UWTASP
tele-antimicrobial stewardship program

March 8ᵗʰ, 2022

Announcements

Didactic: *Accreditation, Inspection and AS (or the DOH/DNV/TJC is here!)*

Cases and discussion

International Women's Day

NATIONAL OREGON DAY – MARCH 8, 2022

Requiring ASPs for Hospitals and Critical Access Hospitals (CAHs)

❖ In September of 2019, CMS, after **close collaboration with CDC**, published a final rule revising a number of the CoP requirements for all Medicare and Medicaid-participating hospitals and CAHs in an **effort to update those requirements that do not fully conform to current standards of practice**.

❖ The rule specifically updates the current requirements for **hospitals to have active and hospital-wide infection prevention and control programs for surveillance, prevention, and control of healthcare-associated and other infections** (and **establishes new requirements for CAHs to have the same**).

❖ Most significantly, this rule also establishes **new requirements for hospitals and CAHs to now have active and facility-wide ASPs to help reduce inappropriate antibiotic use and antimicrobial resistance**.

❖ These CoPs also **require hospitals and CAHs to designate qualified leaders in these facilities to guide and oversee these efforts**.

❖ These new CoP requirements for hospitals and CAHs **must be implemented by March 30, 2020**.

Overview of CMS Rule Changes to Promote (hhs.gov)

Next Steps: Expanding the Culture of Antibiotic Stewardship for Hospitals and Beyond

- ❖ The interpretive guidance currently under review **will incorporate CDC's 7 Core Elements of Antibiotic Stewardship in Hospitals**.

- ❖ CMS, in concert with its internal and external partners, will publish **interpretive guidelines** (IGs) for the new hospital and CAH CoPs that are **designed for the training and education of surveyors and the public** on **infection prevention and control/antibiotic stewardship programs that reflect nationally recognized guidance and standards to reduce HAIs** on a facility, local, state, and national level and that **demonstrate appropriate use of antibiotics in order to combat the development and transmission of antibiotic-resistant pathogens**.

- ❖ For example, IGs for the Quality Assessment and Performance Improvement program requirements for hospitals and CAHs **may incorporate antibiotic stewardship performance measures developed by the CDC, the Agency for Healthcare Research and Quality, and other nationally recognized professional and scientific organizations**.

- ❖ CMS projects the release of IGs between mid-2020 and early 2021 given that release is subject to extensive coordination with stakeholders as well as clearance and publication processes.

- ❖ CMS will eventually look to **propose and expand ASP requirements to apply to post-acute care services providers (such as home health agencies), ambulatory surgery centers, dialysis centers, and other providers and suppliers that participate in the Medicare program and that are subject to the CoPs and CfCs**.

[Overview of CMS Rule Changes to Promote (hhs.gov)](hhs.gov)

Regulatory Authorities

- Departments of Health
- The Joint Commission
- DNV GL
- Flex Program

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Framework- ISO 9001

SR.3 The organization will initiate and continue implementation of the ISO 9001 methodology to achieve compliance or certification as stated in QM.1 SR.1. At a minimum, the organization must be able to demonstrate at the time of the NIAHO® Accreditation survey, evidence of the following:

- SR.3a Control of Documents: the organization's documents (i.e. policies, procedures, forms) are structured in a manner to ensure that only the proper revisions are available for use;

- SR.3b Control of Records: the organization ensures that suitable records are maintained for the CoP and NIAHO® requirements;

- SR.3c Internal Surveys (Internal Audits): the organization conducts internal reviews of its processes and resultant corrective/preventive action measures have been implemented and verified to be effective;

- SR.3d Corrective and Preventive Action: the organization will have a mechanism in place to document and monitor corrective and preventive action implemented in some manner to address improvement and changes, where appropriate;

- SR.3e The organization has established measurable quality objectives, the results are analyzed, addressed, and;

- SR.3f Appropriate information has been submitted to the oversight group for quality management as required in QM.6 SR.1 as well as senior management for review and analysis during a management review process.

Framework- Simplified

SR.3 T... ...e ISO 9001 methodology to achiev... ...num, the organization must be able to demonstrate at the time of the NIAHO® Accreditation survey, evidence of the following:

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...ysis

Program and policies exist

Policies reviewed and updated

Policies are enacted and followed

Metrics and goals

Program, policies, metrics and goals reported up

https://cha.com/wp-content/uploads/2018/05/2018-DNV-NIAHO-Guidelines.pdf

Accreditation Req -

Accreditation Requirements, Interpretive Guidelines & Surveyor Guidance For Critical Access Hospitals

IC.1 INFECTION PREVENTION AND CONTROL AND ANTIBIOTIC STEWARSHIP PROGRAMS

The CAH shall have, as required and/or recommended by the CDC, CMS, OSHA and related professional organizations (e.g., APIC), an Infection Prevention and Control Program (IPCP) to ensure the safety of patients, healthcare workers, volunteers, contract workers and visitors.

SR.1   The IPCP shall provide the means for the surveillance, prevention, and control of HAIs and other infectious diseases, and for the optimization of antibiotic use through stewardship.

SR.1a   The programs shall demonstrate adherence to nationally recognized infection prevention and control guidelines, as well as to best practices for improving antibiotic use where applicable, and for reducing the development and transmission of HAIs and antibiotic-resistant organisms. Infection prevention and control problems and antibiotic use issues identified in the programs shall be addressed in collaboration with the CAH-wide QAPI program.

https://brandcentral.dnvgl.com/fr/gallery/10651/files/original/96194cdda02d4e0493a2bf25c03574b0.pdf

Accreditation Req -

SR.1a An individual (or individuals), who is qualified through education, training, or experience in infectious diseases and/or antibiotic stewardship, is appointed by the governing body as the leader(s) of the antibiotic stewardship program

SR.2a Demonstrates coordination among all components of the organization responsible for antibiotic use and resistance, including, but not limited to:

SR.2a(1) The IPCP;

SR.2a(2) The QAPI program;

SR.2a(3) The medical staff;

SR.2a(4) Nursing services; and,

SR.2a(5) Pharmacy services.

SR.2b Documents the evidence-based use of antibiotics in all departments and services of the CAH; and,

SR.2c Documents any improvements, including sustained improvements, in proper antibiotic use.

Accreditation Req -

SR.3   The antibiotic stewardship program adheres to nationally recognized guidelines, as well as best practices, for improving antibiotic use; and,

    SR.3a   The antibiotic stewardship program reflects the scope and complexity of the CAH services provided.

SR.3a   The development and implementation of a CAH-wide antibiotic stewardship program, based on nationally recognized guidelines, to monitor and improve the use of antibiotics;

    SR.3a(1)   Development of actions to minimize the risk of development, and transmission of, multidrug resistant organisms (MDROs) within the organization (See MM.8).

SR.3b   All documentation, written or electronic, of antibiotic stewardship program activities;

SR.3c   Communication and collaboration with medical staff, nursing, and pharmacy leadership, as well as with the CAH's IPCP and the QAPI program, on antibiotic use issues;

SR.3d   Competency-based training and education of CAH personnel and staff, including medical staff, and, as applicable, personnel providing contracted services, on the practical applications of antibiotic stewardship guidelines, policies, and procedures.

Implementation of
Antibiotic Stewardship Core Elements at Small and Critical Access Hospitals

citations

Program and policies exist

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.

https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf

Examples of implementation strategies:

- Designate a physician (e.g.,CMO) in the C-suite or individual that reports to C-suite to be accountable for the outcomes of the antibiotic stewardship program.

- Approve a policy for the creation and/or expansion of the antibiotic stewardship program to include all core elements.

- Integrate stewardship activities into ongoing quality improvement and/or patient safety efforts in the hospital (e.g., efforts to improve sepsis management)

- Create a reporting structure for the stewardship program to ensure that information on stewardship activities and outcomes is shared with facility leadership and the hospital board (e.g., semi-annual stewardship update at the board meeting).

- Issue a formal board-approved statement on the importance of the antibiotic stewardship program and include in the hospital's annual report.

- Issue a statement from the hospital leadership (e.g., medical, pharmacy and nursing) to all providers and patients highlighting the hospital's commitment to improving antibiotic use.

- Support training for hospital stewardship leaders on antibiotic stewardship through on-line or in-person courses.

Some small and critical access hospitals have found it helpful to seek off-site support for their antibiotic stewardship efforts. Some examples include:

- Enrolling in multi-hospital, collaborative efforts to improve antibiotic use. Consider contacting state hospital associations, state or local public health agencies, and/or large academic medical centers to identity existing antibiotic stewardship collaboratives.

- Funding remote consultation or telemedicine with experts in antibiotic stewardship (e.g., infectious diseases physicians and pharmacists).

  - Even when remote expertise is used, it is important to have a leader of the program who is on staff at the hospital.

- Placing stewardship requirements into the contractual responsibilities of any external pharmacy services including a requirement that pharmacy contractors have formal stewardship training.

https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf

Program and policies exist

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.

Program and policies exist

Pharmacy

Core Element 3: Drug Expertise

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Examples of implementation strategies:

- Appoint a pharmacist leader, ideally someone who is on-site either full- or part-time. Consider having stewardship as part of the job description or service contract of the pharmacist leader and ensure that leaders have dedicated time to spend on developing and maintaining a stewardship program.

- Appoint a physician leader to provide physician support to the antibiotic stewardship program, ideally someone who is on-site either full- or part-time.

- Offer access to training courses on antibiotic stewardship to help develop local expertise.

- Seek additional expertise by joining multi-hospital improvement collaboratives or through remote consultation (e.g. telemedicine).

Policies are enacted and followed

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.

The majority of all antibiotic use in hospitals is driven by just three conditions: community-acquired pneumonia (CAP), urinary tract infections (UTIs) and skin and soft tissue infections (SSTIs). Studies have demonstrated a number of interventions to improve antibiotic use for each of these and hence these are often high-yield targets for improvement.

https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf

There are also key stewardship actions that can be implemented by other team members in small and critical access hospitals. Indeed, experts working on stewardship in these hospitals emphasize the value of a team-based approach.

- The following items are daily activities that can also be performed by a pharmacist:

    - Review antibiotics for unnecessary duplicative antibiotic therapy, such as double anaerobic (e.g., piperacillin/tazobactam AND metronidazole) or double anti-MRSA coverage.

    - Review for opportunities for intravenous to oral conversion (e.g. patients taking other oral medications).

    - Monitor for medication safety (e.g., renal dose adjustments) though these represent general pharmacy practices and are not specific to stewardship.

- Nurses play an important role in implementing stewardship actions in critical access hospitals.[13] For example, nurses can:

    - Review culture techniques to ensure that microbiology cultures are collected properly.

    - Review culture results with the treating clinician and pharmacist.

    - Monitor response to antibiotic therapy with feedback to the treating clinician and pharmacist.

Metrics and goals

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.

Days of therapy is considered the most useful measure of antibiotic use to inform stewardship efforts. Facilities can electronically capture, analyze and benchmark days of therapy through the **CDC's National Healthcare Safety Network (NHSN) Antimicrobial Use (AU) Option**.[14] Tracking adherence to treatment recommendations and performance of interventions such as antibiotic time-outs can be useful to further guide quality improvement efforts. In addition, small and critical access hospitals are well positioned to monitor antibiotic use at the provider level. This type of individual-level feedback can be very helpful. Stewardship programs can work with infection control programs to track data on *C. difficile* and antibiotic-resistant infections. Finally, antibiotic expenditures should not be used as a way to track the effectiveness of stewardship efforts as antibiotic expenditures do not always correlate with antibiotic use.

https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf

Examples of implementation strategies:

- Submit antibiotic use and resistance through CDC NHSN AU and Resistance Module.

  - Alternative approach (if NHSN AU Option not feasible): Calculate defined daily dose (DDD) per **WHO ATC DDD Guidelines**[15] for top 5 commonly used antibiotics (e.g., ceftriaxone, azithromycin, vancomycin, piperacillin-tazobactam, and fluoroquinolones).This can be useful in tracking antibiotic use over time at a given hospital. Note that the DDD metric has limitations in **pediatrics.**[16]

- Monitor adherence to facility-specific treatment recommendations (see above in Action) for CAP, UTI and SSTI. If feasible, consider tracking adherence to treatment recommendations per provider.[1]

- Monitor the performance of antibiotic time-outs to see how often these are being done and if opportunities to improve use are being realized during time-outs.

- Perform a medication use evaluation to assess courses of therapy for selected antibiotics (e.g., piperacillin-tazobactam, carbapenems, vancomycin, fluoroquinolones) to see if there are opportunities to improve use.

- Monitor how often patients are converted from intravenous to oral therapy and assess to see if there are missed opportunities to convert.

- Assess how often patients are prescribed unnecessary duplicate therapy (e.g., two antibiotics to treat anaerobes).

Program, policies, metrics and goals reported up

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.

https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf

Examples of implementation strategies:

- Prepare regular reports on the measures being tracked related to antibiotic use. Include these data as a standing report to key stakeholders within the facility, e.g., pharmacy and therapeutics, patient safety/quality, medical staff leadership/committees, and hospital board.

- If feasible, share provider-specific reports with individual clinicians confidentially.

- Distribute data and key messaging through staff newsletters and emails.

SR.3d including medical staff, and, as applicable, personnel providing contracted services, on the practical applications of antibiotic stewardship guidelines, policies, and procedures.

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. Specific education for nurses could also be very helpful, for example, criteria for intravenous to oral conversion, optimal technique for culture collection, and criteria for when to obtain a urine culture. Lastly, patient and family education can also help drive improvements in antibiotic use and empower patients and families to help monitor for important adverse events, like *C. difficile* infection. To help with patient and family education, the CDC developed a **fact sheet on antibiotic use for hospitalized patients**.[17]

https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf

Examples of Implementation Strategies:

- Integrate regular (e.g., monthly or at least quarterly) updates on antibiotic stewardship and resistance into communications tools with particular focus on interventions related to CAP, UTI and SSTI (e.g., blogs, website, intranet, and employee newsletters).

- Provide targeted in-person or web-based educational presentations and messages to key provider, pharmacist and nursing groups at least annually (e.g., staff meetings for sections).

- One-on-one provider education/coaching (e.g., academic detailing).

- Incorporate antibiotic stewardship education into orientation for new medical, pharmacist and nursing staff and required annual provider educational programs.

- Incorporate antibiotic stewardship into (re)credentialing education

Questions/Discussion