*Measure #20: Perioperative Care: Timing of Antibiotic Prophylaxis – Ordering Physician

DESCRIPTION:

Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics, who have an order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours), prior to the surgical incision (or start of procedure when no incision is required)

INSTRUCTIONS:

This measure is to be reported <u>each time</u> a procedure is performed during the reporting period for patients who undergo surgical procedures with the indications for prophylactic antibiotics. There is no diagnosis associated with this measure. It is anticipated that clinicians who perform the listed surgical procedures as specified in the denominator coding will submit this measure.

This measure is reported using CPT Category II codes:

CPT procedure codes and patient demographics (age, gender, etc.) are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure. If multiple surgical procedures were performed on the same date of service and submitted on the same claim form, it is not necessary for the same clinician to submit the CPT Category II code with each procedure. However, if multiple NPIs are reporting this measure on the same claim, each NPI should report the quality-data code.

When reporting the measure, submit the listed CPT procedure code and the appropriate CPT Category II code <u>OR</u> the CPT Category II code <u>with</u> the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reasons not otherwise specified.

NUMERATOR:

Surgical patients who have an order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required)

Numerator Instructions: There must be documentation of order (written order, verbal order, or standing order/protocol) specifying that antibiotic is to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required) OR documentation that antibiotic <u>has</u> been given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of or start of procedure when no incision is required).

Note: In the event surgery is delayed, as long as the patient is redosed (if clinically appropriate) the numerator coding should be applied.

Numerator Coding:

Table 1A: The antimicrobial drugs listed below are considered prophylactic antibiotics for the purposes of this measure.

Ampicillin/sulbactan	n • Cefuroxime	Gentamicin		
Aztreonam	Ciprofloxacin	Levofloxacin		
Cefazolin	Clindamycin	Metronidazole		
Cefmetazole	Ertapenem	Moxifloxacin		
Cefotetan	Erythromycin base	Neomycin		
Cefoxitin	Gatifloxacin	Vancomycin		

Documentation of Order for Prophylactic Antibiotic (written order, verbal order, or standing order/protocol)

CPT II 4047F: Documentation of order for prophylactic antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required)

OR

Documentation that Prophylactic Antibiotic <u>has</u> been Given within One Hour Prior to the Surgical Incision (or start of procedure when no incision is required) CPT II 4048F: Documentation that prophylactic antibiotic was given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required)

OR

Order for Prophylactic Antibiotic not Given for Medical Reasons

Append a modifier (1P) to CPT Category II code 4047F to report documented circumstances that appropriately exclude patients from the denominator.

 1P: Documentation of medical reason(s) for not ordering antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required)

OR

Order for Administration of Prophylactic Antibiotic <u>not</u> Given, Reason not Specified Append a reporting modifier (8P) to CPT Category II code 4047F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

 8P: Prophylactic antibiotics were <u>not</u> ordered to be given or given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required), reason not otherwise specified

DENOMINATOR:

All surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics

Denominator Coding: A CPT procedure code for surgical procedures for which prophylactic antibiotics are indicated is required to identify patients for denominator inclusion.

SURGICAL PROCEDURE	CPT CODE
Integumentary	15734, 15738, 19260, 19271, 19272, 19301, 19302,
	19303, 19304, 19305, 19306, 19307, 19361, 19364,
	19366, 19367, 19368, 19369
Le Fort Fractures	21346, 21347, 21348, 21422, 21423, 21432, 21433,
	21435, 21436
Mandibular Fracture	21454, 21461, 21462, 21465, 21470
Spine	22325, 22612, 22630, 22800, 22802, 22804, 63030,
	63042
Hip Reconstruction	27125, 27130, 27132, 27134, 27137, 27138
Trauma (Fractures)	27235, 27236, 27244, 27245, 27269, 27758, 27759,
	27766, 27769, 27792, 27814
Knee Reconstruction	27440, 27441, 27442, 27443, 27445, 27446, 27447
Laryngectomy	31360, 31365, 31367, 31368, 31370, 31375, 31380,
	31382, 31390, 31395
Vascular	33877, 33880, 33881, 33883, 33886, 33891, 34800,
	34802, 34803, 34804, 34805, 34825, 34830, 34831,
	34832, 34900, 35081, 35091, 35102, 35131, 35141,
	35151, 35601, 35606, 35612, 35616, 35621, 35623,
	35626, 35631, 35636, 35637, 35638, 35642, 35645,
	35646, 35647, 35650, 35651, 35654, 35656, 35661,
	35663, 35665, 35666, 35671, 36830
Spleen and Lymph Nodes	38115
Glossectomy	41130, 41135, 41140, 41145, 41150, 41153, 41155
Esophagus	43045, 43100, 43101, 43107, 43108, 43112, 43113,
	43116, 43117, 43118, 43121, 43122, 43123, 43124,
	43130, 43135, 43300, 43305, 43310, 43312, 43313,
	43320, 43324, 43325, 43326, 43330, 43331, 43340,
	43341, 43350, 43351, 43352, 43360, 43361, 43400,
Ctomoch	43401, 43405, 43410, 43415, 43420, 43425, 43496
Stomach	43500, 43501, 43502, 43510, 43520, 43600, 43605,
	43610, 43611, 43620, 43621, 43622, 43631, 43632, 43633, 43634, 43640, 43641, 43653, 43800, 43810,
	43820, 43825, 43830, 43831, 43832, 43840, 43843,
	43845, 43846, 43847, 43848, 43850, 43855, 43860, 43865, 43870
Small Intestine	44005, 44010, 44020, 44021, 44050, 44055, 44100,
	44003, 44010, 44020, 44021, 44030, 44033, 44100, 44120, 44125, 44126, 44127, 44130, 44132, 44133,
	44135, 44136
Colon and Rectum	43880, 44025, 44110, 44111, 44140, 44141, 44143,
	44144, 44145, 44146, 44147, 44150, 44151, 44155,
	44156, 44157, 44158, 44160, 44202, 44204, 44205,

	44206, 44207, 44208, 44210, 44211, 44212, 44300,
	44310, 44312, 44314, 44316, 44320, 44322, 44340,
	44345, 44346, 44602, 44603, 44604, 44605, 44615,
	44620, 44625, 44626, 44640, 44650, 44660, 44661,
	44700, 44950, 51597
Anus and Rectum	45108, 45110, 45111, 45112, 45113, 45114, 45116,
	45119, 45120, 45121, 45123, 45126, 45130, 45135,
	45136, 45150, 45160, 45170, 45190, 45500, 45505,
	45520, 45540, 45541, 45550, 45560, 45562, 45563,
	45800, 45805, 45820, 45825
Hepatic Surgery	47133, 47135, 47136, 47140, 47141, 47142
Biliary Surgery	47420, 47425, 47460, 47480, 47560, 47561, 47570,
	47600, 47605, 47610, 47612, 47620, 47700, 47701,
	47711, 47712, 47715, 47720, 47721, 47740, 47741,
D	47760, 47765, 47780, 47785, 47800, 47802, 47900
Pancreas	48020, 48100, 48120, 48140, 48145, 48146, 48148,
	48150, 48152, 48153, 48154, 48155, 48500, 48510,
	48511, 48520, 48540, 48545, 48547, 48548, 48550,
Abdemen Deriteneum & Omentum	48554, 48556
Abdomen, Peritoneum, & Omentum	49215, 49568
Renal Transplant	50300, 50320, 50340, 50360, 50365, 50370, 50380
Gynecologic Surgery	58150, 58152, 58180, 58200, 58210, 58260, 58262,
	58263, 58267, 58270, 58275, 58280, 58285, 58290,
Acoustic Neuroma	58291, 58292, 58293, 58294 61520, 61526, 61520, 61501, 61505, 61506, 61509
	61520, 61526, 61530, 61591, 61595, 61596, 61598, 61606, 61616, 61618, 61619, 69720, 69955, 69960,
	69970
Cochlear Implants	69930
Neurological Surgery	22524, 22554, 22558, 22600, 22612, 22630, 35301,
Neurological Surgery	61154, 61312, 61313, 61315, 61510, 61512, 61518,
	61548, 61697, 61700, 61750, 61751, 61867, 62223,
	62230, 63015, 63020, 63030, 63042, 63045, 63047,
	63056, 63075, 63081, 63267, 63276
Cardiothoracic Surgery	33120, 33130, 33140, 33141, 33202, 33250, 33251,
	33256, 33261, 33305, 33315, 33321, 33322, 33332,
	33335, 33400, 33401, 33403, 33404, 33405, 33406,
	33410, 33411, 33413, 33416, 33422, 33425, 33426,
	33427, 33430, 33460, 33463, 33464, 33465, 33475,
	33496, 33510, 33511, 33512, 33513, 33514, 33516,
	33517, 33518, 33519, 33521, 33522, 33523, 33530,
	33533, 33534, 33535, 33536, 33542, 33545, 33548,
	33572, 35211, 35241, 35271
Cardiothoracic (Pacemaker)	33203, 33206, 33207, 33208, 33212, 33213, 33214,
	33215, 33216, 33217, 33218, 33220, 33222, 33223,
	33224, 33225, 33226, 33233, 33234, 33235, 33236,
	33237, 33238, 33240, 33241, 33243, 33244, 33249,

	33254, 33255
Genitourinary Surgery	51550, 51555, 51565, 51570, 51575, 51580, 51585,
	51590, 51595, 51596, 51920, 51925, 52450, 52601,
	52612, 52614, 52620, 52630, 52647, 52648, 52649,
	54401, 54405, 54406, 54408, 54410, 54415, 54416,
	55801, 55810, 55812, 55815, 55821, 55831, 55840,
	55842, 55845
General Thoracic Surgery	19272, 21627, 21632, 21740, 21750, 21805, 21825,
	31760, 31766, 31770, 31775, 31786, 31805, 32095,
	32100, 32110, 32120, 32124, 32140, 32141, 32150,
	32215, 32220, 32225, 32310, 32320, 32402, 32440,
	32442, 32445, 32480, 32482, 32484, 32486, 32488,
	32491, 32500, 32501, 32800, 32810, 32815, 32900,
	32905, 32906, 32940, 33020, 33025, 33030, 33031,
	33050, 33300, 33310, 33320, 34051, 35021, 35216,
	35246, 35276, 35311, 35481, 35526, 37616, 38381,
	38746, 38747, 39000, 39010, 39200, 39220, 39545,
	39561, 60521, 60522, 64746
Foot & Ankle	27702, 27703, 27704, 27870, 28192, 28193, 28293,
	28296, 28299, 28300, 28306, 28307, 28308, 28309,
	28310, 28320, 28322, 28415, 28420, 28445, 28465,
	28485, 28505, 28525, 28531, 28555, 28585, 28615,
	28645, 28675, 28705, 28715, 28725, 28730, 28735,
	28737, 28740, 28750, 28755, 28760

RATIONALE:

The appropriate timing of administration of prophylactic antibiotics has been demonstrated to reduce the incidence of surgical wound infections. Specifying the time of administration in the order is critical as available evidence suggests that the drug should be received within one hour before incision for maximum antimicrobial effect.

CLINICAL RECOMMENDATION STATEMENTS:

The anti-infective drug should ideally be given within 30 minutes to 1 hour before the initial incision to ensure its presence in an adequate concentration in the targeted tissues. For most procedures, scheduling administration at the time of induction of anesthesia ensures adequate concentrations during the period of potential contamination. Exceptions: cesarean procedures (after cross clamping of the umbilical cord); colonic procedures (starting 19 hours before the scheduled time of surgery). (ASHP)

Infusion of the first antimicrobial dose should begin within 60 minutes before incision. However, when a fluoroquinolone or vancomycin is indicated, the infusion should begin within 120 minutes before incision to prevent antibiotic-associated reactions. Although research has demonstrated that administration of the antimicrobial at the time of anesthesia induction is safe and results in adequate serum and tissue drug levels at the time of incision, there was no consensus that the infusion must be completed before incision. (SIPGWW)