

Los Angeles County Department of Public Health Oral Health and Antibiotic Stewardship Programs

Antibiotic Stewardship in Dental Offices: Implementation Guidance

The overall goal of an effective antibiotic stewardship program in dental offices is to protect patients and the public by reducing the risk of bacterial resistance through improved antibiotic prescribing and avoidance of unnecessary use of antibiotics. The Centers for Disease Control and Prevention (CDC) have identified the essential components or “[Core Elements](#)” of a successful antibiotic stewardship (AS) program. These apply to all outpatient and dental settings, including offices that have only one antibiotic prescriber. The four [Core Elements](#) of an effective antibiotic stewardship program are meant to be a roadmap for quality improvement in antibiotic prescribing within a practice setting and these are: **1) Commitment; 2) Action; 3) Education, and 4) Tracking and Evaluating improvement in antibiotic prescribing.** Below is a description of ways to implement each [Core Element](#) in dental offices of any size.

Implementing Antibiotic Stewardship in Dental Offices through CDC Core Elements

<p>COMMITMENT</p> <p>Ways to show commitment to patients and office staff</p>
<ul style="list-style-type: none"> ➤ Show public commitment to antibiotic stewardship by signing and displaying commitment posters in waiting and exam rooms stating you are helping to prevent antibiotic resistance by prescribing antibiotics only when needed and according to ADA best practices. ➤ Show commitment by assigning antibiotic stewardship responsibilities to various office and ancillary staff. These responsibilities could include patient education, commitment poster maintenance and/or periodic data collection on adherence of antibiotic prescribing to an ADA best practice implemented in your office. These duties could be incorporated to into staff job descriptions. ➤ Show commitment by educating all office staff about AS and managing patient expectations about appropriate antibiotic use.
<p>ACTION</p> <p>Ways to improve antibiotic prescribing by Dentists:</p>
<ul style="list-style-type: none"> ➤ Do not prescribe antibiotic prophylaxis for prosthetic joint implants <ul style="list-style-type: none"> • May consider in certain cases with severe immunodeficiency and either a) history of prosthetic joint infection (PJI) or b) uncontrolled diabetes mellitus (hemoglobin A1c >8; blood sugar >200) ➤ Do not use clindamycin to reduce the risk of <i>C. difficile</i> infection <ul style="list-style-type: none"> • Use cephalexin or azithromycin depending on allergy history ➤ Use shorter courses of antibiotics <ul style="list-style-type: none"> • Prophylaxis for surgical site infections: Use a single dose prior to procedure • Treatment of apical abscess: Treat for 3 days then stop 24 hours after symptoms resolve. Do not treat beyond 7 days. <p>Dental offices may identify other ways to improve antibiotic prescribing in addition to the above.</p>
<p>EDUCATION</p> <p>Ways to provide education to patients and prescribers</p>
<p>Help patients understand the significance of how your stewardship actions prevent bacterial resistance and preserve the future use of antibiotics. Specific topics of focus with patients could include the following:</p> <ul style="list-style-type: none"> ➤ No need for surgical prophylaxis for PJI ➤ Assess patients for low-risk penicillin allergy history to avoid use of alternative antibiotic with more side effects and less proven efficacy ➤ Reduce antibiotic exposure with shorter treatment courses or delayed prescribing <p>Clinicians should be up to date on best practices for antibiotic use and general antibiotic stewardship principles.</p>
<p>TRACK AND EVALUATE IMPROVEMENT</p> <p>Ways to verify antibiotic stewardship actions are effective through prescriber accountability</p>
<p>Once you have implemented an antibiotic stewardship “action” or plan to improve antibiotic prescribing in your office or clinic, it is helpful to measure progress toward achieving your goal through data collection. Examples of data that could be collected include:</p> <ul style="list-style-type: none"> ➤ Prescriptions that were appropriate for PJI prophylaxis ➤ Number of prescriptions for clindamycin ➤ Average duration of therapy for treatment of infections (i.e., oral pain and swelling) ➤ Overall number of antibiotic prescriptions <p>Data collection does not need to be time consuming and should be tailored to office staff resources if available. Results are evaluated for progress toward improvement in antibiotic prescribing specific to the “action”. Barriers to achieving substantial improvement in prescribing should be identified and addressed. Obtaining an antibiotic prescribing baseline prior to implementation of a change in prescribing can be useful to determine improvement but is not required.</p>



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Resources for Implementing Antibiotic Stewardship in Dental Offices

Antibiotic Stewardship Guidance for Dentists	Source
<ul style="list-style-type: none"> Guidance and resources 	ADA
<ul style="list-style-type: none"> Antibiotic stewardship recommendations 	LACDPH
<ul style="list-style-type: none"> CDC “Core Elements” for outpatient antibiotic stewardship Dentists’ checklist for prescribing antibiotics How Dentists can act against resistance Treating oral pain and swelling 	CDC
Antibiotic Stewardship Toolkits for Dentists	
<ul style="list-style-type: none"> Toolkit Summit webinar 	OSAP
Antibiotic Stewardship Training for Dentists	
<ul style="list-style-type: none"> Training module for Dentists Swish and swallow:antibiotic stewardship in dentistry 	CDC
Antibiotic Stewardship Intervention Publications	
<ul style="list-style-type: none"> Private practice dentists improve antibiotic use after dental antibiotic stewardship education from infectious diseases experts 	OFID 2022
<ul style="list-style-type: none"> Pharmacist-led multi-faceted intervention in an antimicrobial stewardship programme at a dental university hospital in Japan (abstract) 	JHI 2023
Penicillin Allergy Assessment	
<ul style="list-style-type: none"> American Academy of Allergy, Asthma and Immunology: penicillin allergy center 	AAAAI
<ul style="list-style-type: none"> Penicillin allergy assessment and medical referral to promote antibiotic stewardship 	MNDA 2022
<ul style="list-style-type: none"> Evaluation and diagnosis of penicillin allergy for healthcare professionals Community pharmacists: <i>Be Antibiotics Aware</i> verify penicillin allergy 	CDC
Commitment Posters for Display in Dental Offices	
<ul style="list-style-type: none"> Dental Clinic Commitment Poster for <i>Dentist</i> 	LACDPH
<ul style="list-style-type: none"> Dental Clinic Commitment Poster for <i>Clinic Staff</i> 	LACDPH
Track Adherence to Antibiotic Stewardship in Dental Offices	
<ul style="list-style-type: none"> Chart audit tool 	OSAP
Patient Education about Antibiotics in Dentistry	
<ul style="list-style-type: none"> Antibiotic use for a safe dental visit Antibiotic safety: do’s and don’ts at the dentist 	CDC

