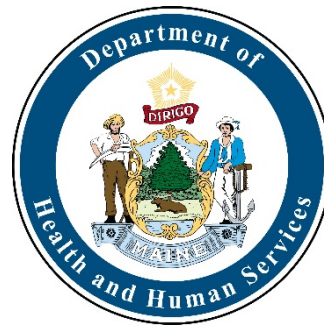


# HAI/AR Collaborating Partners

October 26, 2018



# Agenda

12:00-12:10 PM	Introductions and opening Comments
12:10-12:20 PM	Review of the minutes
12:20-12:30 PM	Membership update
	<u>Developing of the HAI/AR State Plan:</u>
12:30-2:00 PM	Analyze: Health Info Net (HIN) & Maine Health Data Organization (MHDO)
2:00-2:30 PM	Respond: Emerging Pathogens
2:30-3:15 PM	Prevent: A State Reduction Strategy
3:15-3:30 PM	Education
3:30-3:40 PM	Resources
3:40-3:55 PM	2019 meeting schedule and upcoming topics
3:55-4:00 PM	Parking lot / adjournment

# Membership Updates



- Consumer
  - Ann Woloson, Executive Director  
Consumers for Affordable Healthcare
  
- Recruiting for...
  - Pharmacy
  - ALI Laboratory
  - Healthcare Administration

# Analyze: Data Access



**MHDO** Maine Health  
Data Organization

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Information | Insight | Improvement

# Respond: Emerging Pathogens

## Novel/Targeted Multi-drug Resistant Organisms

- State surveillance (Notifiable Conditions Rule)
- CDC's Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms (MDROs)

# Respond: Emerging Pathogens

## Special Pathogens

WHO List of those pathogens likely to cause severe outbreak in near future, and few or no medical countermeasures exist (12.10.2015)

- Coronaviruses (MERS, SARS)
- Hemorrhagic Fever (Crimean Congo, Lassa, Ebola, Marburg)
- Zoonotic (Nipah Virus\*, Rift Valley Fever)

\*Human to Human transmission may be possible

## Target Areas:

1. State Plan(s)
  1. Ebola Readiness Checks – Assessment Hospitals (NETEC)
  2. Assessment Hospital status for all Special Pathogens
  3. Front line Hospital Readiness

# Prevent: a State HAI Reduction Strategy



# Overview

- CEO Dashboard
  - All Hospitals receive a facility specific report

Facility Name						
	Number of Infections - 2017					
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
HAI	Actual	Must Prevent To Reach Goal	Facility SIR - 2017	ME SIR for IPPS Hospitals - 2017	2020 National HHS SIR Goal	Facility SIR Below 2020 National HHS SIR Goal?
CAUTI	0	0	0.00	1.30	0.75	YES
CLABSI	0	0	0.00	0.91	0.50	YES
LabID - CDI	2	0	0.28	0.69	0.70	YES
LabID – MRSA BSI	1	1	NC	0.65	0.50	NO
SSI - COLO	3	2	1.56	1.05	0.70	NO
SSI - HYST	1	1	NC	0.67	0.70	NO

- High Rate Report (**high rate = not at 2020 goal**)
  - Only Hospitals with High Rates receive (ICP Department)
  - Promotes use of the TAP Strategy
    - Measure of Success: ?? (rare for facility to want to do TAP)



# 2018

- June: CEO Dashboard Report
  - CY2017 data
- Sept: High Rate Facility (top 25%)
  - 2017Q2-2018Q1 data (post NHSN deadline)
  - Only 66% of hospitals had entered Q2 data (before NHSN deadline) to use 2017Q3-2018Q2
  - Sent to CEO and ICP Department
- Oct: TAP Strategy (10 high rate hospitals)
  - 70-80% had a formal reduction program in place
    - Having a formal strategy is not necessarily an indicator of reduction
  - 2 signed up for TAP Strategy
  - 4 were CLABSI or CAUTI free for 8-16 months, (HAI = 2/year)

# 2019 and Beyond



## Hospitals

CAUTI

CLABSI

CDI

MRSA-BSI

(SSI)

# Goal Setting I

- **DHHS 2020 HAI Goals**

- (based on % reduction from 2015 rebaseline of SIR)
- CAUTI  $\leq 0.75$  (25%)
- CDI  $\leq 0.70$  (30%)
- SSI  $\leq 0.70$  (30%)
- CLABSI  $\leq 0.50$  (50%)
- MRSA-BSI  $\leq 0.50$  (50%)

- **DHHS 2030 HAI Goals (TBD)**

- Baseline: likely based on CY2020 data
- Goals: likely be posted in Spring 2021
  - likely similar reduction % from CY2020 data
- Success Measure: likely based on CY2030 data

# Goal Setting II

HAI Quality Indicator	Impact 2017 HAI Events	Estimated Average Healthcare Cost per HAI	Estimated Maine Healthcare Cost	Estimated Mortality  (literature)	Where are we? 2017 SIR  (2015 baseline)	Target SIR 2020
CDI <sub>(HO)</sub>	249	\$15,000 <sub>2008</sub>	\$3.7 M	45 <sub>18%</sub>	0.693 =	≤ 0.70
CLABSI ★ ★	50	\$20,00 <sub>2009</sub>	\$1.0 M	10 <sub>19%</sub>	0.900 ↑↓	≤ 0.50
MRSA <sub>(BSI, HO)</sub> ★	23	\$34,500 <sub>2010</sub>	\$0.8 M	5 <sub>20%</sub>	0.712 ↑	≤ 0.50
SSI <sub>(COLO, HYST)</sub>	49	\$21,000 <sub>2014</sub>	\$1.1 M	2 <sub>3%</sub>	0.968 ↓	≤ 0.70
CAUTI ★	78	\$7,670 <sub>2016</sub>	\$0.6M	2 <sub>2%</sub>	1.320 ↑↓	≤ 0.75

- **Make a push for reduction in next 5 years for 2 HAIs**

- ★ furthest from DHHS goals
- ★ highest data-based priorities, not at goal
- other?

# Methodology

- Target High Rate Facilities for reduction
  - Formal Strategy / TAP Strategy
  
- Add?...Targeted Infection Control Assessment by Maine CDC's Healthcare Epidemiology Program (non-regulatory)
  - If high rate?
  - If statistically significantly high rate?
  
- \_\_\_\_\_ ?? \_\_\_\_\_ for facilities with low numbers of infections/year to reduce
  - Root Cause Analysis – share findings with Maine CDC?
  - Other?

# Commitment

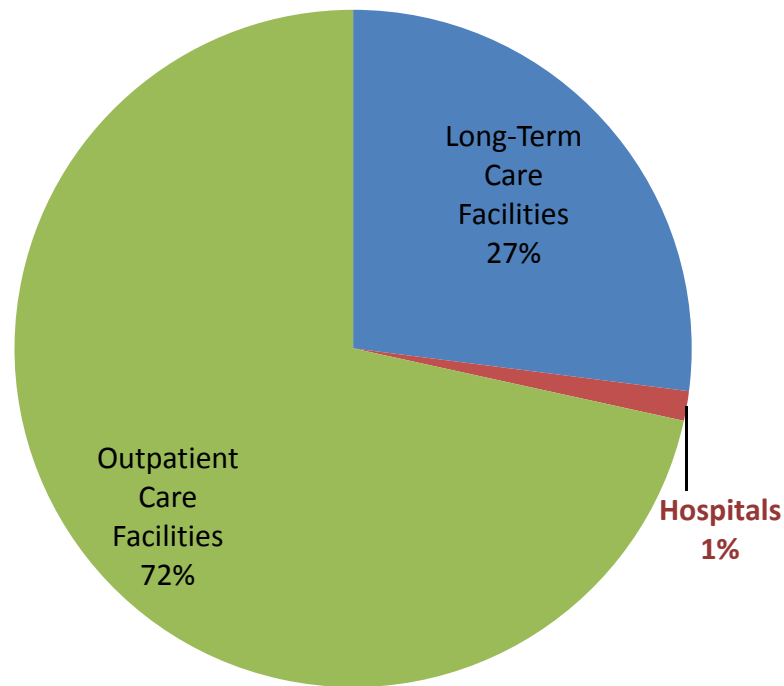
- CEOs
  - Work with MHA to speak to CEOs at meeting
  - Regular updates to CEOs
    - Facility comparison maps (peer group or name?)
  - Do we need to make the business case?
    - What is the driver when facility has 2 or less infections a year to reduce?
  - CEO Commitment: for facility to be actively engaged in a formal HAI reduction strategy.  
More?

# Resources / Tools Needed

- Reports?
- Data Analysis?
- Reduction Strategies?
- Education?
- Other?

# What's Next for Maine?

Healthcare Delivery (n=3468)



What about Outpatient Care?

LTC:  
Infection Control Assessments and Education

Accessing data

- CDI
- UTI (next?)

Hospitals:

Have data - HAI reduction

- CLABSI
- CAUTI
- CDI
- MRSA-BSI
- SSI



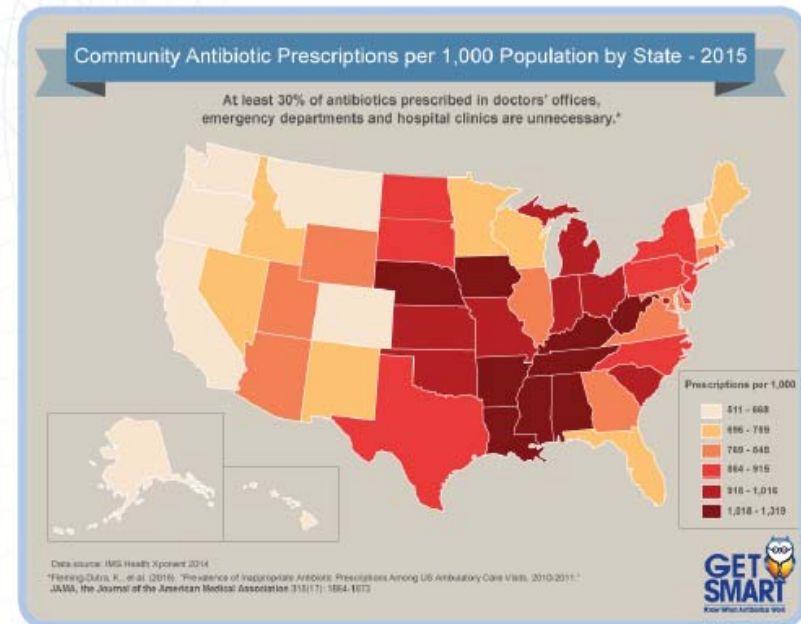
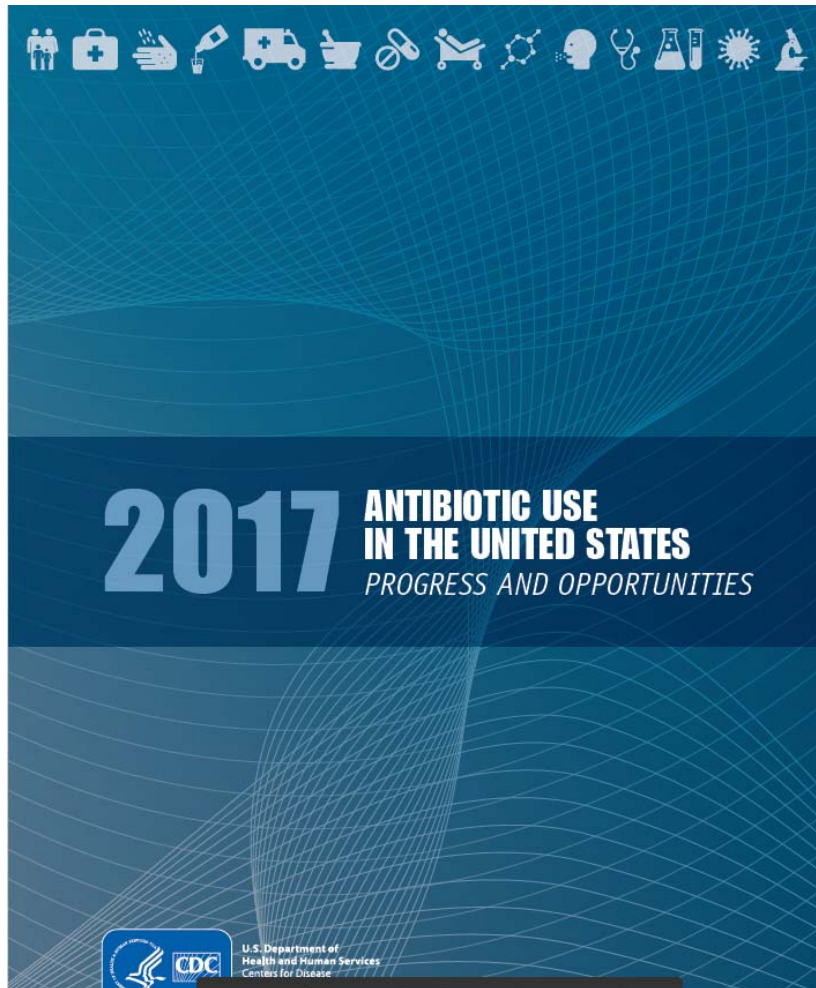
# 2019 and Beyond



**Outpatient  
Clinics**

**AR**

# Outpatient Setting



## ORAL ANTIBIOTIC PRESCRIBING BY PROVIDER TYPE IN THE UNITED STATES IN 2014

Provider type	Number of antibiotic prescriptions in 2014 (millions)
Family Practice Physicians	58.1
Physician Assistants & Nurse Practitioners	54.4
Internal Medicine	30.1
Pediatricians	25.4
Dentistry	24.9
Surgical Specialties	19.9
Emergency Medicine	14.2
Dermatology	7.6
Obstetrics/Gynecology	6.6
Other	25.0
<b>All Providers</b>	<b>266.1</b>

# Outpatient Setting

**Improve Antibiotic Use to Combat Antibiotic Resistance**

**CDC is working to reduce unnecessary antibiotic use**

National Action Plan to Combat Antibiotic-Resistant Bacteria (CARB)

**Goal: By 2020, reduce inappropriate outpatient antibiotic use by 50%**

Find out when antibiotics are necessary. Visit <http://www.cdc.gov/antibiotic>

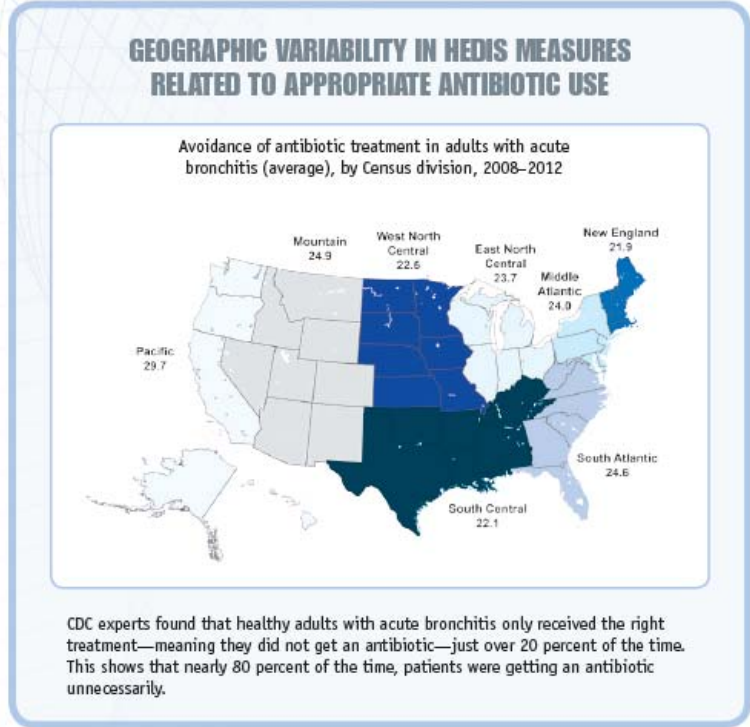
Center for Disease Control and Prevention 2009  
Snyder Stein, E et al. Prevalence of unnecessary antibiotic prescriptions among US ambulatory care visits, 2001-2011.  
Journal of the American Medical Association. May 2014

## PERCENT OF ANTIBIOTIC PRESCRIPTIONS THAT WERE UNNECESSARY

	All conditions*	Acute respiratory conditions**
0-19 year olds	29%	34%
20-64 year olds	35%	70%
≥65 year olds	18%	54%
All ages	30%	50%

\*All conditions included acute respiratory conditions, urinary tract infections, miscellaneous bacterial infections, and other conditions.

\*\*Acute respiratory conditions included ear infections, sinus infections, sore throats, pneumonia, acute bronchitis, bronchiolitis, upper respiratory infections (i.e., common colds), influenza, asthma, allergy, and viral pneumonia.



## PERCENT OF PATIENTS RECEIVING THE RECOMMENDED FIRST-LINE ANTIBIOTIC BY CONDITION, UNITED STATES, 2010-2011\*

	Adults (20+ years of age)	Children (0–19 years of age)
Sinus infection	37%	52%
Pharyngitis (sore throat)	37%	60%
Middle ear infection	N/A	67%

\*Based on the prevalence of allergy to first-line antibiotics and estimated treatment failures after first-line antibiotics, at least 80% of patients presenting with these conditions should receive first-line antibiotics. Analysis is based on NAMCS and NHAMCS data.

# Goal Setting

2019:

- Data for Action
  - Obtain access to Antibiotic Utilization data
    - **All Payer Claims** (most inclusive)
    - Inpatient/ED
    - Medicare
    - Medicaid

# Goal Setting

2020-2023:

- Use data to target antibiotic utilization reduction activities, then measure success
  - Activities ??

# Infection Prevention Education

- Engage with non-IP healthcare professional groups (e.g. Pharmacy, Physicians)
  - Groups and Topics ?
    - Understanding CRE (CP-CRE, nonCP-CRE)
- Best places for patient/public education outside of the Healthcare Facility (on a small budget)?

# Infection Control Resources

- Website <https://www1.maine.gov/dhhs/mecdc/infectious-disease/hai/index.shtml>
- Patient/Public Education
  - Introducing...a new brochure

# Antibiotic Awareness Week

## Nov 12-18, 2018

- Hospital TV ads
- Letters to the Editor (Newspapers)
- Professional Newsletters
- Maine CDC social media
- New brochure on Maine CDC Orderable Materials webpage



# Next Year

- Meeting Dates
  - February 22, 2019
  - April 26, 2019
  - August 23, 2019
  - October 25, 2019
- Location: TBD
- Next Meeting
  - State Plan (Draft)
  - Program Authority (to enter a facility)
  - RESPOND: Outbreaks

# Questions?

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