*Measure #21: Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin

DESCRIPTION:
Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic, who had an order for cefazolin OR cefuroxime for antimicrobial prophylaxis

INSTRUCTIONS:
This measure is to be reported each time a procedure is performed during the reporting period for patients who undergo surgical procedures with the indications for a first or second generation cephalosporin prophylactic antibiotic. 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 codes and the appropriate CPT Category II code OR the CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reasons not otherwise specified.

NUMERATOR:
Surgical patients who had an order for cefazolin OR cefuroxime for antimicrobial prophylaxis

> Numerator Instructions: There must be documentation of order (written order, verbal order, or standing order/protocol) for cefazolin or cefuroxime for antimicrobial prophylaxis OR documentation that cefazolin or cefuroxime was *given*.
> > *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:
> Acceptable First and Second Generation Cephalosporin Prophylactic Antibiotics
> First generation cephalosporin: cefazolin
> Second generation cephalosporin: cefuroxime

Documentation of order for cefazolin OR cefuroxime for antimicrobial prophylaxis (written order, verbal order, or standing order/protocol)
CPT II 4041F: Documentation of order for cefazolin OR cefuroxime for antimicrobial prophylaxis
*Note: CPT Category II code **4041F** is provided for antibiotic <u>ordered</u> or antibiotic <u>given</u>. Report CPT Category II code **4041F** if cefazolin OR cefuroxime was given for antimicrobial prophylaxis.*

OR

Order for First or Second Generation Cephalosporin <u>not</u> Ordered for Medical Reasons
Append a modifier (1P) to CPT Category II code 4041F to report documented circumstances that appropriately exclude patients from the denominator.
- 1P: Documentation of medical reason(s) for not ordering cefazolin OR cefuroxime for antimicrobial prophylaxis

OR

Order for First or Second Generation Cephalosporin <u>not</u> Ordered, Reason not Specified
Append a reporting modifier (8P) to CPT Category II code 4041F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.
- 8P: Order for cefazolin OR cefuroxime for antimicrobial prophylaxis was <u>not</u> documented, reason not otherwise specified

<u>DENOMINATOR:</u>
All surgical patients aged 18 years and older undergoing procedures with the indications for a first or second generation cephalosporin prophylactic antibiotic

<u>Denominator Coding:</u>
A CPT procedure code for surgical procedures with indications for first or second generation cephalosporin prophylactic antibiotic 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
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
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	38100, 38101, 38115, 38120
Esophagus	43045, 43100, 43101, 43107, 43108, 43112, 43113, 43116, 43117, 43118, 43121, 43122, 43123, 43124, 43130, 43135, 43280, 43300, 43305, 43310, 43312, 43313, 43320, 43324, 43325, 43326, 43330, 43331, 43340, 43341, 43350, 43351, 43352, 43360, 43361, 43400, 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, 43651, 43652, 43653, 43800, 43810, 43820, 43825, 43830, 43831, 43832, 43840, 43843, 43845, 43846, 43847, 43848, 43850, 43855, 43860, 43865, 43870, 43880
Small Intestine	44005, 44010, 44020, 44021, 44025, 44050, 44055, 44100, 44110, 44111, 44120, 44125, 44126, 44127, 44130, 44132, 44133, 44135, 44136
Hepatic Surgery	47133, 47135, 47136, 47140, 47141, 47142
Biliary Surgery	47420, 47425, 47460, 47480, 47490, 47510, 47511, 47525, 47530, 47560, 47561, 47570, 47600, 47605, 47610, 47612, 47620, 47630, 47700, 47701, 47711, 47712, 47715, 47720, 47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47802, 47900
Pancreas	48001, 48020, 48100, 48102, 48120, 48140, 48145, 48146, 48148, 48150, 48152, 48153, 48154, 48155, 48500, 48510, 48511, 48520, 48540, 48545, 48547, 48548, 48550, 48554, 48556
Abdomen, Peritoneum & Omentum	49000, 49002, 49010, 49180, 49203, 49204, 49205, 49215
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, 58291, 58292, 58293, 58294
Neurological Surgery	22524, 22554, 22558, 22600, 22612, 22630, 35301, 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, 35820
Cardiothoracic (Pacemaker)	33203, 33254, 33255
General Thoracic Surgery	19272, 21627, 21632, 21740, 21750, 21805, 21825, 31760, 31766, 31770, 31775, 31786, 31805, 32035, 32036, 32095, 32100, 32110, 32120, 32124, 32140, 32141, 32150, 32200, 32215, 32220, 32225, 32310, 32320, 32402, 32440, 32442, 32445, 32480, 32482, 32484, 32486, 32488, 32491, 32500, 32501, 32540, 32601, 32602, 32603, 32604, 32605, 32606, 32650, 32651, 32652, 32653, 32654, 32655, 32656, 32657, 32658, 32659, 32660, 32661, 32662, 32663, 32664, 32665, 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:
Current published evidence supports the use of either cefazolin, a first generation cephalosporin, or cefuroxime, a second generation cephalosporin, for many surgical procedures, in the absence of β-lactam allergy. An alternative antimicrobial regimen may be appropriate depending on the antimicrobial susceptibility pattern in an individual institution (potentially a medical reason for excluding patients treated at that institution from this measure.)

CLINICAL RECOMMENDATION STATEMENTS:
For most procedures, cefazolin should be the agent of choice because of its relatively long duration of action, its effectiveness against the organisms most commonly encountered in surgery, and its relatively low cost. (ASHP)

In operations for which cephalosporins represent appropriate prophylaxis, alternative antimicrobials should be provided to those with a high likelihood of serious adverse reaction or allergy on the basis of patient history or diagnostic tests such as skin testing.

The preferred antimicrobials for prophylaxis in patients undergoing hip or knee arthroplasty are cefazolin and cefuroxime. Vancomycin or clindamycin may be used in patients with serious allergy or adverse reactions to β-lactams.

The recommended antimicrobials for cardiothoracic and vascular operations include cefazolin or cefuroxime. For patients with serious allergy or adverse reaction to β-lactams, vancomycin is appropriate, and clindamycin may be an acceptable alternative. (SIPGWW)