

SUPPLEMENT TO THE CLINICAL PRACTICE GUIDELINE FOR THE PREVENTION OF ORTHOPAEDIC IMPLANT INFECTION IN PATIENTS UNDERGOING DENTAL PROCEDURES

e-Appendix 1

- PICO Questions
- Inclusion Criteria
- Search Strategy
- Excluded Articles
- Guideline Development Group Disclosures
- AAOS Approval Bodies
- Review Organizations
- Letters of Endorsement from External Organizations

This supplementary material has been provided by the authors to give readers additional information about their work

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PICO Questions

1. In hip or knee arthroplasty patients presenting for dental procedure, does systemic ABX use prior to procedure, affect patient outcomes?
2. In hip or knee arthroplasty patients presenting for dental procedure, does topical antiseptic wash use prior to procedure, affect patient outcomes?
3. In patients with orthopaedic implants, presenting for dental procedure, does systemic ABX use prior to procedure, affect patient outcomes?
4. For patients presenting for hip or knee arthroplasty, does dental evaluation predict post-arthroplasty outcomes?
5. For patients who require dental procedure before hip/knee arthroplasty, does delay of arthroplasty affect rates of PJI?
6. For hip or knee patients who require dental procedure after arthroplasty, does delay of the dental procedure affect rates of PJI following the dental procedure?

Inclusion Criteria

Standard Criteria for all CPGs

1. Article must be a full article report of a clinical study.
2. Retrospective non-comparative case series, medical records review, meeting abstracts, historical articles, editorials, letters, and commentaries are **excluded**.
3. Confounded studies (i.e. studies that give patients the treatment of interest AND another treatment) are **excluded**.
4. Case series studies that have non-consecutive enrollment of patients are **excluded**.
5. Controlled trials in which patients were not stochastically assigned to groups AND in which there was either a difference in patient characteristics or outcomes at baseline AND where the authors did not statistically adjust for these differences when analyzing the results are **excluded**.
6. All studies of "Very Low" Quality of evidence are **excluded**.
7. All studies evaluated as Level V will be **excluded**.
8. Composite measures or outcomes are **excluded** even if they are patient-oriented.
9. Study must appear in a peer-reviewed publication
10. For any included study that uses "paper-and-pencil" outcome measures (e.g., SF-36), only those outcome measures that have been validated will be included
11. For any given follow-up time point in any included study, there must be $\geq 50\%$ patient follow-up (if the follow-up is $>50\%$ but $<80\%$, the study quality will be downgraded by one Level)
12. Study must be of humans
13. Study must be published in English
14. Study results must be quantitatively presented
15. Study must not be an in vitro study
16. Study must not be a biomechanical study
17. Study must not have been performed on cadavers

*We will only evaluate surrogate outcomes when no patient-oriented outcomes are available.

Work Group Defined Criteria

1. Study must be published in or after 1980 for surgical treatment, rehabilitation, bracing, prevention and MRI.
2. Study must be published in or after 1980 for x rays and non-operative treatment.
3. Study must be published in or after 1980 for all others non specified.
4. Study should have 10 or more patients per group (interventional studies)
5. Study should have 100 or more patients per group (observational studies)

Literature Search Strategy

Database:	MEDLINE
Interface:	Ovid MEDLINE® and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions ® 1946 to May 8, 2023
Date of Initial Search:	5/9/2023
Date of Updated Search:	10/26/2023
Search	Dental Implant Infection
Query #	Search
1	English.lg.
2	(exp Animals/ NOT Humans/) OR exp Cadaver/ OR cadaver*.ti,ab. OR in-vitro.ti. OR ((comment OR editorial OR letter OR historical article) NOT clinical trial).pt. OR address.pt. OR news.pt. OR newspaper article.pt. OR pmcbook.af. OR case reports.pt. OR retracted-publication.pt. OR retraction-of-publication.pt. OR (case report? OR abstracts OR editorial OR reply OR comment? OR commentary OR letter).ti. OR (animal* OR dog OR dogs OR sheepdog OR canine OR cats OR feline OR horse* OR equine OR donkey* OR mouse OR mice OR murin?e OR woodmouse OR rat OR rats OR cottonrat* OR rodent* OR hamster* OR squirrel* OR chipmunk* OR otter* OR weasel* OR badger* OR beaver* OR llama* OR alpaca* OR rabbit* OR hare OR hares OR sheep OR ovine OR lamb? OR goat* OR porcine OR swine * OR pig OR pigs OR piglet* OR boar OR boars OR hog OR hogs OR cow OR cows OR cattle* OR bull OR bulls OR bovine OR bison* OR buffalo* OR monkey* OR ape OR apes OR baboon* OR gibbon* OR bonobo* OR gorilla* OR lemur* OR chimp* OR orangutan* OR macaque* OR marmoset* OR primate* OR bear OR bears OR ursine OR avian OR bird * OR hen OR hens OR chicken * OR duck? OR goose OR geese OR poult * OR fowl? OR deer OR doe OR reindeer OR dolphin OR (fish* NOT fisher*) OR pisces OR trout* OR zebrafish* OR catfish* OR goldfish* OR seahorse* OR shark* OR salmon OR whitefish* OR reptil* OR snake* OR lizard* OR alligator* OR crocodile* OR turtle* OR amphibian* OR frog* OR toad* OR eel? OR salamander* OR veterinar*).ti.
3	1 NOT 2
4	limit 3 to yr=1980-Current
5	exp Arthroplasty/ or exp Joint-Prosthesis/ or Prostheses-and-Implants/ or *Prosthesis-Related-Infections/ or Orthopedic-Procedures/ or (arthroplast* or ((replacement* or prosth* or endoprosthe* or periprosthe* or artificial* OR implant* OR device* OR instrument*)) AND (hip or knee or joint? or orthop?edic* or spinal)) OR ((orthop?edic* OR spinal OR hip?) AND surger*) OR (prosth* AND device*)).tw,kf.
6	exp Dentistry/ or exp Periodontal-Diseases/ or (dental* or dentist* or periodont* or (tooth not (Charcot-Marie or blue-tooth))).tw,kf. OR (oral adj (cavity OR health)).ti.
7	exp Infections/ OR (infect* OR bacter?emia).tw,kf.
8	exp Anti-Bacterial-Agents/ OR exp Premedication/ OR (antibiotic* AND prophyla*).tw,kf.
9	Oral-Hygiene/ OR (oral-health OR (dental adj (care OR patient?))).ti. OR dental-clearance.tw,kf.
10	exp Jaw/ or (TMJ or temporomandib* or mandib* or maxilla* or zygoma* or aort* or valve? or penile or pacemaker* or crani* OR (cardi* NOT prosth*) OR heart OR coronary OR facial OR orbit* OR rhino* OR orthognath* OR cochlea* OR (urolog* NOT dent*)).ti.
11	(4 AND 5 AND 6 AND (7 OR 8 OR 9)) NOT 10
12	
	limit 11 to ez=20230509-20231026

Database:	Embase
Interface:	Elsevier (https://embase.com)
Date of Initial Search:	5/9/2023
Date of Updated Search:	10/26/2023
Search	Dental Implant Infection
Query #	Search
1	[english]/lim
2	(nonhuman/de NOT human/exp) OR abstract-report/de OR book/de OR editorial/de OR editorial:it OR note/de OR note:it OR letter/de OR letter:it OR case-study/de OR case-report/de OR chapter:it OR conference-paper/exp OR conference-paper:it OR conference-abstract:it OR conference-review:it OR retraction-notice/exp OR (abstracts OR editorial OR reply OR comment\$ OR commentary OR letter):ti OR cadaver/de OR in-vitro-study/exp OR cadaver*:ti,ab OR in-vitro:ti OR animal-experiment/exp OR veterinary-study/exp OR animal-disease/exp OR (animal* OR dog OR dogs OR sheepdog OR canine OR cats OR feline OR horse* OR equine OR donkey* OR mouse OR mice OR murin\$ OR woodmouse OR rat OR rats OR cottonrat* OR rodent* OR hamster* OR squirrel* OR chipmunk* OR otter* OR weasel* OR badger* OR beaver* OR llama* OR alpaca* OR rabbit* OR hare OR hares OR sheep OR ovine OR lamb\$ OR goat* OR porcine OR swine* OR pig OR pigs OR piglet* OR boar OR boars OR hog OR hogs OR cow OR cows OR cattle* OR bull OR bulls OR bovine OR bison* OR buffalo* OR monkey* OR ape OR apes OR baboon* OR gibbon* OR bonobo* OR gorilla* OR lemur* OR chimp* OR orangutan* OR macaque* OR marmoset* OR primate* OR bear OR bears OR ursine OR avian OR bird* OR hen OR hens OR chicken* OR duck\$ OR goose OR geese OR poultr* OR fowl\$ OR deer OR doe OR reindeer OR dolphin OR (fish* NOT fisher*) OR pisces OR trout* OR zebrafish* OR catfish* OR goldfish* OR seahorse* OR shark* OR salmon OR whitefish* OR reptil* OR snake* OR lizard* OR alligator* OR crocodile* OR turtle* OR amphibian* OR frog* OR toad* OR eel\$ OR salamander* OR veterinar*):ti
3	(#1 NOT #2) AND [1980-2023]/py
4	arthroplasty/exp or joint-prosthesis/exp or prosthesis-infection/exp or prostheses-and-orthoses/de or (arthroplast* or ((replacement* or prosth* or endoprosth* or periprosthe* or artificial* OR implant* OR device* OR instrument*)) AND (hip or knee or joint\$ or orthop\$edic* or spinal)) OR ((orthop\$edic* OR spinal OR hip\$) AND surger*) OR (prosthe* AND device*)):ti,ab,kw
5	dentistry/exp or tooth-disease/exp OR mouth-abscess/de OR mouth-ulcer/exp or (dental* or dentist* or periodont* or (tooth not (Charcot-Marie or blue-tooth))):ti,ab,kw or (oral NEXT/1 (cavity or health)):ti
6	infection/de OR bacterial-infection/exp OR bone-and-joint-infections/exp OR (infect* OR bacter\$emia):ti,ab,kw
7	antiinfective-therapy/exp OR antibiotic-prophylaxis/de OR (antibiotic* AND prophyla*):ti,ab,kw
8	mouth-hygiene/de OR (oral-health OR (dental NEXT/1 (care OR patient\$))):ti OR dental-clearance:ti,ab,kw
9	(TMJ or temporomandib* or mandib* or maxilla* or maxillomandibul* or sinonasal or zygoma* or aort* or valve\$ or penile or pacemaker* or crani* OR (cardi* NOT prosthe*) OR heart OR coronary OR facial OR orbit* OR rhino* OR orthognath* OR cochlea* OR (urolog* NOT dent*)):ti
10	(#3 AND #4 AND #5 AND (#6 OR #7 OR #8)) NOT #9
11	

Database:	Cochrane Library
Interface:	wiley.com
Date of Initial Search:	5/9/2023
Date of Updated Search:	10/26/2023
Search	Dental Implant Infection
Query #	Search
1	(arthroplast* or ((replacement* or prosthesis* or endoprosthesis* or periprostheses* or artificial* OR implant* OR device* OR instrument*) AND (hip or knee or joint? or orthopedic* or spinal)) OR ((orthopedic* OR spinal OR hip?) AND surgery*)) OR (prosthesis* AND device*)):ti,ab,kw
2	(dental* or dentist* or periodont* or (tooth not (Charcot-Marie or blue-tooth))):ti,ab,kw or (oral NEXT/1 (cavity or health)):ti
3	(infect* OR bacteremia):ti,ab,kw
4	(antibiotic* AND prophylaxis):ti,ab,kw
5	(oral-health OR (dental NEXT/1 (care OR patient\$))):ti OR dental-clearance:ti,ab,kw
6	(TMJ or temporomandibular* or mandible* or maxilla* or maxillomandibular* or sinonasal or zygoma* or aorta* or valve? or penile or pacemaker* or crani* OR (cardiac* NOT prosthesis*) OR heart OR coronary OR facial OR orbit* OR rhinology* OR orthognath* OR cochlea* OR (urology* NOT dent*)):ti
7	(#1 AND #2 AND (#3 OR #4 OR #5)) NOT #6
8	"conference abstract":pt OR "retracted publication":pt OR "retraction of publication":pt OR (abstracts OR editorial OR reply OR comment? OR commentary OR letter):ti OR cadaver*:ti,ab OR "in vitro":ti OR (animal* OR dog OR dogs OR sheepdog OR canine OR cats OR feline OR horse* OR equine OR donkey* OR mouse OR mice OR murine OR woodmouse OR rat OR rats OR cottonrat* OR rodent* OR hamster* OR squirrel* OR chipmunk* OR otter* OR weasel* OR badger* OR beaver* OR llama* OR alpaca* OR rabbit* OR hare OR hares OR sheep OR ovine OR lamb? OR goat* OR porcine OR swine* OR pig OR pigs OR piglet* OR boar OR boars OR hog OR hogs OR cow OR cows OR cattle* OR bull OR bulls OR bovine OR bison* OR buffalo* OR monkey* OR ape OR apes OR baboon* OR gibbon* OR bonobo* OR gorilla* OR lemur* OR chimp* OR orangutan* OR macaque* OR marmoset* OR primate* OR bear OR bears OR ursine OR avian OR bird* OR hen OR hens OR chicken* OR duck? OR goose OR geese OR poultry* OR fowl? OR deer OR doe OR reindeer OR dolphin OR (fish* NOT fisher*) OR pisces OR trout* OR zebrafish* OR catfish* OR goldfish* OR seahorse* OR shark* OR salmon OR whitefish* OR reptile* OR snake* OR lizard* OR alligator* OR crocodile* OR turtle* OR amphibian* OR frog* OR toad* OR eel? OR salamander* OR veterinarian*):ti
9	#7 NOT #8 with Publication Year from 1980 to 2023, in Trials
10	#7 NOT #9
11	

Excluded Articles

Article Title	Authors	Year	Reason for Exclusion
Infections associated with dental procedures in total hip arthroplasty	LaPorte, D. M.; Waldman, B. J.; Mont, M. A.; Hungerford, D. S.	1999	<10 cases (3 cases) had dental procedures after THA
Total knee arthroplasty infections associated with dental procedures	Waldman, B. J.; Mont, M. A.; Hungerford, D. S.	1997	<10 cases (9 cases) had dental procedures
Bacteria isolated from late prosthetic joint infections: dental treatment and chemoprophylaxis	Jacobson, J. J.; Matthews, L. S.	1987	<100 cases (30 cases); not relevant outcome
Identification of oral bacterial DNA in synovial fluid of patients with arthritis with native and failed prosthetic joints	Temoin, Stephanie; Chakaki, Alia; Askari, Ali; El-Halaby, Ahmed; Fitzgerald, Steven; Marcus, Randall E.; Han, Yiping W.; Bissada, Nabil F.	2012	<100 cases (36 cases)
Dental X-ray status of patients admitted for total hip replacement	Lindqvist, C.; Soderholm, A. L.; Slatis, P.	1989	<100 cases (50 cases)
Haematogenous prosthetic knee infections: Prospective cohort study of 58 patients	Stevignon, Thomas; Mouton, Antoine; Meyssonier, Vanina; Kerroumi, Younes; Yazigi, Alexandre; Aubert, Thomas; Lhotellier, Luc; Le Strat, Vincent; Passeron, Dorick; Graff, Wilfrid; Zeller, Valerie; Heym, Beate; Marmor, Simon	2019	<100 cases (58 cases); prospective cohort study
The role of poor oral health in surgical site infection following elective spinal surgery	Mirzashahi, B.; Tonkaboni, A.; Chehrassan, M.; Doosti, R.; Kharazifard, M. J.	2019	<100 cases (78 cases); cross-sectional study
An Orthopedic Surgeon's Dental Examination: Reducing Unnecessary Delays in Joint Replacement Surgery for Marginalized Patients in a Safety Net Hospital System	Tye, Erik Y.; Taylor, Adam J.; Kay, Robert D.; Bryman, Jason A.; Andrawis, John P.; Runner, Robert P.	2021	<100 cases per group (75 vs. 30 cases); retrospective cohort study
Prophylactic coverage of dental patients with artificial joints: a retrospective analysis of thirty-three infections in hip prostheses	Jacobsen, P. L.; Murray, W.	1980	<100 cases were reviewed (33 cases)
Dental treatment and late prosthetic joint infections	Jacobson, J. J.; Millard, H. D.; Plezia, R.; Blankenship, J. R.	1986	<100 cases; dental t/t grp 33 cases, non-dental treatment grp 97 cases

Article Title	Authors	Year	Reason for Exclusion
The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints: Evidence-based clinical practice guideline for dental practitioners--a report of the American Dental Association Council on Scientific Affairs	Sollecito, Thomas P.; Abt, Elliot; Lockhart, Peter B.; Truelove, Edmond; Paumier, Thomas M.; Tracy, Sharon L.; Tampi, Malavika; Beltran-Aguilar, Eugenio D.; Frantsve-Hawley, Julie	2015	A report on CPG
Management of Patients with Orthopaedic Implants Undergoing Dental Procedures	Quinn, Robert H.; Murray, Jayson N.; Pezold, Ryan; Sevarino, Kaitlyn S.	2017	AAOS AUC
The American Academy of Orthopaedic Surgeons Appropriate Use Criteria for the Management of Patients with Orthopaedic Implants Undergoing Dental Procedures	Quinn, Robert H.; Murray, Jayson N.; Pezold, Ryan; Sevarino, Kaitlyn S.	2017	AAOS AUC
Antibiotic prophylaxis for dental patients with total joint replacements. American Dental Association; American Academy of Orthopaedic Surgeons	Anonymous,	1997	advisory statement
Advisory statement. Antibiotic prophylaxis for dental patients with total joint replacements. American Dental Association; American Academy of Orthopaedic Surgeons	Anonymous,	1997	Advisory statement
Dental Screening in Elective Total Joint Arthroplasty: Risk Factors for Failure	Kohler, James G.; Holte, Andrew J.; Glass, Natalie A.; Bedard, Nicholas A.; Brown, Timothy S.	2021	all patients underwent dental screening; doesn't answer PICO question
Recent Update on Antibiotic Prophylaxis for Prosthetic Joints for Dental Patients	Rhodus, Nelson L.	2015	An update; narrative
Antibiotic prophylaxis in dentistry: an update	Little, James W.; Falace, Donald A.; Miller, Craig S.; Rhodus, Nelson L.	2008	An update; narrative
Management of dental patients with prosthetic joints. Council on Dental Therapeutics	Anonymous,	1990	association report
Myths of dental-induced prosthetic joint infections	Wahl, M. J.	1995	author's perspective

Article Title	Authors	Year	Reason for Exclusion
The dental treatment of patients with joint replacements: a position paper from the American Academy of Oral Medicine	Little, James W.; Jacobson, Jed J.; Lockhart, Peter B.	2010	brief report; not relevant
Report on prosthetic joints, antibiotic prophylaxis and dental treatment	Hardie, J.	1988	Brief review
Antibiotic Prophylaxis for Prosthetic Joint Patients Undergoing Invasive Dental Procedures: Time for a Rethink?	Springer, Bryan D.; Baddour, Larry M.; Lockhart, Peter B.; Thornhill, Martin H.	2022	commentary
The new American Academy of Orthopedic Surgeons' recommendations regarding antibiotic prophylaxis: where's the evidence?	Marek, Cindy L.; Ernst, Erika J.	2009	commentary
Diagnosis and management of orthopedic implant-associated infection: A comprehensive review of the literature	Birlutiu, R. M.; Birlutiu, V.; Mihalache, M.; Mihalache, C.; Cismasiu, R. S.	2017	comprehensive literature review
Controversies in antimicrobial prophylaxis	Hirschmann, J. V.	1987	Controversies; not actual research
Presence of staphylococci in mouth and presence of streptococci in late infections of knee and hip joint prostheses: antibiotic prophylaxis, a conundrum	Friedlander, Arthur H.	2009	conundrum
Drug cost implications for antibiotic prophylaxis for dental procedures	Lockhart, Peter B.; Blizzard, Joe; Maslow, Andrea L.; Brennan, Michael T.; Sasser, Howell; Carew, John	2013	Cost
Is Antibiotic Prophylaxis Cost-effective for Dental Patients Following Total Knee Arthroplasty?	Skaar, D. D.; Park, T.; Swiontkowski, M. F.; Kuntz, K. M.	2019	cost analysis
Cost-effectiveness of antibiotic prophylaxis for dental patients with prosthetic joints: Comparisons of antibiotic regimens for patients with total hip arthroplasty	Skaar, Daniel D.; Park, Taehwan; Swiontkowski, Marc F.; Kuntz, Karen M.	2015	cost analysis
Antibiotic prophylaxis for haematogenous bacterial arthritis in patients with joint disease: a cost effectiveness analysis	Krijnen, P.; Kaandorp, C. J.; Steyerberg, E. W.; van Schaardenburg, D.; Moens, H. J.; Habbema, J. D.	2001	cost analysis

Article Title	Authors	Year	Reason for Exclusion
Chemoprophylaxis of prosthetic joint patients during dental treatment: a decision-utility analysis	Jacobson, J. J.; Schweitzer, S. O.; Kowalski, C. J.	1991	cost analysis
Antibiotic prophylaxis for dental patients with joint prostheses? A decision analysis	Jacobson, J. J.; Schweitzer, S.; DePorter, D. J.; Lee, J. J.	1990	cost analysis; decision tree analysis
The American Academy of Orthopaedic Surgeons and the American Dental Association clinical practice guideline on the prevention of orthopaedic implant infection in patients undergoing dental procedures	Rethman, Michael P.; Watters, William, 3rd; Abt, Elliot; Anderson, Paul A.; Carroll, Karen C.; Evans, Richard Parker; Futrell, Harry C.; Garvin, Kevin; Glenn, Stephen O.; Goldberg, Michael J.; Hellstein, John; Hewlett, Angela; Kolessar, David; Moucha, Calin; O' Donnell, Richard J.; Osmon, Douglas R.; O' Toole, John; Rinella, Anthony; Steinberg, Mark J.; Martin, William Robert, 3rd; Cummins, Deborah S.; Song, Sharon; Sluka, Patrick; Boyer, Kevin; Woznica, Anne; Ristic, Helen; Hanson, Nicholas Buc	2013	CPG
The new AAOS-ADA clinical practice guideline on Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures	Jevsevar, David S.; Abt, Elliot	2013	CPG
Critique of American Dental Association Council on Scientific Affairs Clinical Practice Guideline: Use of Prophylactic Antibiotics Before Dental Procedures in Patients With Prosthetic Joints	Friedlander, Arthur H.; Chang, Tina I.; Hazboun, Renna C.; Aghazadehsanai, Nona	2015	CPG Critique
Is routine antibiotic prophylaxis cost effective for total joint replacement patients?	Slover, James D.; Phillips, Michael S.; Iorio, Richard; Bosco, Joseph	2015	decision model; no patients
The Antibacterial Effect of Tetracycline-loaded Mesoporous Silica Nanoparticles in the Gingival Fluid at Implant-abutment Junction: A Randomized Clinical Trial Study	Mirzaali, F.; Dizaj, S. M.; Shahi, S.; Memar, M. Y.; Parnia, F.	2023	dental implant

Article Title	Authors	Year	Reason for Exclusion
15-Year Post-Market Clinical Follow-up Study of 1,828 Ceramic (Zirconia) Implants in Humans	Oliva, J.; Oliva, X.	2023	dental implant
A survey on systemic antibiotic prescription among dentists in Romandy	Loume, A.; Gardelis, P.; Zekeridou, A.; Giannopoulou, C.	2023	dentist's survey
Capturing orthopaedic surgical site infection data and assessing dental recommendations with respect to total joint arthroplasty	Florschutz, Anthony V.; Parsley, Brian S.; Shapiro, Irving M.	2015	Discussion; not an original research paper
Analysis of postoperative and hematogenous prosthetic joint-infection microbiological patterns in a large cohort	Zeller, Valerie; Kerroumi, Younes; Meyssonier, Vanina; Heym, Beate; Metten, Marie-Astrid; Desplaces, Nicole; Marmor, Simon	2018	does not answer PICO question
Effect of the COVID-19 pandemic on the oral health and nutritional status of Japanese older adults who underwent total hip or knee arthroplasty: A 3-year single-institution retrospective cohort study	Matsuda, Shinpei; Kawachi, Ichiro; Fujita, Ryosuke; Yoshida, Hisato; Oki, Hisashi; Kokubo, Yasuo; Matsumine, Akihiko; Yoshimura, Hitoshi	2022	Doesn't answer PICO question
Antibiotic prophylaxis prescriptions prior to dental visits in the Veterans' Health Administration (VHA), 2015-2019	Suda, Katie J.; Fitzpatrick, Margaret A.; Gibson, Gretchen; Jurasic, M. Marianne; Poggensee, Linda; Echevarria, Kelly; Hubbard, Colin C.; McGregor, Jessina C.; Evans, Charlesnika T.	2022	Doesn't answer PICO question
Appropriateness of Antibiotic Prophylaxis Before Dental Procedures, 2016-2018	Hubbard, Colin C.; Evans, Charlesnika T.; Calip, Gregory S.; Zhou, Jifang; Rowan, Susan A.; Suda, Katie J.	2022	Doesn't answer PICO question
Periprosthetic joint infections treated with two-stage revision over 14 years: an evolving microbiology profile	Bjerke-Kroll, Benjamin T.; Christ, Alexander B.; McLawhorn, Alexander S.; Sculco, Peter K.; Jules-Elysee, Kethy M.; Sculco, Thomas P.	2014	Doesn't answer PICO question
Dental procedures and subsequent prosthetic joint infections: findings from the Medicare Current Beneficiary Survey	Skaar, Daniel D.; O'Connor, Heidi; Hodges, James S.; Michalowicz, Bryan S.	2011	Doesn't answer PICO question
Outcome and Failure Analysis of 132 Episodes of Hematogenous Periprosthetic Joint Infections - A Cohort Study	Renz, N.; Trampuz, A.; Perka, C.; Rakow, A.	2022	Doesn't answer PICO question

Article Title	Authors	Year	Reason for Exclusion
Development and initial validation of the Comprehensive Geriatric Oral Health Assessment Tool	Shoaei, S.; Heydari, M. H.; Hessari, H.; Mehrdad, N.; Khalilazar, L.; Hatami, B.; Sharifi, F.	2023	Doesn't answer PICO question
Radiographic Evaluation of Crestal Bone Loss Following Endosseous Implant Placement	Kiran, Y. S.; Subhas, S.; Alekhya, G. N. V.	2023	Doesn't answer PICO question
Impaired Oral Health in Older Orthopaedic In-Care Patients: The Influence of Medication and Morbidity	Andersson, Pia; Kragh Ekstam, Annika	2021	Doesn't answer PICO question; Irrelevant comparison
Dental hygiene in maintaining a healthy joint replacement: A survey of Canadian total joint replacement patients	Wood, T. J.; Petrucci, D.; Piccirillo, L.; Staibano, P.; Winemaker, M.; De Beer, J.	2016	Doesn't answer PICO question; survey of patients with TJA/THA
Antibiotic prescribing by dentists has increased: Why?	Marra, Fawziah; George, Diana; Chong, Mei; Sutherland, Susan; Patrick, David M.	2016	Doesn't answer PICO question; Trends
Corrigendum to 'Prosthetic Joint Infection After Dental Work: Is the Correct Prophylaxis Being Prescribed? A Systematic Review' [Arthroplasty Today 7 (2021) 69-75]	Danilkowicz, Richard M.; Lachiewicz, Anne M.; Lorenzana, Daniel J.; Barton, Karen D.; Lachiewicz, Paul F.	2022	Erratum
Erratum: Dental procedures as risk factors for prosthetic hip or knee infection: A hospital-based prospective case-control study (Clin Infect Dis (2010) 50 (8-16))	Berbari, E. F.; Osmon, D. R.; Carr, A.; Baughan, L. W.	2010	erratum; not actual research paper
Antibiotic prophylaxis to reduce the risk of joint implant contamination during dental surgery seems unnecessary	Legout, L.; Beltrand, E.; Migaud, H.; Senneville, E.	2012	expert opinion
Antibiotic prophylaxis in oral health care: administration strategies of general dental practitioners	Ellervall, Eva; Bjorklund, Fredrik; Rohlin, Madeleine; Vinge, Ellen; Knutsson, Kerstin	2005	general dental practitioners survey
Review of Guidelines for Dental Antibiotic Prophylaxis for Prevention of Endocarditis and Prosthetic Joint Infections and Need for Dental Stewardship	Goff, Debra A.; Mangino, Julie E.; Glassman, Andrew H.; Goff, Douglas; Larsen, Peter; Scheetz, Richard	2020	Guideline Review; not relevant
Antibiotic prophylaxis: a literature review	Radfar, Lida; Settle, Susan; Movaffagh, Yavar; Masood, Farah	2013	Guidelines summary

Article Title	Authors	Year	Reason for Exclusion
Guidelines for antibiotic prophylaxis for dental patients with joint replacements	Wynn, R. L.; Meiller, T. F.	1998	Guidelines; not relevant
The Importance of Oral History: Does Dental Implant Placement or Caries One Year Before or After Primary Total Knee Arthroplasty Increase Medical Complications and Periprosthetic Joint Infections?	Gordon, Adam M.; Ng, Mitchell K.; Erez, Orry; Wong, Che H.; Mont, Michael A.	2023	irrelevant comparison
Assessment of the Appropriateness of Antibiotic Prescriptions for Infection Prophylaxis Before Dental Procedures, 2011 to 2015	Suda, Katie J.; Calip, Gregory S.; Zhou, Jifang; Rowan, Susan; Gross, Alan E.; Hershow, Ronald C.; Perez, Rose I.; McGregor, Jessina C.; Evans, Charlesnika T.	2019	irrelevant comparison: appropriate antibiotic prophylaxis versus unnecessary antibiotic prophylaxis
Periodontopathogenic bacteria in prosthetic joint infection: a retrospective analysis of 1,673 patients	Deppe, Herbert; Ritschl, Lucas M.; Vacha, Eva; Rechl, Hans; Wantia, Nina; Wagenpfeil, Stefan; Sculean, Anton	2019	irrelevant comparison: Periodontopathogenic microflora in PJI study group vs. control group (no prosthetic joint)
Frequent Dental Scaling Is Associated with a Reduced Risk of Periprosthetic Infection following Total Knee Arthroplasty: A Nationwide Population-Based Nested Case-Control Study	Tai, Ta-Wei; Lin, Tzu-Chieh; Ho, Chia-Jung; Kao Yang, Yea-Huei; Yang, Chyun-Yu	2016	irrelevant intervention: Dental scaling versus no dental scaling in groups that had periprosthetic infection versus control (no infection)
PRISM (Pictorial Representation of Illness and Self-Measure) as Visual Tool to Support Oral Health Education Prior to Endoprosthetic Joint Replacement-A Novel Approach in Dentistry	Schmalz, Gerhard; Schmidt, Laura; Haak, Rainer; Buchi, Stefan; Goralski, Szymon; Roth, Andreas; Ziebolz, Dirk	2022	irrelevant outcome
An assessment of the effectiveness of a pre-operative dental visit: An audit of the elective orthopaedic assessment clinic in relation to dental infection and joint arthroplasty	Moholkar, K.; Corrigan, J.	2004	irrelevant outcome
One Third of Patients before Endoprosthesis Implantation Show an Oral Focus as Potential Source of Infectious Complication-The Value of Pre-Operative Dental Risk Stratification in a German Cohort	Schmalz, Gerhard; Reuschel, Florentine; Bartl, Markus; Schmidt, Laura; Runge, Janine; Haak, Rainer; Goralski, Szymon; Roth, Andreas; Ziebolz, Dirk	2022	irrelevant outcome, all patients had dental examination

Article Title	Authors	Year	Reason for Exclusion
Analysis of Prosthetic Joint Infections Following Invasive Dental Procedures in England	Thornhill, Martin H.; Crum, Annabel; Rex, Saleema; Stone, Tony; Campbell, Richard; Bradburn, Mike; Fibisan, Veronica; Lockhart, Peter B.; Springer, Bryan; Baddour, Larry M.; Nicholl, Jon	2022	irrelevant outcome: incidence of Invasive dental procedure in cases vs. control months before PJI
Modifiable Risk Factors Are Common in Early Revision Hip and Knee Arthroplasty	Kee, James R.; Mears, Simon C.; Edwards, Paul K.; Barnes, C. Lowry	2017	irrelevant outcome: infected knee revision patients were more likely to have poor dentition.
Incidence and risk factors for dental pathology in patients planned for elective total hip or knee arthroplasty	Vuorinen, M.; Makinen, T.; Rantasalo, M.; Leskinen, J.; Valimaa, H.; Huotari, K.	2019	irrelevant outcome: risk factors for dental pathology
Association between oral health and oral health-related quality of life in patients before hip and knee endoprosthesis surgery: a cross-sectional study	Schmalz, Gerhard; Fenske, Fabian; Reuschel, Florentine; Bartl, Markus; Schmidt, Laura; Goralski, Szymon; Roth, Andreas; Ziebolz, Dirk	2022	irrelevant outcome; all patients had dental examination before EP
Dental clearance prior to elective arthroplasty may not be needed for everyone	Tokarski, Anthony T.; Patel, Raj G.; Parvizi, Javad; Deirmengian, Gregory K.	2014	irrelevant outcome; risk factors for failed dental clearance
Evaluation of the prevalence of periodontal disease as a non-classical risk factor in the group of patients undergoing hip and/or knee arthroplasty	Adamkiewicz, K.; Platek, A. E.; Legosz, P.; Czerniuk, M. R.; Malyk, P.; Szymanski, F. M.	2018	irrelevant outcome; study is looking for prevalence of periodontal disease in the included population
Clinical response to 2 different therapeutic regimens to treat peri-implant mucositis	Porras, R.; Anderson, G. B.; Caffesse, R.; Narendran, S.; Trejo, P. M.	2002	irrelevant patient population (none of them underwent hip/knee arthroplasty)
The effect of preoperative clindamycin in reducing early oral implant failure: a randomised placebo-controlled clinical trial	Santamaria Arrieta, G.; Rodriguez Sanchez, F.; Rodriguez-Andres, C.; Barbier, L.; Arteagoitia, I.	2023	irrelevant population; pts. received oral implants
Relationship between dental caries and total joint arthroplasty at a Veterans Administration hospital	Green-Riviere, Emilia; Giori, Nicholas	2009	literature review
Antibiotic prophylaxis after total joint replacements	Kuong, Evelyn E.; Ng, F. Y.; Yan, C. H.; Fang, Christian X. S.; Chiu, Peter K. Y.	2009	literature review
I PREVENT bacterial resistance. an update on the use of antibiotics in dermatologic surgery	Moorhead, Christine; Torres, Abel	2009	literature review

Article Title	Authors	Year	Reason for Exclusion
Managing dental patients with joint prostheses	Little, J. W.	1994	literature review
The need for antibiotic coverage for dental treatment of patients with joint replacements	Little, J. W.	1983	literature review
Dental disease and periprosthetic joint infection	Young, Heather; Hirsh, Joel; Hammerberg, E. Mark; Price, Connie S.	2014	narrative review
Dental Antibiotic Prophylaxis: What to do with Current Recommendations	Couch, Cory G.; Mears, Simon C.; Edwards, Paul K.; Gene Jines, W.; Lowry Barnes, C.	2017	narrative review
Antibiotic prophylaxis for dental procedures	Daly, Christopher G.	2017	Narrative Review
Debate rages over antibiotic prophylaxis in patients with total joint replacements	Garg, Arun; Guez, Ghislaine	2011	narrative review
Antibiotic prophylaxis for all total joint replacement dental patients: where's the evidence?	Wynn, Richard L.	2009	Narrative Review
Routine prophylactic antibiotics for arthroplasty patients receiving dental care. Is it necessary?	Rose, R. E.	2003	Narrative Review
Update on prosthetic joints, dental treatment, and antibiotic prophylaxis	Rothstein, Jerome P.	2002	Narrative Review
Joint arthroplasty, dental treatment, and antibiotics: a review	Curry, Sean; Phillips, Hugh	2002	Narrative Review
Prosthetic joints, dental treatment, and antibiotic prophylaxis	Rothstein, J. P.	1999	narrative review
Antibiotic prophylaxis in dentistry: a common sense approach	Campbell, J. H.	1998	narrative review
Clinical issues in the prevention of dental-induced endocarditis and prosthetic joint infection	Wahl, M. J.	1995	Narrative Review
Use of prophylactic antibiotics in the prevention of infective endocarditis and prosthesis infection	Lam, M. S.; Wong, S. Y.	1995	narrative review
Extension and containment of infections secondary to dental implant procedures	Perez-Garcia, R. A.	1991	Narrative Review
Prophylactic antibiotic coverage for patients with joint prostheses	Banting, D.; Greenhorn, P.; Richardson, M.; Spagnuolo, G.	1988	Narrative Review

Article Title	Authors	Year	Reason for Exclusion
Evaluation and management of the dental patient with a prosthetic joint replacement	Cutler, L. S.	1987	narrative review
Prophylactic antibiotic management of dental patients with prosthetic joints	Owens, B. M.; Hart, G. T.; Schuman, N. J.	1992	no comparison group
What is the true incidence of dental pathology in the total joint arthroplasty population?	Barrington, John W.; Barrington, Thomas A.	2011	no comparison group; study identifying incidence of dental pathology
Prioritizing Research Informing Antibiotic Prophylaxis Guidelines for Knee Arthroplasty Patients	Kuntz, K. M.; Alarid-Escudero, F.; Swiontkowski, M. F.; Skaar, D. D.	2022	no outcomes of interest; no intervention
Incidence and risk of delayed surgical site infection following instrumented lumbar spine fusion	Lewkonja, Peter; DiPaola, Christian; Street, John	2016	no relevant comparison
Deep sepsis following total knee arthroplasty. Ten-year experience at the University of California at Los Angeles Medical Center	Grogan, T. J.; Dorey, F.; Rollins, J.; Amstutz, H. C.	1986	no relevant comparison
The risk of haematogenous infection in total joint replacements	Ainscow, D. A.; Denham, R. A.	1984	no relevant comparison
Oral health implications in total hip and knee arthroplasty patients: A review	Young, Joseph R.; Bannon, Annika L.; Anoushiravani, Afshin A.; Posner, Andrew D.; Adams, Curtis T.; DiCaprio, Matthew R.	2021	non-systematic review
Current Concepts in Prophylactic Antibiotics in Oral and Maxillofacial Surgery	Dammling, Chad; Abramowicz, Shelly; Kinard, Brian	2022	non-systematic review
Appropriate prescribing of dental prophylaxis in patients with orthopedic implants	Steinhour, Amy; Hodder, Jeremy	2020	non-systematic review
Preventive Antibiotic Use in Nursing Homes: A Not Uncommon Reason for Antibiotic Overprescribing	Sloane, Philip D.; Tandan, Meera; Zimmerman, Sheryl	2020	non-systematic review
The Management of Infections and the Use of Antibiotic Prophylaxis by Dentists: A Review of the Evidence	Maranon, George	2017	non-systematic review
Prosthetic Joint Infections: an Update	Abad, C. L.; Haleem, A.	2018	non-systematic review

Article Title	Authors	Year	Reason for Exclusion
Anaerobic prosthetic joint infection	Shah, Neel B.; Tande, Aaron J.; Patel, Robin; Berbari, Elie F.	2015	non-systematic review
Antibiotic Prophylaxis During Dental Procedures in Patients with Prosthetic Joints	Sendi, Parham; Uckay, Ilker; Suva, Domizio; Vogt, Markus; Borens, Olivier; Clauss, Martin	2016	non-systematic review
Review of antibiotics and indications for prophylaxis	Weiss, Adam; Dym, Harry	2012	non-systematic review
Patients with artificial joints: do they need antibiotic cover for dental treatment?	Scott, J. F.; Morgan, D.; Avent, M.; Graves, S.; Goss, A. N.	2005	non-systematic review
Antibiotic prophylaxis in orthopedic prosthetic surgery	Marculescu, Camelia E.; Osmon, Douglas R.	2005	non-systematic review
Antibiotic prophylaxis for dental patients with total joint replacements	Anonymous,	2003	non-systematic review
Antibiotic prophylaxis for endocarditis, prosthetic joints, and surgery	Seymour, Robin A.; Whitworth, John M.	2002	non-systematic review
Antibiotic prophylaxis in dentistry: a review and practice recommendations	Tong, D. C.; Rothwell, B. R.	2000	non-systematic review
Is antibiotic prophylaxis necessary for preventing prosthetic device infection?	Segreti, J.	1999	non-systematic review
Position paper of The American Academy of Periodontology: periodontal disease as a potential risk factor for systemic diseases	Scannapieco, F. A.	1998	non-systematic review
Patients with prosthetic joints: are they at risk when receiving invasive dental procedures?	Little, J. W.	1997	non-systematic review
Prophylactic use of antibiotics for procedures after total joint replacement	Deacon, J. M.; Pagliaro, A. J.; Zelicof, S. B.; Horowitz, H. W.	1996	non-systematic review
Prophylactic antibiotics: cardiac and prosthetic considerations	Yagiela, J. A.	1995	non-systematic review
Antibacterial prophylaxis	Hall, E. H.; Sherman, R. G.; Emmons, W. W., 3rd; Naylor, G. D.	1994	non-systematic review
Dentally induced bacteremia and infection of total joint replacement arthroplasty	Kim, B.; Weiss, L. P.	1993	non-systematic review
Antibiotic prophylaxis for prevention of bacterial endocarditis and infections	Little, J. W.	1992	non-systematic review

Article Title	Authors	Year	Reason for Exclusion
of major joint prostheses [corrected]			
Prosthetic implants: risk of infection from transient dental bacteremias	Little, J. W.	1991	non-systematic review
Antibiotic prophylaxis in orthopedic surgery	Norden, C. W.	1991	non-systematic review
Prophylactic antibiotics for patients with artificial joints undergoing oral and dental surgery: necessary or not?	Field, E. A.; Martin, M. V.	1991	non-systematic review
Infection in orthopaedic implants	Sanderson, P. J.	1991	non-systematic review
The role of prophylactic antibiotics in the prevention of prosthetic device infections	Segreti, J.; Levin, S.	1989	non-systematic review
Antibiotic prophylaxis for dental patients with prosthetic joints	Schaaf, J. E.; Yoder, K. M.	1989	non-systematic review
Antibiotics in Mohs Micrographic Surgery: Strategies for Prophylaxis and Effective Utilization	Hunter, A. L.; Bermudez, R.	2023	non-systematic review
Antibiotic Prophylaxis in Dental and Oral Surgery Practice	Hollingshead, C. M.; Brizuela, M.	2023	non-systematic review
Combating Bacterial Biofilms: Current and Emerging Antibiofilm Strategies for Treating Persistent Infections	Abdelhamid, A. G.; Yousef, A. E.	2023	non-systematic review
A comprehensive review: Different approaches for encountering of bacterial infection of dental implants and improving their properties	Heydariyan, Z.; Soofivand, F.; Dawi, E. A.; Al-Kahdum, S. A. A.; Hameed, N. M.; Salavati-Niasari, M.	2023	non-systematic review
Medical Clearance for Common Dental Procedures	Herrick, Kevin R.; Terrio, Jennifer M.; Herrick, Crispin	2021	non-systematic review; Recommendations
Prolonged release of an antimicrobial peptide GL13K-loaded thermosensitive hydrogel on a titanium surface improves its antibacterial and anti-inflammatory properties	Zhou, L.; Xing, Y.; Ou, Y.; Ding, J.; Han, Y.; Lin, D.; Chen, J.	2023	Not relevant

Article Title	Authors	Year	Reason for Exclusion
One-year Postoperative Radiographic and Patient-reported Outcomes Following Cervical Deformity Correction Are Not Affected by a Short-term Unplanned Return to the OR	Fourman, M. S.; Lafage, R.; Ames, C.; Smith, J. S.; Passias, P. G.; Shaffrey, C. I.; Mundis, G.; Protopsaltis, T.; Gupta, M.; Klineberg, E. O.; Bess, S.; Lafage, V.; Kim, H. J.	2023	Not relevant
Clinical profile of cutaneous drug reactions in a tertiary care centre	Vanitha, B.; Shenkeshi, S. K.; Agape, B. D.; Arra, S.	2022	Not relevant
Comparison of guideline concordant antibiotic prophylaxis in Veterans Affairs and non-Veterans Affairs dental settings among those with cardiac conditions or prosthetic joints	Ramanathan, S.; Evans, C. T.; Hershow, R. C.; Calip, G. S.; Rowan, S.; Hubbard, C.; Suda, K. J.	2023	not relevant outcome of interest
New CDA position statement on dental patients with orthopedic implants	Anonymous,	2013	not relevant; one pager
Minimizing infection risk: fortune favors the prepared mind	Dunbar, Michael J.; Richardson, Glen	2011	not the complete paper; only abstract
NZDA code of practice: Antibiotic prophylaxis for dental treatment of patients with prosthetic joint replacements (adopted March 2003)	Anonymous,	2003	NZDA code of practice; 2 pages
Clostridioides difficile infection following dental antibiotic prescriptions in a cohort of US veterans	Wilson, G. M.; Evans, C. T.; Fitzpatrick, M. A.; Poggensee, L.; Gibson, G.; Jurasic, M. M.; Echevarria, K.; Suda, K. J.	2023	only 26.7% cohort of patients had prosthetic joints; no comparison given for this group
Recommendations for antibiotics in patients with joint prosthesis are irresponsible and indefensible	Morris, Andrew M.; Howie, Sandra	2009	opinion; narrative
By the way, doctor. Do I need to take antibiotics before dental cleanings and other procedures to prevent infection in my hip prosthesis?	Robb-Nicholson, Celeste	2009	Question and answer; not a research paper
Who needs to take antibiotics before dental work?	Anonymous,	1998	Question and answer; not a research paper
Antibiotic prophylaxis in dental procedures	Ballard, C.; Mowers, R. M.; Millares, M.	1990	Question and answer; not a research paper

Article Title	Authors	Year	Reason for Exclusion
Tough Questions in Total Hip and Total Knee Arthroplasty	Lombardi, Adolph V., Jr.; Eggenberger, Eileen E.; Kolich, Mark T.; Berend, Keith R.; Adams, Joanne B.	2022	Questionnaire; non-systematic
Antibiotic Prophylaxis in Patients with Orthopedic Implants Undergoing Dental Procedures: A Review of Clinical Effectiveness, Safety, and Guidelines	Anonymous,	2016	Rapid Response report
Antibiotic Prophylaxis in Patients with Orthopedic Implants Undergoing Dental Procedures: A Review of Clinical Effectiveness, Safety, and Guidelines	Anonymous,	2016	Rapid Response report
Antibiotic prophylaxis for dental patients with prosthetic joints: Indiana surgeons' recommendations	Schaaf, J. E.; Yoder, K. M.	1988	Recommendations
Antibiotic Prophylaxis for Dental Patients at Risk for Infection	Anonymous,	2018	Recommendations (revision)
The controversy over antibiotic prophylaxis for dental patients with prosthetic joints	Rhodus, Nelson L.	2012	review
Premedication of patients undergoing dental procedures causing bacteremia after total joint arthroplasty	Aminoshariae, Anita; Kulild, James	2010	review article
Late infections of total joint prostheses. A review and recommendations for prevention	Maderazo, E. G.; Judson, S.; Pasternak, H.	1988	review of 24 cases
Dental premedication protocols for patients with knee and hip prostheses	Portnof, Jason E.; Israel, Howard A.; Brause, Barry D.; Behrman, David A.	2006	Review of recommendations
Hematogenous infections of total joint replacements: implications and recommendations related to dental treatment	Gilbert, J. A.	1984	review; recommendations
Spinal Epidural Abscess	Luo, C. T.; Yee, J.	2020	simulation case
Chemoprophylaxis of dental patients with prosthetic joints: a simulation model	Jacobson, J. J.; Schweitzer, S.; DePorter, D. J.; Lee, J. J.	1988	simulation models used; decision tree analysis
Antibiotic prophylaxis for orthopedic prostheses and GI procedures: report of a survey	Meyer, G. W.; Artis, A. L.	1997	surgeons (program director) survey

Article Title	Authors	Year	Reason for Exclusion
Antibiotic prophylaxis for dental procedures at risk of causing bacteremia among post-total joint arthroplasty patients: a survey of Canadian orthopaedic surgeons and dental surgeons	Colterjohn, Tristan; de Beer, Justin; Petrucci, Danielle; Zabtia, Nazar; Winemaker, Mitch	2014	surgeons survey
Antibiotic prophylaxis for dental or urological procedures following hip or knee replacement	Kingston, R.; Kiely, P.; McElwain, J. P.	2002	surgeons survey
A survey of antibiotic use in dentistry	Epstein, J. B.; Chong, S.; Le, N. D.	2000	surgeons survey
Prophylactic antibiotic coverage in patients with total arthroplasty: current practice	Jaspers, M. T.; Little, J. W.	1985	surgeons survey
Antibiotic prophylaxis for dental procedures after joint arthroplasty: a cross-sectional survey of orthopaedic surgeons about current practices	Del Prince, C.; Pavlesen, S.; DiPaola, M. J.	2023	surgeons survey
Antibiotic prophylaxis and invasive dental treatment in prosthetic joint patients	Tong, Darryl; Theis, Jean-Claude	2008	surgeons survey; literature review
Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures	Watters, William, 3rd; Rethman, Michael P.; Hanson, Nicholas Buck; Abt, Elliot; Anderson, Paul A.; Carroll, Karen C.; Futrell, Harry C.; Garvin, Kevin; Glenn, Stephen O.; Hellstein, John; Hewlett, Angela; Kolessar, David; Moucha, Calin; O'Donnell, Richard J.; O'Toole, John E.; Osmon, Douglas R.; Evans, Richard Parker; Rinella, Anthony; Steinberg, Mark J.; Goldberg, Michael; Ristic, Helen; Boyer, Kevin; Sluka, Patrick; Martin, William Robert, 3rd; Cummins, Deborah S.; Song, Sharon; Woznica, Anne;	2013	Systematic Review
Antibiotic prophylaxis in oral and maxillofacial surgery: a systematic review	Milic, T.; Raidoo, P.; Gebauer, D.	2021	systematic review
Is Antibiotic Prophylaxis Necessary Before Dental Procedures in Patients Post Total Ankle Arthroplasty?	Noori, Naudereh; Myerson, Charles; Charlton, Timothy; Thordarson, David	2019	Systematic Review

Article Title	Authors	Year	Reason for Exclusion
World Workshop on Oral Medicine VI: Controversies regarding dental management of medically complex patients: assessment of current recommendations	Napenas, Joel J.; Kujan, Omar; Arduino, Paolo G.; Sukumar, Suma; Galvin, Sheila; Baricevic, Marinka; Costella, John; Czerninski, Rakefet; Peterson, Douglas E.; Lockhart, Peter B.	2015	Systematic Review
Antimicrobial prophylaxis in dentistry	Merlos, A.; Vinuesa, T.; Jane-Salas, E.; Lopez-Lopez, J.; Vinas, M.	2014	Systematic Review
Antibiotic prophylaxis in dermatologic surgery: advisory statement 2008	Wright, Tina I.; Baddour, Larry M.; Berbari, Elie F.; Roenigk, Randall K.; Phillips, P. Kim; Jacobs, M. Amanda; Otley, Clark C.	2008	Systematic Review
Total joint replacement: a consideration for antimicrobial prophylaxis	Cioffi, G. A.; Terezhalmay, G. T.; Taybos, G. M.	1988	systematic review
Is Antibiotic Prophylaxis Necessary before Dental Implant Procedures in Patients with Orthopaedic Prostheses? A Systematic Review	Salgado-Peralvo, Angel-Orion; Pena-Cardelles, Juan-Francisco; Kewalramani, Naresh; Garcia-Sanchez, Alvaro; Mateos-Moreno, Maria-Victoria; Velasco-Ortega, Eugenio; Ortiz-Garcia, Ivan; Jimenez-Guerra, Alvaro; Vegh, Daniel; Pedrinaci, Ignacio; Monsalve-Guil, Loreto	2022	Systematic Review completed
Prosthetic Joint Infection After Dental Work: Is the Correct Prophylaxis Being Prescribed? A Systematic Review	Danilkowicz, Richard M.; Lachiewicz, Anne M.; Lorenzana, Daniel J.; Barton, Karen D.; Lachiewicz, Paul F.	2021	Systematic Review completed
Is there a Role for Antibiotic Prophylaxis Prior to Dental Procedures in Patients with Total Joint Arthroplasty? A Systematic Review of the Literature	Slullitel, Pablo Ariel; Onativia, Jose Ignacio; Piuze, Nicolas Santiago; Higuera-Rueda, Carlos; Parvizi, Javad; Buttaro, Martin Alejandro	2020	Systematic Review completed
Is there scientific evidence to support antibiotic prophylaxis in patients with periodontal disease as a means to decrease the risk of prosthetic joint infections? A systematic review	Moreira, Ana Isabel; Mendes, Luzia; Pereira, Jose Antonio	2020	Systematic Review completed
Dental assessment prior to orthopedic surgery: A systematic review	Barrere, Sophie; Reina, Nicolas; Peters, Ove A.; Rapp, Lucie; Vergnes, Jean-Noel; Maret, Delphine	2019	Systematic Review completed

Article Title	Authors	Year	Reason for Exclusion
Antibiotic prophylaxis is not indicated prior to dental procedures for prevention of periprosthetic joint infections	Rademacher, Willem M. H.; Walenkamp, Geert H. I. M.; Moojen, Dirk Jan F.; Hendriks, Johannes G. E.; Goedendorp, Theo A.; Rozema, Frederik R.	2017	Systematic Review completed
Impact of dental clearance on total joint arthroplasty: A systematic review	Frey, Christopher; Navarro, Sergio M.; Blackwell, Terri; Lidner, Carla; Del Schutte, H., Jr.	2019	Systematic Review completed
Antibiotic prophylaxis during dental procedures in patients with in situ lower limb prosthetic joints	Alao, U.; Pydisetty, R.; Sandiford, N. A.	2015	Systematic Review completed
Antibiotics in dentistry: Bacteremia, antibiotic prophylaxis, and antibiotic misuse	Dinsbach, Nathan A.	2012	Systematic Review completed
Antimicrobial prophylaxis in noncardiac prosthetic device recipients	Guay, David R.	2012	Systematic Review completed
Prevention of surgical site infections in bone and joint procedures	Vonberg, Ralf-Peter; Gastmeier, Petra	2012	Systematic Review completed
Antibiotic prophylaxis in dentistry and oral surgery: use and misuse	Termine, Nicoletta; Panzarella, Vera; Ciavarella, Domenico; Lo Muzio, Lorenzo; D'Angelo, Matteo; Sardella, Andrea; Compilato, Domenico; Campisi, Giuseppina	2009	Systematic Review completed
The evidence base for the efficacy of antibiotic prophylaxis in dental practice	Lockhart, Peter B.; Loven, Bridget; Brennan, Michael T.; Fox, Philip C.	2007	Systematic Review completed
Antibiotic prophylaxis during dental treatment in patients with prosthetic joints	Thyne, G. M.; Ferguson, J. W.	1991	Systematic Review completed
Late infections in patients with prostheses for total replacement of joints: implications for the dental practitioner	Mulligan, R.	1980	Systematic Review completed
Surgical site infection prophylaxis: what have we learned and are we making progress?	Ierano, C.; Hall, L.; James, R.	2023	Systematic Review completed
Exploring the link between poor oral hygiene and mesh infection after hernia repair: a systematic review and proposed best practices	East, B.; Podda, M.; Beznoskova-Seydlova, M.; de Beaux, A. C.	2023	Systematic Review completed

Article Title	Authors	Year	Reason for Exclusion
A Rare Pathogen of Bones and Joints: A Systematic Review of Osteoarticular Infections Caused by <i>Gemella morbillorum</i>	Saad, E.; Faris, M. E.; Abdalla, M. S.; Prasai, P.; Ali, E.; Stake, J.	2023	Systematic Review completed
Antibacterial prophylaxis for dental, GI, and GU procedures	Anonymous,	2005	The medical letter
Cost-effectiveness of dental antibiotic prophylaxis in total knee arthroplasty recipients with type II diabetes mellitus	Stanley, Elizabeth E.; Trentadue, Taylor P.; Smith, Karen C.; Sullivan, James K.; Thornhill, Thomas S.; Lange, Jeffrey; Katz, Jeffrey N.; Losina, Elena	2020	used osteoarthritis policy model instead of actual patients
Viewpoint: Periprosthetic joint infection and dental antibiotic prophylaxis guidelines	Zhou, Miao Xian; Berbari, Elie F.; Couch, Cory G.; Gruwell, Scott F.; Carr, Alan B.	2021	Viewpoint/Framework

Voting Members' and Non-Voting Oversight Chairs' Disclosures

Prior to the development of this clinical practice guideline, clinical practice guideline development group members disclose conflicts of interest (COI). They disclose COIs in writing to the American Academy of Orthopaedic Surgeons via a private on-line reporting database and also verbally at the recommendation approval meeting.

Disclosure Items: (n) = Respondent answered 'No' to all items indicating no conflicts. 1 = Royalties from a company or supplier; 2 = Speakers bureau/paid presentations for a company or supplier; 3A = Paid employee for a company or supplier; 3B = Paid consultant for a company or supplier; 3C = Unpaid consultant for a company or supplier; 4 = Stock or stock options in a company or supplier; 5 = Research support from a company or supplier as a PI; 6 = Other financial or material support from a company or supplier; 7 = Royalties, financial or material support from publishers; 8 = Medical/Orthopaedic publications editorial/governing board; 9 = Board member/committee appointments for a society.

Yale Fillingham, MD, FAAOS

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Charles Hannon, MD, MBA

AAOS: Board or committee member (\$0)

American Association of Hip and Knee Surgeons: Board or committee member (\$0)

Orchard Medical: Paid consultant (\$7,000) N/A(Self)

Stryker: Research support (\$0)

David Jevsevar, MD, MBA, FAAOS

AAOS: Board or committee member (\$0) Council Chair(Self)

American Association of Hip and Knee Surgeons: Board or committee member (\$0) EBPC(Self)

Medacta: Paid presenter or speaker (\$7,000) Number of Presentations: 1 None(Self)

Matthew Grosso, MD

American Association of Hip and Knee Surgeons: Board or committee member (\$0)

Teladoc Health: Paid consultant (\$35,000) N/A(Self)

Nicholas Bedard, MD

American Association of Hip and Knee Surgeons: Board or committee member (\$0)

DePuy, A Johnson & Johnson Company: Paid consultant (\$0)

Journal of Arthroplasty: Editorial or governing board (\$0)

Elie Berbari, MD

(This individual reported nothing to disclose)

Majdi Al-Hasan, MBBS

Antibiotics: Editorial or governing board (\$0) Editorial Board Member(Self)

Pharmacy: Editorial or governing board (\$0) Editorial Board Member(Self)

Jessica Seidelman, MD

(This individual reported nothing to disclose)

Alberto V Carli, MD, MSc, FRCSC

Heraeus Medical: Paid consultant (\$0)

Michele R D'Apuzzo, MD, FAAOS

AAOS: Board or committee member (\$0)

Florida Orthopedic Society: Board or committee member (\$0)

Miami Orthopedic Society: Board or committee member (\$0)

OREF: Research support (\$0)

Thomas G Myers, MD, FAAOS

AAOS: Board or committee member; Board or committee member (\$0) Practice Management & Rehabilitation Program Committee(Self)

American Association of Hip and Knee Surgeons: Board or committee member (\$0) FOCAL Committee (Self)

Journal of Arthroplasty: Editorial or governing board (\$0) editorial board(Self)

Matthew J Dietz, MD, FAAOS

Guidepoint Consulting: Paid consultant (\$0)

Heraeus Medical: Paid consultant (\$0)

Heraeus Medical USA: Research support (\$0)

Peptilogics: Unpaid consultant

Peptilogics: Stock or stock Options Number of Shares: 0

Peptilogics: Research support (\$0)

Karl C Roberts, MD, FAAOS

AAOS: Board or committee member (\$0) Chairman EBQV(Self)

AAOS Now: Editorial or governing board (\$0) CORQ Liason(Self)

Journal of Arthroplasty: Editorial or governing board (\$0) Editorial Board(Self)

MARCQI: Board or committee member (\$0) Michigan Arthroplasty Registry for Quality Initiative(Self)

Lauren L Patton, DDS

(This individual reported nothing to disclose)

Tara Aghaloo, DDS, MD, PhD

Journal of Oral and Maxillofacial Surgery: Editorial or governing board (\$25,000) N/A(Self)

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-list members and disclosures

AAOS Approval Bodies

Committee on Evidence Based Quality and Value

The committee on Evidence Based Quality and Value (EBQV) consists of nineteen AAOS members who implement evidence-based quality initiatives such as clinical practice guidelines (CPGs), systematic literature reviews (SRs) and appropriate use criteria (AUCs). They also oversee the dissemination of related educational materials and promote the utilization of orthopaedic value products by the Academy's leadership and its members.

Research and Quality Council

The Research and Quality Council promotes ethically and scientifically sound clinical and translational research to sustain patient care in musculoskeletal disorders. The Council also serves as the primary resource for educating its members, the public, and public policy makers regarding evidenced-based medical practice, orthopaedic devices and biologics, regulatory pathways and standards development, patient safety, and other related important research and quality areas. The Council is comprised of the chairs of the committees on Devices, Biologics, and Technology, Patient Safety, Research Development, U.S. and chair and section leaders of the Evidence Based Quality and Value committee. Also, on the Council are the second vice-president, three members at large, and representatives of the Diversity Advisory Board, Women's Health Issues Advisory Board, Board of Specialty Societies (BOS), Board of Councilors (BOC), Communications Cabinet, Orthopaedic Research Society (ORS), Orthopedic Research and Education Foundation (OREF).

Board of Directors

The 18-member Board of Directors manage the affairs of the AAOS, set policy, and oversee the Strategic Plan

Review Organizations

Review of the clinical practice guideline is completed by interested external organizations. The AAOS solicits reviewers for each clinical practice guideline. They consist of experts in the topic area and represent professional societies other than AAOS. Review organizations are nominated by the clinical practice guideline development group at the introductory meeting. Review responses are available on www.aaos.org/quality.

Participation in the AAOS systematic literature review peer review process does not constitute an endorsement, nor does it imply that the reviewer supports this document.

Letters of Endorsement from External Organizations



December 16, 2024

Kaitlyn S. Sevarino, MBA, CAE
Director
Department of Clinical Quality and Value
American Academy of Orthopaedic Surgeons
9400 West Higgins Road Rosemont, IL 60018

Dear Ms. Sevarino,

The Musculoskeletal Infection Society has voted to endorse the AAOS Clinical Practice Guideline for the Prevention of Total Hip and Knee Arthroplasty Periprosthetic Joint Infection in Patients Undergoing Dental Procedures.

This endorsement implies permission for the AAOS to officially list our organization as an endorser of this clinical practice guideline and reprint our logo in the introductory section of the clinical practice guideline review document. Sincerely,

Andy Miller, MD
MSIS President 2025



March 3, 2025

Kaitlyn S. Sevarino, MBA, CAE
Director
Department of Clinical Quality and Value
American Academy of Orthopaedic Surgeons
9400 West Higgins Road Rosemont, IL 60018

Dear Ms. Sevarino,

The Infectious Diseases Society of America (IDSA) has voted to endorse the AAOS Clinical Practice Guideline for the Prevention of Total Hip and Knee Arthroplasty Periprosthetic Joint Infection in Patients Undergoing Dental Procedures.

This endorsement implies permission for the AAOS to officially list our organization as an endorser of this clinical practice guideline and reprint our logo in the introductory section of the clinical practice guideline review document.

Sincerely,

A handwritten signature in black ink that reads "Loretta Dzanya". The signature is written in a cursive, flowing style.

Loretta Dzanya
Program Coordinator, Clinical Affairs and Practice Guidelines