Antibiotic Stewardship for Long Term Care Facilities, is your facility ready?

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"What is antibiotic stewardship? Antibiotic stewardship refers to a set of commitments and actions designed to make sure residents receive the right dose, the right antibiotic, at the right time; and only when truly necessary". The Centers for Disease Control and Prevention (CDC) has recommended all nursing homes should implement an antibiotic stewardship program. An Antibiotic Stewardship program would encompass the use of seven core elements is necessary for implementing a successful program. The seven core elements are leadership commitment, accountability, drug expertise, action, tracking, reporting and education. Of these seven elements, nursing homes are encouraged to implement one or two activities as a starting point and gradually add new strategies from each element over time. Statistics, according to the CDC, indicate that as many as 70% of nursing home residents receive one or more antibiotics in a year; 40% to75 % of antibiotics prescribed in nursing homes may be unnecessary and/or inappropriate resulting in possible harm from over use for frail older adults.

Leadership for the antibiotic stewardship in nursing homes is the Medical Director, the Director of Nursing, Infection Preventionist, administrative leadership, and a Consultant Pharmacist. The Medical Director is charged with setting standards and ensuring adherence for prescribing antibiotics, overseeing prescribing practices are adhered to, review relevant antibiotic usage data and monitoring best practices. The Director of Nursing is empowered to set standards for assessing, monitoring and communicating changes in resident's condition to direct care staff, educate front line staff about importance of antibiotic stewardship and policies. The Infection Preventionist has designated responsibility for infection control program. The consulting pharmacists can provide education about the different types of antibiotics and their uses, review microbiology cultures and provide feedback; engage with activities of medication regimen reviews and antibiotics information reporting with oversight through quality assurance. As you can see, the leadership team's role is vital to the success and implementation of the Antibiotic Stewardship program.

Nursing homes must take a proactive approach in reviewing policies and procedures for implementing changes and practices for antibiotic use. These policies may address prescribing practices, to ensure residents are not started on antibiotics unless necessary, and should set minimum criteria for antibiotic prescribing. Another key role for this position is to develop standards for empiric antibiotic use, review antibiotic appropriateness, as well as resistance patterns on a regular basis should be based on facility driven data. The nursing homes regulations already in place for the review and monitoring of antibiotic use are F-880 Infection Control, F- 758 Unnecessary Drugs, and F-756 Pharmacy Review Drug Regimen Monthly; beginning November 2017 the following regulations will be in effect, F-880 Infection Prevention and Control, F-757 Drug Regimen is Free of Unnecessary Drugs, F-756 Drug Regimen Review, Report Irregular, Act On. All of which will all be a part of the Antibiotic Stewardship Program implemented in Phase 2, November 2017.

Please refer to <u>www.cdc.gov</u> for the Core Elements of Antibiotic Stewardship for Nursing Homes.

For more information please refer to the following website for additional updates and information <u>www.cms.gov</u> and <u>www.cdc.gov</u>

Core Elements of Antibiotic Stewardship in Nursing Homes Checklist

Effective November 28, 2017 the implementation of an antibiotic stewardship program will include antibiotic protocol:

- Monitoring system for antibiotic use
- A facility assessment is to be used to re-evaluate the system for your Infection and Preventions Control Program and make changes as needed

Below are steps The Centers for Disease Control and Prevention recommends for all nursing homes take, implement, and practice for a successful Antibiotic Stewardship Program.

Checklist Guidance from CDC

Leadership Support: Can your facility demonstrate leadership support for antibiotic stewardship through one or more of the following actions? Indicate which of the following are in place:

- Written statement which of leadership support to improve antibiotic use
- Antibiotic stewardship duties include the medical director position description
- Antibiotic duties included director of nursing position description
- Leadership monitors whether polices on antibiotic stewardship are followed
- Antibiotic use and resistance data is reviewed in Quality Assurance meetings

Accountability: Has your facility identified a lead(s) for antibiotic stewardship activities? Indicate who is accountable for stewardship activities.

- Medical Director
- Director or assistant director of nursing services
- Consultant pharmacist
- Infection Preventionist
- Administrative leadership
- Additional ______

Drug Expertise: Does your facility have access to individual(s) with antibiotic stewardship expertise? Indicate who is accountable for stewardship activities

- Consultant pharmacist has staff trained/ is experienced in antibiotic stewardship
- Partnering with stewardship team at referral hospital

• External infectious disease/stewardship consultant

Actions to Improve Use: Does your facility have policies to improve antibiotic use/prescribing? Which polices are in place

- Require prescribers to document a dose, duration, and indication for all antibiotics prescriptions
- Developed facility –specific algorithm for assessing residents
- Developed facility –specific algorithm for diagnostic testing for specific infection
- Developed facility –specific treatment recommendations for infections
- Reviews antibiotics agents listed on the medication formulary
- Additional ______

Has your facility implemented practices to improve antibiotic use?

- Implemented a standard assessment and communication tool for residents suspected of having an infection
- Implemented a process for communicating or receiving antibiotic use information when residents are transferred to/from other healthcare facilities
- Developed reports summarizing the antibiotic susceptibility patterns
- Implemented an antibiotic review process/ antibiotic time out
- Implemented an infection specific intervention to improve antibiotic use -Indicate for which condition(s)

Does your consultant pharmacist support antibiotic stewardship activities? Indicate activities performed by the consultant pharmacist

- Review antibiotic courses for appropriateness of administration and/or indication
- Establish standards for clinical/ laboratory monitoring for adverse drug events from antibiotic use
- Reviews microbiology culture data to assess and guide antibiotic selection

Tracking: Monitoring Antibiotic Prescribing, Use, and Resistance:

Doses your facility monitor one or more measure of antibiotic use? Indicate which of the following are being tracked:

- Adhere to clinical assessment documentation (signs/symptoms, vital signs, physical findings)
- Adhere to prescribing documentation (dose, duration, indication)
- Adhere to facility-specific treatment recommendations
- Perform point prevalence surveys of antibiotics use
- Monitor rates of new antibiotics starts/ 1,000 residents days
- Monitor antibiotic days of therapy /1000 resident-days
- Additional ______

Does your facility monitor one or more outcomes of antibiotic use?

Indicate which of the following are being tracked:

- Monitor rates of C. difficile infection
- Monitor rates of antibiotics –resistant organisms
- Monitors rates of adverse drug events due to antibiotics
- Others

Reporting Information to Staff on Improving Antibiotic Use and Resistance: Does your

facility provide specific reports on antibiotic use and outcomes with clinical providers and nursing staff? Indicate which of the following are being tracked:

- Measure of antibiotic use in facility
- Measure of outcome related to antibiotic use
- Report of facility antibiotic susceptibility patterns (within 18 months)
- Personalized feedback on antibiotic prescribing practices
- Others

Education: Does the facility provide educational resources and materials about antibiotic resistance and opportunity for improving antibiotic use? Indicate which of the following are being tracked

- Clinical providers (MDs. Pharmacy, NP, etc.)
- Nursing staff (RNs, LPNs, CNAs)
- Residents and families
- Others

Facility task must be used to investigate compliance at F-880, F- 881 and F-883. The facility infection prevention and control program must be facility-wide and includes all department and contracted services

Resources:

www.cdc.gov; The Core Elements of Antibiotic Stewardship for Nursing Homes Checklist

www.cms.gov