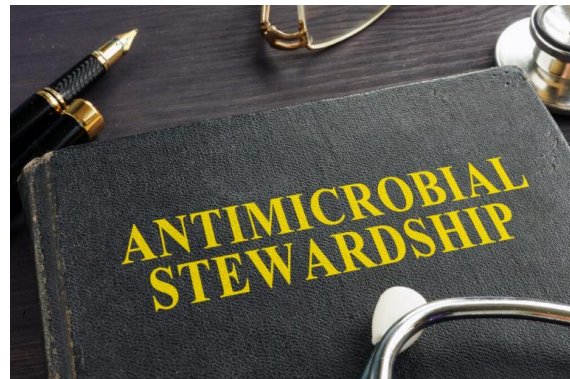


# Principles of Antimicrobial Stewardship (AS) and the New Jersey Department of Health's Antimicrobial Stewardship Recognition Program (ASRP) -Acute Care Settings: Bronze, Silver, and Gold Levels-

New Jersey Department of Health – Communicable Disease Service

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# Background

- Antimicrobial Stewardship (AS)
  - A rationale, systematic commitment to the appropriate and safe use of antimicrobials
- Antimicrobial Resistance (AR) is a global threat
- There were 1.27 million people killed worldwide and 5 million associated deaths in 2019
- U.S. - 2.8 million antimicrobial-resistant infections and more than 35,000 deaths annually
- *Clostridioides difficile* is a complicating factor...
  - Associated with antimicrobial use
  - Adds to US toll and burden
  - Excess of 3 million cases and 48,000 deaths



<https://www.cdc.gov/drugresistance/about.html>

# Centers for Disease Control and Prevention (CDC) Antimicrobial Stewardship Core Elements (CE)

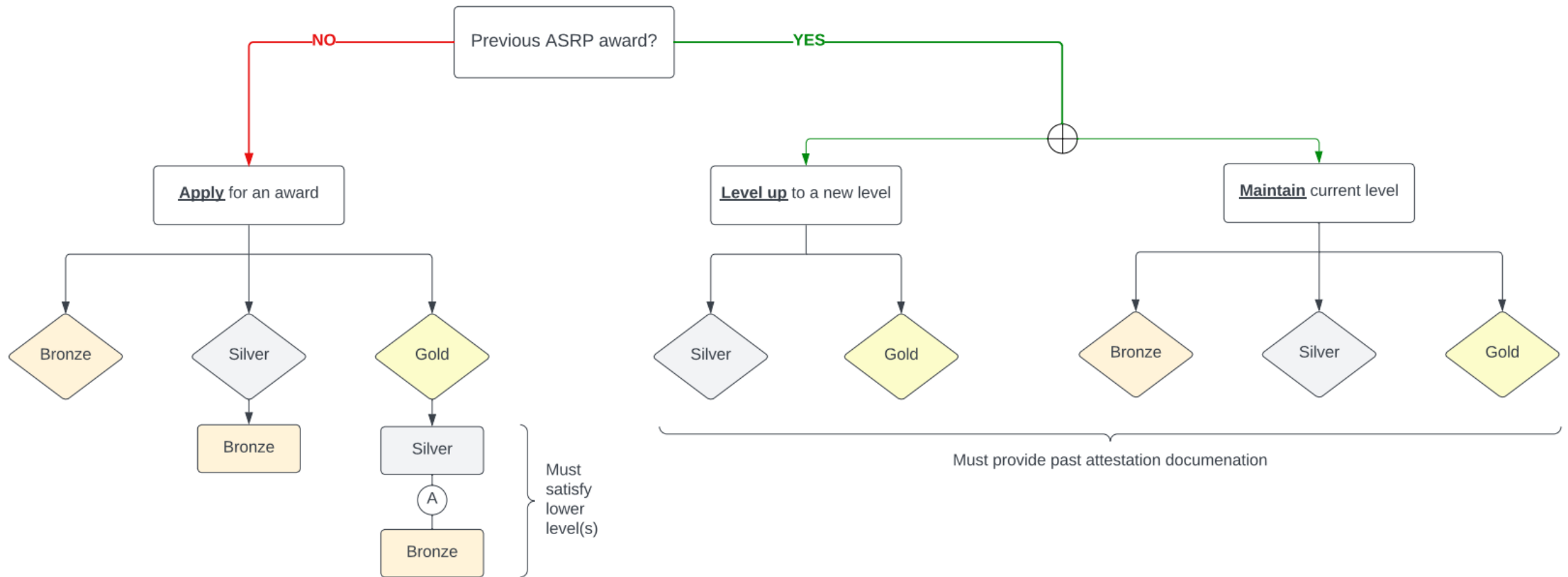
- Leadership
- Accountability
- Drug Expertise
- Action
- Tracking
- Reporting
- Education
- Related items: more formal development of Antimicrobial Stewardship Programs (ASP) in 2014, NJ Department of Health Antimicrobial Stewardship Recognition Program (ASRP) began in 2019, and updates continue to evolve (CDC Priority Core Elements) in 2022, denoted with an asterisk\*

<https://www.cdc.gov/antibiotic-use/core-elements/index.html>

# Core Elements (CE), Practice Settings, and the Antimicrobial Stewardship Recognition Program (ASRP)

- Acute Care (hospitals, long-term acute care settings)
- Post-Acute Care (long-term care facilities, nursing homes)
- Outpatient (physician offices, clinics, urgent care centers, networks, or independent settings)
- ASRP
  - Three award levels (Bronze, Silver, Gold)
  - New applicants/applications (may apply at any level; must meet all criteria of award level sought and preceding levels)
  - Previous applicants (may remain at current/previous level and provide letter of attestation, with no lapses in award status)
  - Level-up (Upgrade) applicants (must meet criteria requirements of newly sought level only and provide letter of attestation of current/previous level, with no lapses in award status)

# Antimicrobial Stewardship Recognition Process (ASRP) Application Process



# Core Element 1 - Leadership

## Bronze

- Antimicrobial Stewardship Program (ASP) leader time commitment: letter or memo signed by Senior Executive Leader (SEL) or job description of any ASP leader with activities
- Antimicrobial Stewardship (AS) physician and/or pharmacist (RPh) activities in contract, job description, or review\*

## Silver

- SEL provides informational technology (IT) support and training for ASP: Conference or training attendance for one ASP leader or screen shot of ASP alerts or time outs as supporting documentation

## Gold

- SEL commitment to ASP meetings: ASP meeting agenda/minutes/notes
- SEL commitment to National Healthcare Safety Network (NHSN) usage: evidence of NHSN enrollment as supporting documentation

# Core Element 2 - Accountability

## Bronze

- Physician leader: ASP member list with names, credentials, and roles
- ASP is co-led by a physician and pharmacist (or pharmacist involvement for critical access hospitals (CAH))\*

## Silver

- Nursing leadership + non-physician prescriber leader (physician assistant, nurse practitioner): ASP member list with names, credentials, and roles

## Gold

- SEL point of contact or champion for ASP activities: ASP member list with names, credentials, and roles

# Core Element 3 – Drug Expertise

## Bronze

- Registered Pharmacist (RPh) leader: ASP member list with names, credentials, and role

## Silver

- RPh with formal ASP training and/or experience: resume/continuing education certificate/training documentation
- AS physician and/or RPh completion of Infectious Disease (ID) training, certificate program, or AS training\*

## Gold

- RPh provides stewardship education related to optimal antimicrobial use, adverse drug reactions (ADRs), and antimicrobial resistance (AR) to providers



# Core Element 4 - Action

## Bronze

- Treatment guidelines for 2 common clinical conditions + optimal intervention for at least 1 of following: CAP, UTI, or SSTI + at least 2 protocols on stewardship interventions: sepsis, SA infections, prevention measures in CDI cases, positive blood cultures, or outpatient therapy

## Silver

- Antimicrobial preauthorization or Antimicrobial Time-Out (ATO) Policy

## Gold

- Antimicrobial pre-authorization + ATO + prospective audit and feedback on at least 2 agents and conditions
- ASP has facility-specific recommendations for common conditions and performs prospective audit/feedback or preauthorization\*

CAP=Community Acquired Pneumonia; UTI=Urinary Tract Infection; SSTI=Skin-Skin Structure Infection; SA = Staphylococcus aureus; CDI = Clostridioides difficile infection and prevention of unnecessary antimicrobials in new cases

# Core Element 5 - Tracking

## Bronze

- Antimicrobial orders are tracked for 4D's: drug/class, dose, duration, and diagnosis

## Silver

- ASP routine tracking for at least 3 of the following: AR, CDI, antimicrobial use (AU) as Days of Therapy (DOT) or Defined Daily Doses (DDD), or expenditure
- Documentation of at least 2 of the referenced items; AR can be antibiogram or tracking of 2 or more drugs

## Gold

- Rate of appropriate discharge antibiotics and duration per discharged patients (report with 4D's)
- Hospital staff submit antibiotic use data to the National Health and Safety Network (NHSN) Antimicrobial Use (AU) option\*

# Core Element 6 - Reporting

## Bronze

- Antimicrobial use report + metrics shared with prescribers for at least one agent: metrics (DOT, DDD, Length of Therapy (LOT), Standard Antimicrobial Administration Ratio (SAAR), patients exposed to antibiotics per admission, patients, exposed to antibiotics per all patients)

## Silver

- Facility antibiogram shared with prescribers within previous year

## Gold

- Shares de-identified individual prescriber specific report of at least one agent with above metrics and results of MUE for at least 2 agents, for at least 1 clinical condition
- AU reports shared  $\geq$  1x/year and ASP monitors treatment for  $\geq$  1 condition\*

# Core Element 7 - Education

## Bronze

- ASP staff provides education to providers on optimal antimicrobial prescribing, ADR, and AR

## Silver

- ASP staff provides education to nursing and other clinical staff on optimal antimicrobial prescribing, ADR, and AR

## Gold

- ASP staff provides education to patients, families, and facility staff on the previously referenced matters; may be tools for distribution or training on processes

\*No updates to Core Element 7 (Education) as of November 2022

\*Reference: <https://www.cdc.gov/antibiotic-use/core-elements/hospital/priorities.html>

# Antimicrobial Stewardship (AS) References and Toolkits

- Centers for Disease Control and Prevention (CDC) Core Elements - All Settings
  - <https://www.cdc.gov/antibiotic-use/core-elements/index.html>
- Centers for Disease Control Priority Core Elements - Hospitals
  - <https://www.cdc.gov/antibiotic-use/core-elements/hospital/priorities.html>
- Agency for Healthcare Research and Quality (AHRQ) – All Settings
  - <https://www.ahrq.gov/antibiotic-use/index.html>
- Minnesota Department of Health – All Settings
  - <https://www.health.state.mn.us/diseases/antibioticresistance/hcp/asp/index.html>

# New Jersey Department of Health – Communicable Disease Service References/Contacts

- Website:
- <https://www.nj.gov/health/cds>
- Healthcare-associated Infections/Antimicrobial Resistance (HAI/AR) Unit
  - Antimicrobial Stewardship (AS) Section:
    - Paul Fotiou, PharmD/Antimicrobial Stewardship Coordinator
    - Gargi Patel, PharmD/Infectious Disease Pharmacist
    - Contact: [abxaware@doh.nj.gov](mailto:abxaware@doh.nj.gov)
  - Antimicrobial Stewardship Recognition Program:
    - [https://www.nj.gov/health/cd/edu\\_training/ASP/asp\\_recognition.shtml](https://www.nj.gov/health/cd/edu_training/ASP/asp_recognition.shtml)