed by a variety of health professionals to people, pets, and agricultural animals in Kansas, appropriate prescribing is truly a "One Health" mission and will require a collaborative effort; and

WHEREAS, raising awareness of this threat to public health and educating about appropriate antibiotic use promises to change attitudes and behaviors of healthcare professionals and the general public alike, leading to the proper prescribing and use of antibiotics—preserving their revolutionary ability to save lives for generations to come.

NOW, THEREFORE, I, Laura Kelly, GOVERNOR OF THE STATE OF KANSAS, do hereby proclaim November 18th through 24th, 2021 as

Use Antibiotics Wisely Week

in the state of Kansas and I urge all citizens to join in this observation.

DONE: At the Capitol in Topeka under the Great Seal of the State this 18th day of November, A.D. 2021

BY THE GOVERNOR: Laura Kelly

Scott Schwab
Secretary of State

Sandy Jacquot
Assistant Secretary of State

Overdose Data to Action (OD2A) Program

The Kansas Healthcare Collaborative (KHC) is working with the Kansas Department of Health and Environment (KDHE) on the Overdose Data to Action (OD2A) project. KHC is accepting applications from hospitals and/or clinics in high risk areas interested in participating in a quality improvement project related to preventing and/or decreasing harms associated with opioids and other controlled substances.

Focus areas may include:

- Decrease providers' self-reported opioid and/or other controlled substance prescribing rates;
- Increase the number of patients receiving non-pharmacological treatments;
- Decrease problematic co-prescribing (e.g. concurrent benzodiazepines and opioids); and
- Increase providers' access to Kansas's Prescription Drug Monitoring Program, K-TRACS.

Project Timeline

Application Period:	Accepted on a first come basis, as funding is available.
Last Date to Start:	June 1, 2022
Wrap-Up Period:	August 31, 2022

Hospital and/or Clinic Responsibility

1) Assign a point of contact for the project and meet regularly with a KHC Quality Improvement Advisor in person or virtually during the project period.
2) Work with KHC to implement quality improvement cycles, change concepts, policy development and implementation around safe prescribing, screening processes, and/or increasing referrals to evidence-based treatment and other community-based resources, including the use of K-TRACS.
3) Agree to share details of the quality improvement project and create a storyboard with indiviulaized data for tracking progress (with the assistance of KHC staff) to be shared with KDHE and potentially other Kansas practices.

Benefits of Participation include:

- Alignment with other KHC Quality Initiatives such as the HQIN and Compass HQIC initiatives' strategies for Behavioral Health, with a focus on Opioids and Patient Safety categories:
  - Implement best practices for opioid and other controlled substance medication prescribing.
  - Decrease opioid-related adverse drug events for patients who take high-risk medications or have a behavioral health diagnosis.
- A small financial stipend upon completion of the project and submission of the storyboard.

For more information contact your KHC Quality Improvement Advisor or visit www.khconline.org/od2a

Engaging PFAC Members

December 16
1:00 - 2:00 PM (CST)

Overview

Explore strategies for engaging PFAC members continuously throughout their term.

Objectives

+ Explain the importance of each meeting in terms of providing information and soliciting input and solutions
+ Review the key guidelines including the importance and appreciation of everyone's voice reflective of the diversity of the community
+ Identify key areas of input needed by PFAC and plan meetings

Register

https://us06web.zoom.us/j/89571534845?pwd=MktoeVFnaXIzSFVGb2t2MVU3cmViQT09 (Link)

Upcoming PFAC Podcasts

Best approaches for PFAC recruitment + interviewing

November 18

Objectives

+ Explain the importance of each meeting in terms of providing information and soliciting input and solutions
+ Review the key guidelines including the importance and appreciation of everyone's voice reflective of the diversity of the community
+ Propose taking the PFAC members on a tour of the hospital along with explanation of units; may need to rotate tours to avoid any unit disruption
+ Identify key areas of input needed by PFAC and plan meetings

Tune In

https://www.ihconline.org/icompass/dashboard/post-list?category=hospital#page=0&subcategoryid=6837a60c-53e6-40f1-ba1f-24c3865013e8&posttype=resource (Link)

Review of Accomplishments

January 2022

Objectives

+ Describe and review success stories on recruitment and valuable meetings
+ Schedule and develop connections with PFAC members and staff

Tune In

https://www.ihconline.org/icompass/dashboard/post-list?category=hospital#page=0&subcategoryid=6837a60c-53e6-40f1-ba1f-24c3865013e8&posttype=resource (Link)

This material was prepared by Compass HQIC Network a Hospital Quality Improvement Contractor under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW Compass HQIC Network/Hospital Quality Improvement Contractor – [0018] – 09/21/2021.

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