

# ANTIMICROBIAL STEWARDSHIP IN NURSING HOMES

It's our turn now

**Grow Good Knowledge Not Bad Bugs**

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# DISCLOSURE

**I have no actual or potential conflict of interest in relation to this program or presentation.**

# LEARNING OBJECTIVES

- ☐ Evaluate current state of Antimicrobial Stewardship preparedness in post acute/long term care (PALTC)
- ☐ Review upcoming regulatory changes in PALTC related to Antimicrobial Stewardship
- ☐ Describe CDC's core elements of antibiotic stewardship for nursing homes
- ☐ Discuss practical approaches to starting a successful and long-lasting Antimicrobial Stewardship Program in PALTC

# Pretest Question 1

Which of the following is not a core element of antibiotic stewardship in nursing homes?

- A. Leadership Commitment
- B. Accountability
- C. Obtaining cultures upon admission
- D. Drug Expertise

# Pretest Question 2

Which of the following exemplifies a good antibiotic stewardship program?

- A. Policies that support optimal antibiotic use
- B. Broad interventions (antibiograms and antibiotic time-outs)
- C. Positive cultures must be treated immediately
- D. Infection and syndrome specific interventions (asymptomatic bacteriuria – ASB)

# DEFINITION

Antibiotic stewardship refers to a set of commitments and activities designed to **“optimize the treatment of infections while reducing the adverse events associated with antibiotic use.”**

# DATA POINTS

- **70%** of NH residents **receive** one or more courses of antibiotics in a year
- **40%-75%** of antibiotics prescribed in NH may be **unnecessary or inappropriate**
- **Cost** of antibiotic use in NHs is **\$ 38 to 137 million** per year
- Residents with higher antibiotic use are at **24 % higher** risk of antibiotic related **harm**
- **20 %** of **providers prescribe 80 %** of antibiotics
- **40-75%** of antibiotics in NH are prescribed **incorrectly**
- **50 %** of antibiotics in NH are prescribed for **longer duration than necessary**



# NATIONAL STRATEGY FOR COMBATING ANTIBIOTIC- RESISTANT BACTERIA

***Vision:** The United States will work domestically and internationally to prevent, detect, and control illness and death related to infections caused by antibiotic-resistant bacteria by implementing measures to mitigate the emergence and spread of antibiotic resistance and ensuring the continued availability of therapeutics for the treatment of bacterial infections.*

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Part II

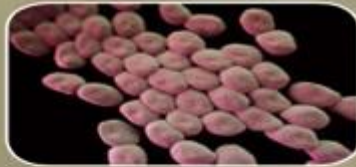
Department of Health and Human Services

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Centers for Medicare & Medicaid Services

42 CFR Parts 405, 431, 447, *et al.*

Medicare and Medicaid Programs; Reform of Requirements for Long-Term  
Care Facilities; Proposed Rule



## The Core Elements of **Antibiotic Stewardship** for Nursing Homes

National Center for Emerging and Zoonotic Infectious Diseases  
Division of Healthcare Quality Promotion





### **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

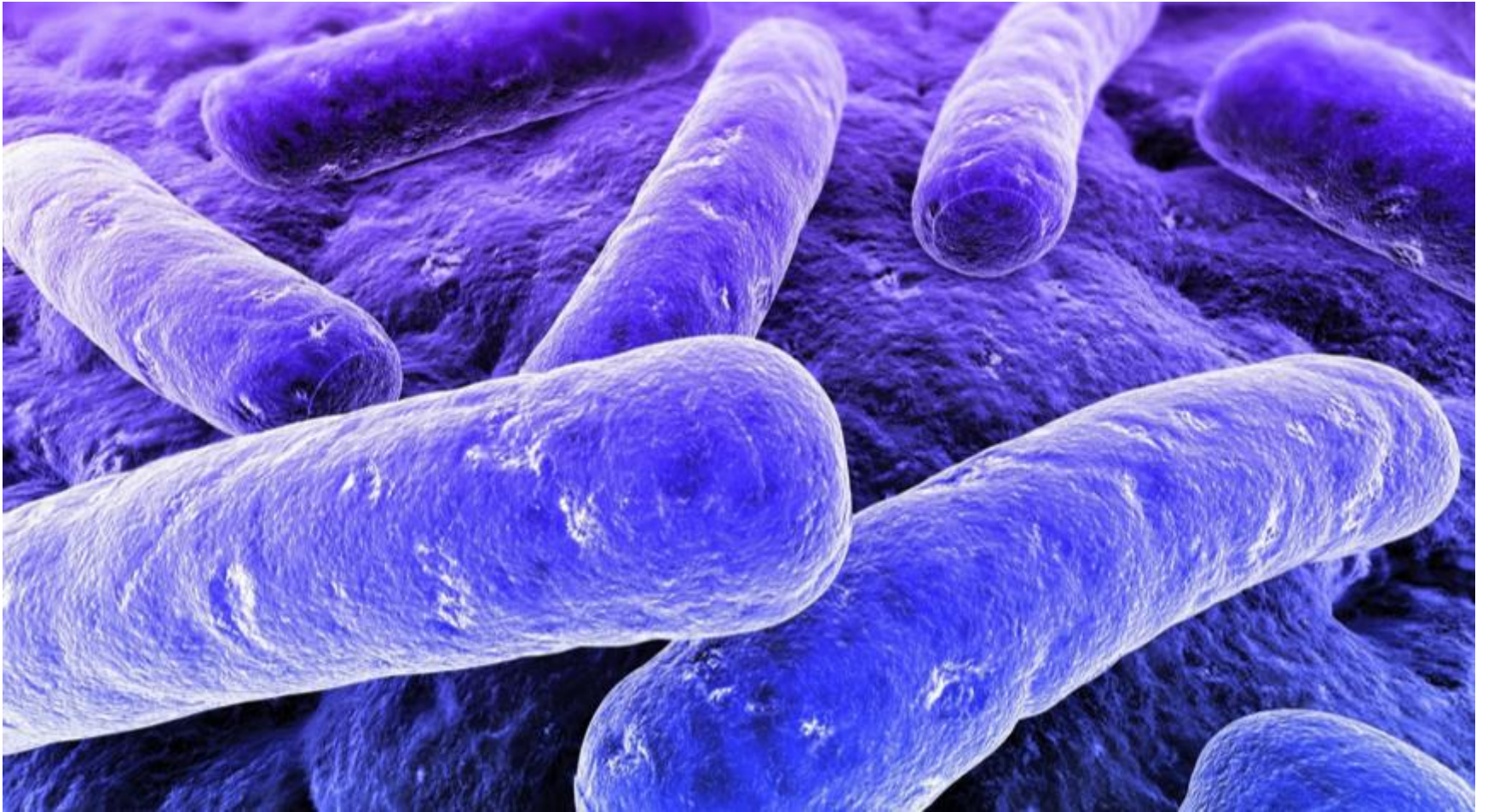
# Leadership Commitment

- **Written statements** of Leadership support
- **Define Duties** of leaders and champions
- Notify and **communicate**
- Create and promote a **culture**

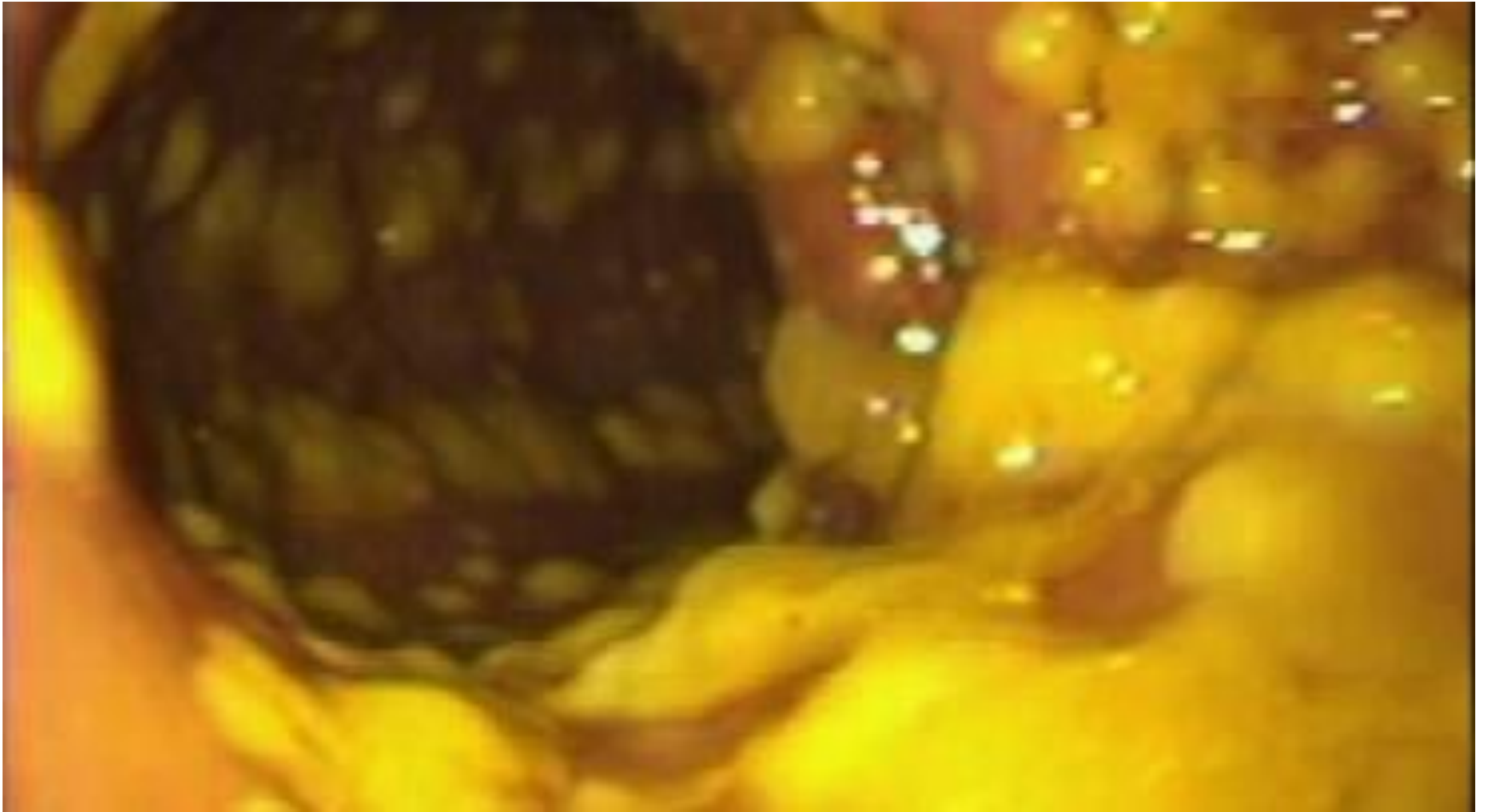
# Normal Colon



# C. Difficile



# C. Diff Colitis



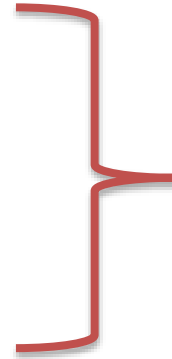
# Side by Side





# Accountability

- The medical director
- The director of nursing
- The pharmacist



**LEADERS**

- The Infection prevention program coordinator
- The laboratory
- State and local health departments

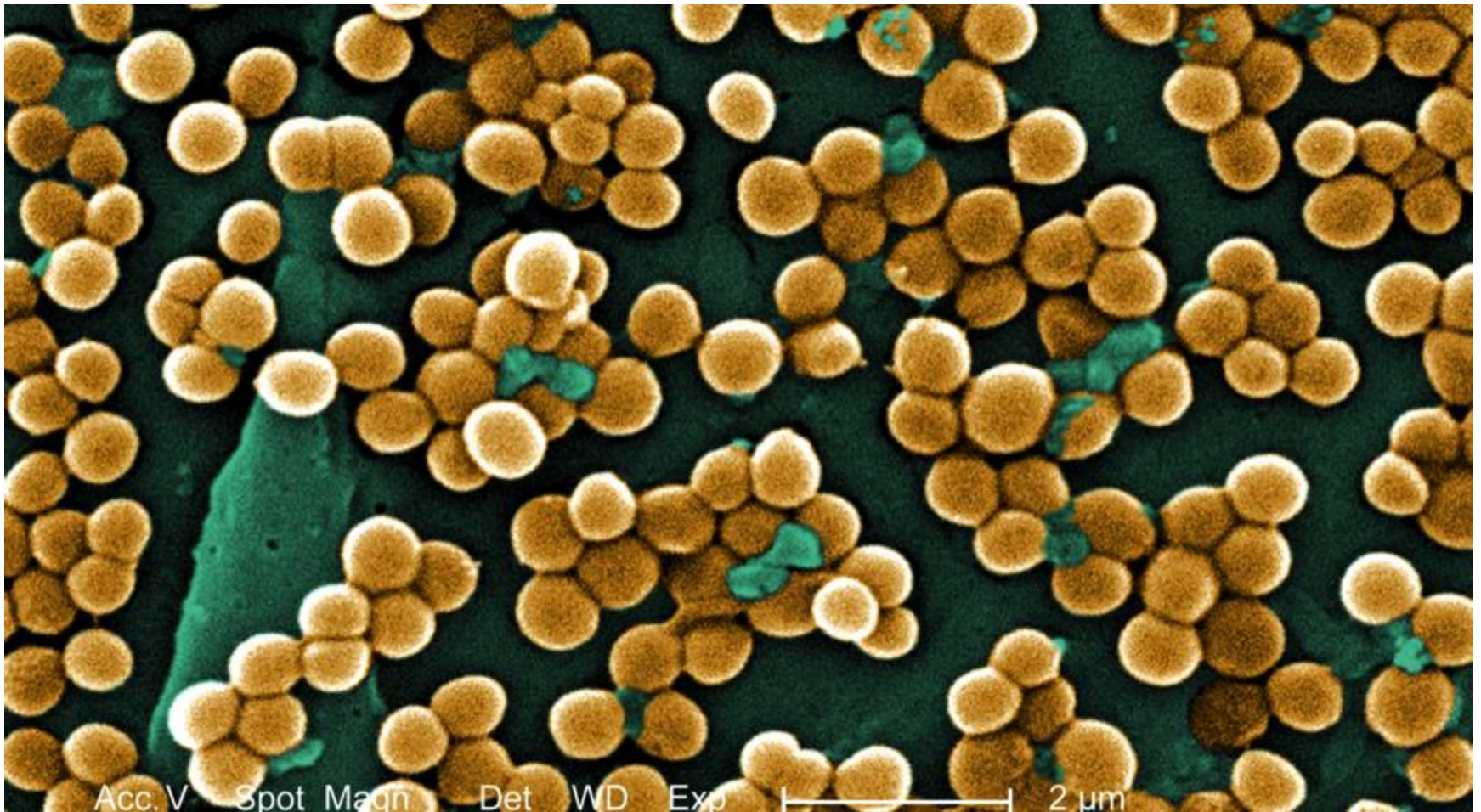
# Drug Expertise

- Work with consultant **pharmacists with additional training**
- Network with area hospital with similar AMS philosophy and **engage with Infection prevention personnel**
- Develop relationships with **infectious disease consultants**

# Policy and Practice Change

- Policies that support optimal antibiotic use
- Broad interventions (antibiograms and antibiotic time-outs)
- Pharmacy interventions (review of labs, cultures etc.)
- Infection and syndrome specific interventions (asymptomatic bacteriuria, ASB)

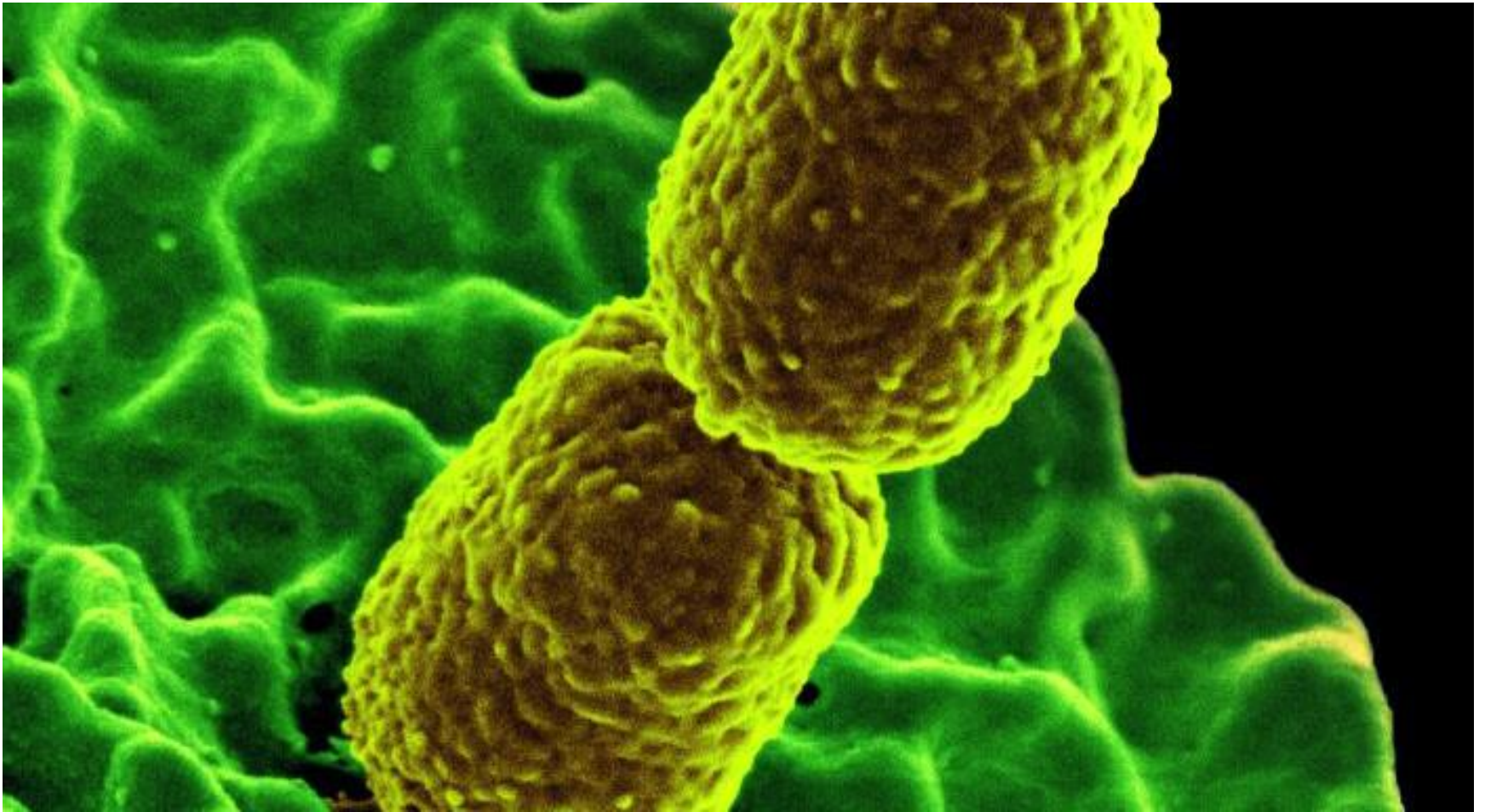
# Picture Quiz # 1



# Tracking and Reporting

- Tracking **how and why** antibiotics are prescribed ( process measure)
- Tracking **how often and how many** antibiotics are prescribed (antibiotic use measure)
- Tracking the **adverse outcomes** and costs from antibiotics (outcome measure)

# Picture Quiz # 2



# Education

- WHO

Physicians, NPPs, Nursing, residents and families

- HOW

Flyers, Newsletters, Emails/listserves and In-person sessions

....FEEDBACK goes a long way

# CONCLUSION

- AMS core elements are similar for hospitals and nursing homes
- NHs should start with 1 or 2 activities and build on success
- Celebrate your achievements and recognize the staff



# Post-test Question 1

Which of the following is not a core element of antibiotic stewardship in nursing homes?

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## Post-test Question 2

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