

Comparison of CDC's 7 Core Elements of Antibiotic Stewardship

The three CDC Publications from Acute Care Hospitals, LTC / Nursing Homes and Small and Critical Access Hospitals all have exact same 7 Core Elements. The only difference is the way the commitments are defined in the 3 different CDC publications. Here are the definitions, word for word, from the CDC website.

1 - = Stewardship definition in Nursing Homes

2) = Stewardship definition in Hospitals

3) = Stewardship definition in Small and Critical Access Hospitals

LEADERSHIP COMMITMENT

- 1) **Leadership commitment:** Demonstrate support and commitment to safe and appropriate antibiotic use in your facility
- 2) **Leadership Commitment:** Dedicating necessary human, financial and information technology resources.
- 3) **Core Elements 1 and 2: Leadership Commitment/Accountability** Leadership commitment by hospital executives and board trustees in small and critical access hospitals is important to ensuring allocation of the necessary resources to support antibiotic stewardship programs. Obtaining leadership commitment from the chief medical officer (CMO), pharmacy director, and nursing leaders can facilitate physician, pharmacist, infection preventionist, and nurse engagement to implement stewardship initiatives to create a strong and sustainable program.

ACCOUNTABILITY

- 1) **Accountability** Identify physician, nursing and pharmacy leads responsible for promoting and overseeing antibiotic stewardship activities in your facility
- 2) **Accountability:** Appointing a single leader responsible for program outcomes. Experience with successful programs show that a physician leader is effective.
- 3) **Accountability** Identify physician, nursing and pharmacy leads responsible for promoting and overseeing antibiotic stewardship activities in your facility

DRUG EXPERTISE

- 1) **Drug expertise** Establish access to consultant pharmacists or other individuals with experience or training in antibiotic stewardship for your facility
- 2) **Drug Expertise:** Appointing a single pharmacist leader responsible for working to improve antibiotic use.
- 3) **Core Element 3: Drug Expertise** In most critical access hospitals, a pharmacist, usually one who is on-site, provides the leadership and expertise for the antibiotic stewardship program. When possible, having a physician leader is helpful to support the pharmacist. Leaders of stewardship programs can expand their knowledge and experience through a variety of educational programs

and through participation in multi-hospital stewardship collaboratives. External expertise via remote or on-site consultation has also been helpful in some critical access hospitals.

ACTION

- 1) **Action** Implement at least one policy or practice to improve antibiotic use
- 2) **Action:** Implementing at least one recommended action, such as systemic evaluation of ongoing treatment needs after a set period of initial treatment (i.e. “antibiotic time out” after 48 hours).
- 3) **Core Element 4: Action** There are a number of evidenced-based interventions that can improve antibiotic use. Decisions on which one(s) to implement should be based on local needs, which are best determined through discussions with providers and review of local information on antibiotic use.

TRACKING AND MONITORING

- 1) **Tracking Monitor** at least one process measure of antibiotic use and at least one outcome from **antibiotic use in your facility**
- 2) **Tracking:** Monitoring antibiotic prescribing and resistance patterns.
- 3) Core Element 5: Tracking Data are essential for informing and assessing stewardship actions. A variety of data options are outlined below, and some hospitals might also have more individualized measures. Small and critical access hospitals can review options and make decisions based on local needs and resources. The ultimate key is to have a measure that is useful for stewardship activities, meaningful to providers and that can be tracked over time to assess improvements.

REPORTING

- 1) **Reporting** Provide regular feedback on antibiotic use and resistance to prescribing clinicians, nursing
- 2) **Reporting:** Regular reporting information on antibiotic use and resistance to doctors, nurses and relevant staff.
- 3) **Core Element 6: Reporting** The reporting for critical access hospitals should be consistent with the action and tracking components of the antibiotic stewardship program (e.g., optimizing diagnosis and treatment for the commonly encountered infections, reducing unnecessary duplicate therapy, etc.). As mentioned above, data on stewardship efforts should be reported not just to providers, but also to the hospital leadership and board. A key to success is to discuss reporting options with stakeholders to determine optimal timing, format and delivery method(s) for the reports.

EDUCATION

- 1) **Education** Provide resources to clinicians, nursing staff and other relevant staff
- 2) **• Education:** Educating clinicians about resistance and optimal prescribing.
- 3) **Core Element 7: Education** The limited number of providers, along with the collaborative nature of many small and critical access hospitals, create some unique advantages for providing individualized education compared to larger hospitals. The pharmacist and/or physician leader can provide stewardship education (e.g., optimizing diagnosis and treatment for the commonly encountered infections, reducing unnecessary duplicate therapy, etc.) to individual providers and pharmacists.