



### **WELCOME!**

## Please MUTE your phones!

**EQuIP for LTC webinar will begin at 10:00 AM** 

Today's topic is

"AMS and Nursing Homes: How Nurses Can Make a Difference"
5/24/17 PUBLIC HEAL





## Housekeeping

### Please...

- Mute your phone if you are not speaking
- Do not put the phone line on hold
- Use the chat box to ask questions during and after the presentation





## **Enrollment in EQuIP**

- Formal participation encouraged (not mandatory)
- Requires signed enrollment form by facility leadership & contact info for facility attendees
- Annual facility self-assessment
- Opportunity to participate in small group collaborative and QI projects
  - Work together
  - Share outcome data
  - Community of support
- Establish ASP & be recognized on DOH Honor Roll for Stewardship





## Leadership Commitment Poster

- Customize for your facility
- Post in prominent location
- Include in admission packet

Your nursing home photo and logo here!



#### A Commitment to Our Patients about Antibiotics

#### What we will do as your healthcare team

Your health is important to us. When you have an illness, we promise to provide the best possible treatments for your condition. If an antibiotic is not needed, or would do more harm than good, we will explain this to you and offer other treatments that are better for you.

#### Antibiotics only fight infections caused by bacteria

- Antibiotics don't work for viral infections like the common cold, most coughs, and most sore throats.
- If you're sick from a virus and you take antibiotics, you won't get better and you could get bad side effects.
- · Antibiotics should only be taken when necessary.
- Buying medications that won't help you is a waste of your money.

#### What should you do?

- . If you get an antibiotic, take it as prescribed.
- If you don't get an antibiotic but think you need one, discuss your concerns with us.

#### Problems with using antibiotics

Antibiotics make bacteria more resistant and can make future infections harder to treat.

Side effects include:

- Drug-resistant infections ("superbugs")
- · Skin rashes
- Diarrhea (including C.difficile which can be serious and difficult to treat)
- Yeast infections

#### Our promise

As your healthcare team, we promise to provide the best possible treatments for your condition. We are dedicated to prescribing antibiotics only when they are needed, and we will avoid giving them to you when they might do more harm than good.

If you have any questions, please feel free to ask your doctor, nurse, or pharmacist.

Clinic Picture Here

Clinic Name Here

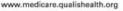
Clinic Logo Here











This material was prepared by the Washington Blate Department of Health, the Washington Blate Medical Association and Dealer Beach, by Microan Coully Inhosistic Arterials (Proceedings of Dealer) prepared Department Department Objection (IOV DID for Idea) and Washington, under contract with the Centers for Medical & Microal Bentius (IOVI), an agency of the U.S. Department of Health and Human Services, The contents presented do not necessarily related CMS policy. (IOVACL 30 OH 20 VIII) Material adapted from Meeker D, Kright TK, Freetberg MW, etc. ol. JASAN Intern Med. 2014;174:05: 425-421 doi: 10.1001/jamantsemmed.2013.1419/ and Centers for Disease Control and Prevention (EDC) Get Smith Nove Miller Antibiotics Work Internationals (International International Inte







## AMS and Nursing Homes: How Nurses Can Make a Difference

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#### INVITED ARTICLE







CLINICAL PRACTICE: Ellie J. C. Goldstein, Section Editor

## The Critical Role of the Staff Nurse in Antimicrobial Stewardship—Unrecognized, but Already There

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An essential participant in antimicrobial stewardship who has been unrecognized and underutilized is the "staff nurse." Although the role of staff nurses has not formally been recognized in guidelines for implementing and operating antimicrobial stewardship programs (ASPs) or defined in the medical literature, they have always performed numerous functions that are integral to successful antimicrobial stewardship. Nurses are antibiotic first responders, central communicators, coordinators of care, as well as 24-hour monitors of patient status, safety, and response to antibiotic therapy. An operational analysis of inpatient admissions evaluates these nursing stewardship activities and analyzes the potential benefits of nurses' formal education about, and inclusion into, ASPs.

Keywords. antimicrobial stewardship; antimicrobial stewardship program; antibiotic resistance; nursing; turnaround time.

Olans RN, Olans RD, DeMaria A Jr. The Critical Role of the Staff Nurse in Antimicrobial Stewardship---Unrecognized, but Already There. Clin Infect Dis 2016.1;62(1):84-9. doi: 10.1093/cid/civ697. Epub 2015 Aug 11. PMID: 2626-496 Ashington State Department of Company of the Company of the Staff Nurse in Antimicrobial Stewardship---Unrecognized, but Already There. Clin Infect Dis 2016.1;62(1):84-9. doi: 10.1093/cid/civ697. Epub 2015 Aug 11. PMID: 2626-496 Ashington State Department of Company of the Company of the

# Antimicrobial Stewardship & Nursing Homes How Nurses Can Make a Difference

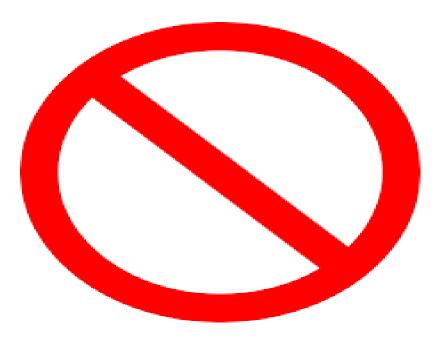
5.24.17

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## Disclosures



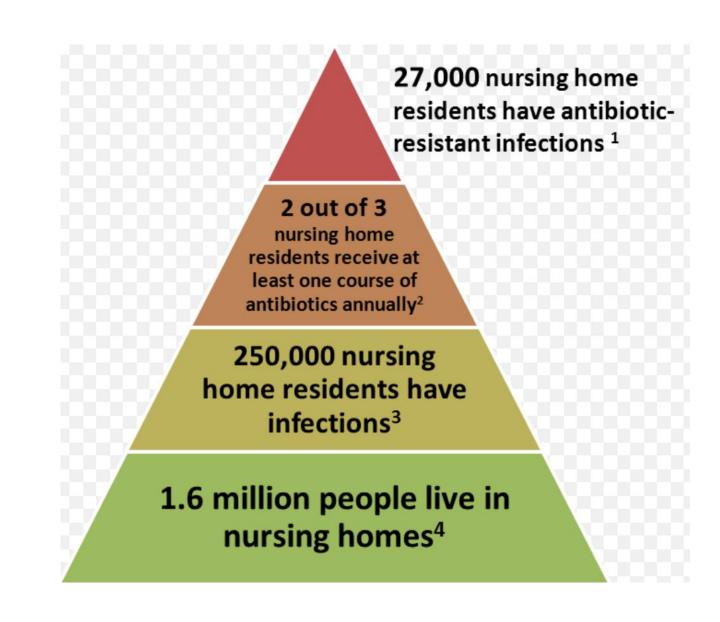
## Learning Objectives

☐ Recognize the scope of antibiotic resistance nursing homes and hospitals	ir
☐ Understand how the nurse is already contributing to antibiotic stewardship activiti	es
☐ Identify 3 areas where nurses can increase their skill set to enhance antibiotic stewardsh performance in nursing homes	ip
Utilize the SBAR format to communicate critical information to prescribers about possible infection	

"Antimicrobial [antibiotic] Stewardship is a quality paradigm whose desired goal is the best use of antibiotics to produce a lower rate of antibiotic resistance while achieving optimal clinical outcomes"

Antibiotic &
Antimicrobial
Resistance is
Interchangeable



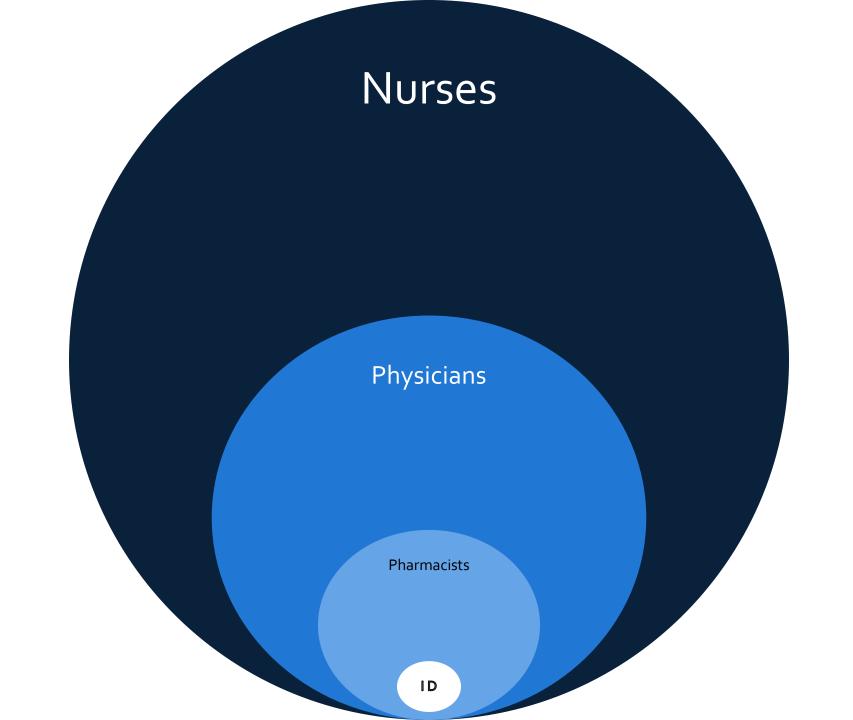


## Antibiotic Stewardship Goals

- OTo prevent or slow the emergence of antibiotic resistance,
- OTo optimize the selection, dosing, and duration of antibiotic therapy in individual patients,
- To reduce adverse drug events, including secondary infections (e.g., *C. difficile*),
- OTo reduce morbidity, mortality, length of hospitalization, and health care-related costs.

## What does Google say?

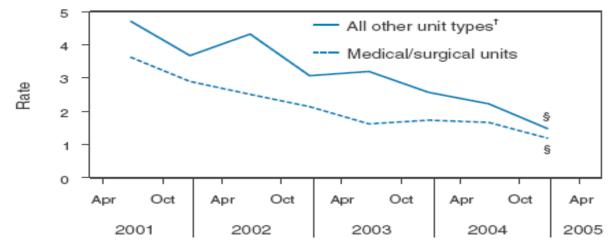
The use of antibiotics in nursing homes is intense and usually empiric. ... Programs that will limit the emergence and impact of antibiotic resistance and infections in nursing homes need to be developed



## What Happens When Nurses Are Engaged

#### Pennsylvania

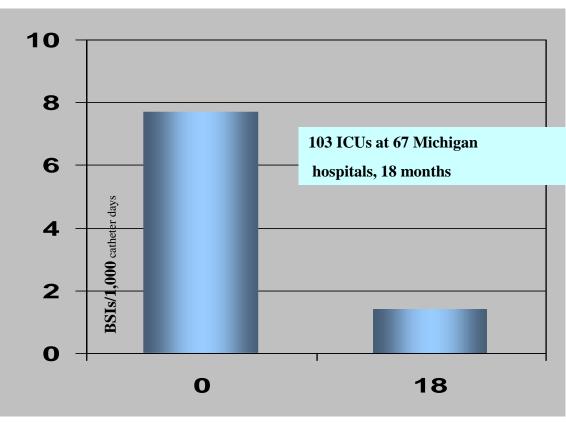
FIGURE. Central line–associated bloodstream infection rate\* in 66 intensive care units (ICUs), by ICU type and semiannual period — southwestern Pennsylvania, April 2001–March 2005



\* Pooled mean rate per 1,000 central line days.

<sup>9</sup>p<0.001.

#### Michigan



Pronovost P. New Engl J Med 2006;355:2725-32

Semiannual period

Includes cardiothoracic, coronary, surgical, neurosurgical, trauma, medical, burn, and pediatric ICUs.

## Summary of Core Elements for Antibiotic Stewardship in Nursing Homes



#### **Leadership commitment**

Demonstrate support and commitment to safe and appropriate antibiotic use in your facility



#### **Accountability**

Identify physician, nursing and pharmacy leads responsible for promoting and overseeing antibiotic stewardship activities in your facility



#### **Drug expertise**

Establish access to consultant pharmacists or other individuals with experience or training in antibiotic stewardship for your facility



#### Action

Implement **at least one** policy or practice to improve antibiotic use



#### **Tracking**

Monitor at least one process measure of antibiotic use and at least one outcome from antibiotic use in your facility



#### Reporting

Provide regular feedback on antibiotic use and resistance to prescribing clinicians, nursing staff and other relevant staff



#### **Education**

Provide resources to clinicians, nursing staff, residents and families about antibiotic resistance and opportunities for improving antibiotic use

## Recognition of an Infection

AS Activity or Task	CDC Core AS Element for Nursing Homes	Nurses
Appropriate triage & isolation	Accountability Drug Expertise Education	Identifies source Appropriate precautions
Accurate antibiotic allergy history	Accountability Drug Expertise Education	Takes allergy history Medication reconciliation Records in resident's record
Early & appropriate cultures	Accountability Drug Expertise Tracking	Obtains/sends cultures Monitors/reports results
Timely antibiotic initiation	Drug Expertise Action Tracking	Receives orders Reviews dose/time Checks allergy/ Administers & records

### Patient Course

AS Activity or Task	CDC Core AS Element for Nursing Homes	Nurses
Progress reporting	Drug Expertise Action Tracking	At bedside 24/7 Monitors Communicates
Antibiotic adjustment based on microbiology reports	Drug Expertise Action Tracking	Labs 'chase' resident Receives 1 <sup>st</sup> Communicates
Antibiotic dosing, Culture & Sensitivity reporting, & de-escalation	Drug Expertise Action Tracking Education	Updates labs Micro susceptibilities

## Safety Implications

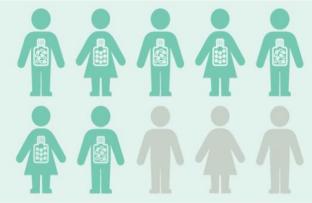
AS Activity or Task	CDC Core AS Element for Nursing Homes	Nurses
Adverse events	Action Tracking Education	Monitors & reports adverse events
Superinfection/ Resistant Infection	Drug Expertise Action Tracking Education	Identifies resident's status change Initiates appropriate changes in isolation
Antibiotic resistance	Education Tracking	Reviews Culture & Sensitivity results Reports bug/drug mismatches

### Transition to and/or from the Hospital

AS Activity or Task	CDC Core AS Element for Nursing Homes	Nurses
Length of stay	Action Tracking Education	24/7 Progress monitor
Resident education, Medication reconciliation	Drug Expertise Action Education	Continuous resident & family education Discharge teaching
Hospital transitions	Action Tracking Education	Communicates /or receives Diagnosis, management, medications to/ or from transferring facility

## Why?





UP TO **70%**of nursing home residents received antibiotics during a year



UP TO **75%** of antibiotics are prescribed incorrectly



# Improving Antibiotic Use -> Potential Roles for Nurses?

- ☑ Take a good recent antibiotic use history
- ✓ Nuanced antibiotic allergy
- ☑ Appropriate cultures, appropriately
- ✓ Informed patient response
- ☑ *C. diff* differential testing/ diagnosis
- ☑ Improved transitions in care
- ✓ Interdisciplinary communication
- ☑ Patient & family engagement
- ☑ Public education

# Take a good recent antibiotic use history

#### Check the chart!

- Ask the patient, "What antibiotics have you taken in the last 6 months?"
- "Why did you take them?"
- "How long did you take them?"
- "Did you finish all the pills?"
- "Did you get better?"

## Nuanced antibiotic allergy

- "Tell me more about your allergy to penicillin..."
- "Did someone tell you that you had an allergy to an antibiotic?"
- "Was it in childhood?"
- "What were your symptoms?
- "Have you ever taken Keflex?"

Appropriate cultures, appropriately

# Testing Stewardship

# Informed patient response



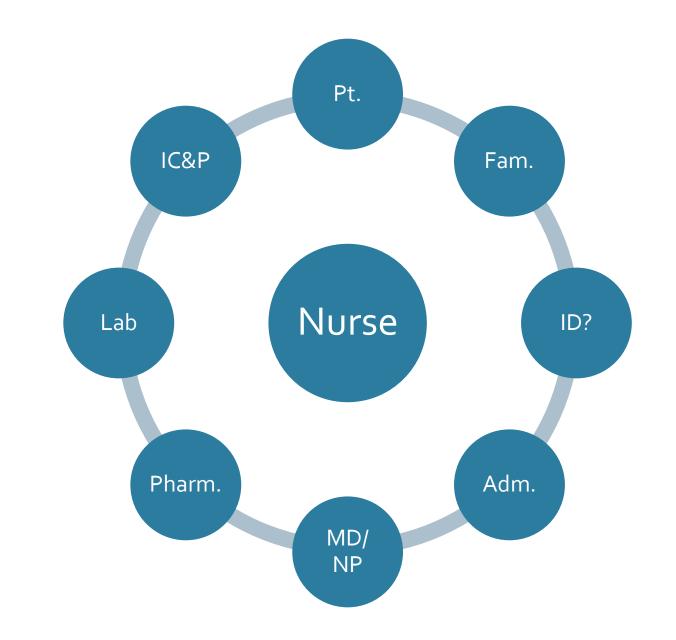
C. diff
differential
testing/
diagnosis



Improved transitions in care



## Interdisciplinary communication



Patient & Family Engagement



## Public Education



### **SBAR**

- Situation (identify yourself, the resident, and the problem).
- Background (history, vitals, results, etc).
- Assessment (findings, severity, life-threatening?).
- Recommendation (what is next?, needs, timeframe) or Request for Orders (can be called in or faxed).

### **Situation**

I am contacting you about a suspected UTI for the above resident.

Vital Signs

BP\_\_\_\_/\_ HR \_\_\_\_

Resp. rate \_\_\_\_\_ Temp. \_\_\_\_

## Background

Active Diagnosis		
$\square$ No $\square$ Yes	The resident has an indwelling catheter	
$\square$ No $\square$ Yes	Patient is on dialysis	
$\square$ No $\square$ Yes	The resident is incontinent.	
	If yes, new/worsening? ☐ No ☐ Yes	
$\square$ No $\square$ Yes	Advance directives. Specify	
□No □Yes	Medication Allergies. Specify	

#### Assessment

#### Resident with indwelling Resident without indwelling Catheter Catheter (Criteria met if 1 met) (Criteria met if 1 of 3 met) No/Yes No/Yes $\square$ $\square$ T 100° /repeat T99° □□ Acute dysuria alone New back/flank pain ----or---- $\square$ Single T 100°& 1 or Acute pain worsening sxs $\square \square$ Rigors/shaking chills ----Or-----New/dramatic $\triangle$ MS No fever or 2 or more sxs ☐ Hypotension $\square$ urgency $\square$ frequency □ incontinence □ suprapubic □gross hematuria

## Request for Orders

Physician's signature	Date

#### Using this UTI SBAR as an example...

- The UTI SBAR form is based on criteria developed by an expert consensus panel which modified clinical practice guidelines for infections in older adults in long-term care facilities.
- The UTI SBAR form can be faxed or used to communicate with a prescribing clinician. It takes only minutes to fill in and can be used as part of the resident's medical record.

SBAR can be part of Team Strategies & Tools to Enhance Performance & Patient Safety



	Very High	High	Average	Low	Very Low
	%	%	%	%	%
Nurses	29	55	13	2	1
Pharmacists	15	52	26	6	2
Medical doctors	15	50	29	5	2
Engineers	13	52	29	4	1
Dentists	10	49	34	5	2
Police officers	16	42	29	10	3
College teachers	10	37	32	12	6
Clergy	12	32	39	9	4
Psychiatrists	6	32	45	9	3
Chiropractors	5	33	45	10	3
Bankers	2	22	46	22	8
Journalists	4	19	34	23	18
Lawyers	3	15	45	26	11
State governors	2	16	45	27	8
Business executives	2	15	50	23	9
Stockbrokers	2	10	46	28	11
HMO managers	1	11	48	23	8
Senators	1	11	37	36	14
Advertising practitioners	1	10	46	29	11
Insurance salespeople	1	10	51	28	10
Car salespeople	1	8	45	31	15
Members of Congress	1	7	31	39	20

Dec. 7-11, 2016

GALLUP

http://www.gallup.com /poll/1654/honesty-ethicsprofessions.aspx

### What does Google say?

The use of antibiotics in nursing homes is intense and usually empiric... Programs that will limit the emergence and impact of antibiotic resistance and infections in nursing homes need to be developed

# CDC has a lot of resources for the public and for nursing homes



#### FOR PARENTS









#### ANTIBIOTICS AREN'T ALWAYS THE ANSWER

Many common infections are becoming resistant to antibiotics. As a parent, ask questions to make sure your sick child is getting the best care possible, which might not include an antibiotic.

#### The Facts:

. Antibiotics can have reactions and side effects.

Harmful effects from antibiotics, such as side effects and allergic reactions, cause 1 out of 5 emergency department visits for adverse drug events and lead to 50,000 emergency department visits in children each veri\*.

. Antibiotics can be overused and misused.

It is estimated that more than half of antibiotics are unnecessarily prescribed to children in doctor office settings for cough and cold illness, most of which are caused by viruses.

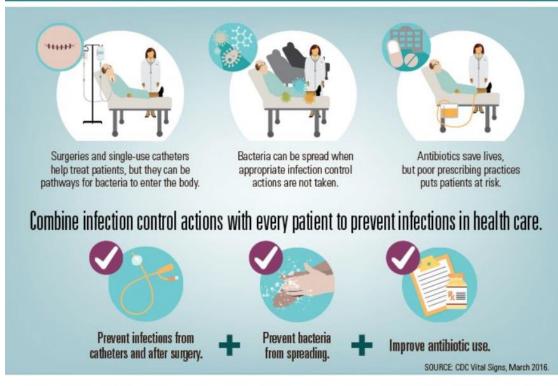
- · Antibiotics can only cure infections caused by bacteria, not viruses.
- . Antibiotic resistance is growing.

An estimated 2 million illnesses and 23,000 deaths occur each year in the United States due to antibiotic-resistant infections<sup>2</sup>. Overuse and misuse of antibiotics are main drivers of resistance.



# Teaching Materials to Post in your Facility

#### Protect patients from antibiotic-resistant infections.







#### Fact Sheets from CDC for Patients & Families



Core Elements for Antibiotic Stewardship in Nursing Homes

#### What to Ask Your Healthcare Provider about Antibiotics

Antibiotic resistance is a growing problem, both in the United States and across the world. An important driver of antibiotic resistance is the overuse of antibiotics. When antibiotics are used correctly, you get the best effect on your health, your family's health, and the health of those around you. Here are some questions to ask your healthcare provider about antibiotics.



#### Questions to Ask your Healthcare Provider Before Asking for an Antibiotic

- Could my symptoms be caused by something other than bacteria (e.g., a virus or something that is not an infection)?
- 2. What signs or symptoms should I look for that could mean I might need an antibiotic?
- 3. Can I be monitored to see if my symptoms improve with other remedies, without using antibiotics?

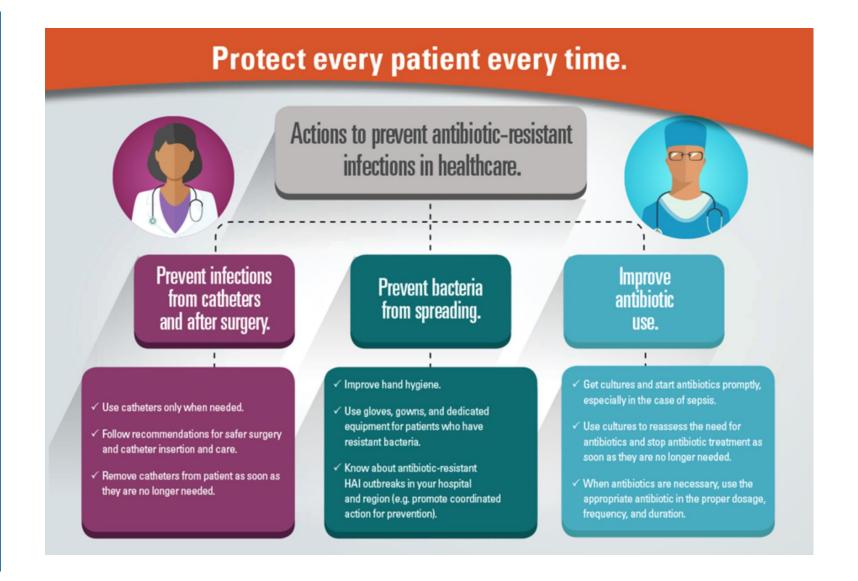


#### Questions to Ask your Healthcare Provider When you are Prescribed an Antibiotic

- 1. What infection is the antibiotic treating and how do you know I have that infection?
- 2. What side effects might occur from this antibiotic?
- 3. Could any of my other medications interact with this antibiotic?
- 4. How will I be monitored to know whether my illness is responding to the antibiotic?



These can be posted in public places inside your facility to show patients & families you care



Antimicrobial stewardship is everyone's responsibility



By recognizing and better understanding each others' roles and contributions to antimicrobial stewardship, we create a safer, more collaborative, and better integrated interdisciplinary antimicrobial stewardship process. In doing this, we improve both our individual patient's as well as the broader public's health, now and in the future.

-R.D. Olans & R.N. Olans, 2013

## Are Nurses antibiotic prescribers?

Antibiotic stewards? *YES!* 

Stewardship definition: the conducting, supervising, or managing of something; especially, the careful and responsible management of something entrusted to one's care

### Learning Objectives

- Recognize the scope of antibiotic resistance in nursing homes and hospitals
- Understand how the nurse is already contributing to antibiotic stewardship activities
- ☑ Identify 3 areas where nurses can increase their skill set to enhance antibiotic stewardship performance in nursing homes
- Utilize the SBAR format to communicate critical information to prescribers about possible infection

# Antimicrobial Stewardship 2.0

Thank you,
Rita Olans
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