

# Heart Failure National Hospital Inpatient Quality Measures

- HF-1 Discharge instructions**  
(documentation of all 6 elements below -  
TJC retired / CMS voluntary)
1. Activity level
  2. Diet
  3. Discharge medications
  4. Follow-up appointment
  5. Weight monitoring
  6. What to do if symptoms worsen
- HF-2 Evaluation of LVS function**  
(TJC and CMS required)
- HF-3 ACEI or ARB for LVSD**  
(TJC required / CMS voluntary)

Specifications Manual for National Hospital Inpatient Quality  
Measures Discharges **01-01-14 (1Q14) through 09-30-14 (3Q14)**



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# Acute Myocardial Infarction National Hospital Inpatient Quality Measures

- AMI-1 Aspirin at Arrival<sup>1</sup>
- AMI-2 Aspirin Prescribed at Discharge<sup>1</sup>  
(TJC required / CMS voluntary)
- AMI-3 ACEI or ARB for LVSD<sup>1</sup>
- AMI-5 Beta-Blocker Prescribed at Discharge<sup>1</sup>
- AMI-7 Median Time to Fibrinolysis<sup>1</sup>
- AMI-7a Fibrinolytic Therapy Received Within  
30 Minutes of Hospital Arrival<sup>2</sup>
- AMI-8 Median Time to Primary PCI<sup>1</sup>
- AMI-8a Primary PCI Received Within 90  
Minutes of Hospital Arrival<sup>2</sup>
- AMI-10 Statin Prescribed at Discharge<sup>1</sup>

<sup>1</sup>TJC required / CMS voluntary

<sup>2</sup>TJC and CMS required

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## Prophylactic Antibiotic Regimen Selection for Surgery

for discharges from 01-01-14 (1Q14) through 09-30-14 (3Q14)

SURGICAL PROCEDURE	APPROVED ANTIBIOTICS
CABG, Other Cardiac or Vascular Surgery	Cefazolin <b>or</b> Cefuroxime <b>or</b> Vancomycin <sup>1</sup> <b>If <math>\beta</math>-lactam allergy:</b> Vancomycin <sup>2</sup> <b>or</b> Clindamycin <sup>2</sup>
Hip/Knee Arthroplasty	Cefazolin <b>or</b> Cefuroxime <b>or</b> Vancomycin <sup>1</sup> <b>If <math>\beta</math>-lactam allergy:</b> Vancomycin <sup>2</sup> <b>or</b> Clindamycin <sup>2</sup>
Colon	Cefotetan <b>or</b> Cefoxitin <b>or</b> Ampicillin/Sulbactam <b>or</b> Ertapenem <sup>3</sup> <b>or</b> Metronidazole + Cefazolin <b>or</b> Metronidazole + Cefuroxime <b>or</b> Metronidazole <sup>4</sup> + Ceftriaxone <b>If <math>\beta</math>-lactam allergy:</b> Clindamycin + Aminoglycoside <b>or</b> Clindamycin + Quinolone <b>or</b> Clindamycin + Aztreonam <b>or</b> Metronidazole with Aminoglycoside <b>or</b> Metronidazole + Quinolone

### Special Considerations

<sup>1</sup>Vancomycin is acceptable with a physician/APN/PA/pharmacist documented justification for its use (see data element *Vancomycin*).

<sup>2</sup>For cardiac, orthopedic and vascular surgery, if the patient is allergic to beta-lactam antibiotics, Vancomycin or Clindamycin are acceptable substitutes.

<sup>3</sup>A single dose of Ertapenem is recommended for colon procedures.

<sup>4</sup>This combination should only be used in hospitals where surgical site infection surveillance demonstrates gram negative surgical infections resistant to first and second generation cephalosporins. It is recommended not to be used routinely.

## Prophylactic Antibiotic Regimen Selection for Surgery

SURGICAL PROCEDURE	APPROVED ANTIBIOTICS
<p>Hysterectomy Abdominal or Vaginal</p>	<p>Cefotetan <b>or</b> Cefazolin <b>or</b> Cefoxitin <b>or</b> Cefuroxime <b>or</b> Ampicillin/Sulbactam <b>If <math>\beta</math>-lactam allergy:</b> Clindamycin + Aminoglycoside <b>or</b> Clindamycin + Quinolone <b>or</b> Clindamycin + Aztreonam <b>or</b> Metronidazole + Aminoglycoside <b>or</b> Metronidazole + Quinolone Vancomycin + Aminoglycoside <b>or</b> Vancomycin + Aztreonam <b>or</b> Vancomycin + Quinolone</p>
<p>Principal Procedure Code of Abdominal or Vaginal Hysterectomy with an Other Procedure Code of Colon Surgery found in Appendix A, Table 5.03</p>	<p>Cefotetan <b>or</b> Cefazolin <b>or</b> Cefoxitin <b>or</b> Cefuroxime <b>or</b> Ampicillin/Sulbactam <b>or</b> Ertapenem<sup>3</sup> <b>If <math>\beta</math>-lactam allergy:</b> Clindamycin + Aminoglycoside <b>or</b> Clindamycin + Quinolone <b>or</b> Clindamycin + Aztreonam <b>or</b> Metronidazole + Aminoglycoside <b>or</b> Metronidazole + Quinolone Vancomycin + Aminoglycoside <b>or</b> Vancomycin + Aztreonam <b>or</b> Vancomycin + Quinolone</p>

<sup>3</sup> A single dose of Ertapenem is recommended for colon procedures.

The antibiotic regimens described in this table reflect the combined published recommendations of the Specifications Manual for National Hospital Inpatient Quality Measures Discharges **01-01-14 (1Q14) to 09-30-14 (3Q14)**

## POSTER 1 of 2

# VTE Prophylaxis Options for Surgery

for discharges from 01-01-14 through 09-30-14

SURGERY TYPE	RECOMMENDED PROPHYLAXIS OPTIONS
Intracranial Neurosurgery	Any of the following: <ul style="list-style-type: none"><li>• Intermittent pneumatic compression devices (IPC) with or without graduated compression stockings (GCS)</li><li>• Low-dose unfractionated heparin (LDUH)</li><li>• Low molecular weight heparin (LMWH)</li><li>• LDUH or LMWH combined with IPC or GCS</li></ul>
General Surgery	Any of the following: <ul style="list-style-type: none"><li>• Low-dose unfractionated heparin (LDUH)</li><li>• Low molecular weight heparin (LMWH)</li><li>• Factor Xa Inhibitor</li><li>• Intermittent pneumatic compression devices (IPC)</li></ul>
Gynecologic Surgery	Any of the following: <ul style="list-style-type: none"><li>• Low-dose unfractionated heparin (LDUH)</li><li>• Low molecular weight heparin (LMWH)</li><li>• Factor Xa Inhibitor</li><li>• Intermittent pneumatic compression devices (IPC)</li><li>• LDUH or LMWH or Factor Xa Inhibitor combined with IPC or GCS</li></ul>
Urologic Surgery	Any of the following: <ul style="list-style-type: none"><li>• Low-dose unfractionated heparin (LDUH)</li><li>• Low molecular weight heparin (LMWH)</li><li>• Factor Xa Inhibitor</li><li>• Intermittent pneumatic compression devices (IPC)</li><li>• LDUH or LMWH or Factor Xa Inhibitor combined with IPC or GCS</li></ul>



## POSTER 2 of 2

# VTE Prophylaxis Options for Surgery

for discharges from 01-01-14 through 09-30-14

SURGERY TYPE	RECOMMENDED PROPHYLAXIS OPTIONS
Elective Total Knee or Total Hip Replacement	Any of the following: <ul style="list-style-type: none"><li>• Low molecular weight heparin (LMWH)</li><li>• Factor Xa Inhibitor</li><li>• Oral Factor Xa Inhibitor<sup>1</sup></li><li>• Warfarin</li><li>• Intermittent pneumatic compression devices (IPC)</li><li>• Venous foot pump (VFP)</li><li>• Low-dose unfractionated heparin (LDUH)</li><li>• Aspirin</li></ul>
Hip Fracture Surgery	Any of the following: <ul style="list-style-type: none"><li>• Low-dose unfractionated heparin (LDUH)</li><li>• Low molecular weight heparin (LMWH)</li><li>• Factor Xa Inhibitor</li><li>• Warfarin</li><li>• Intermittent pneumatic compression devices (IPC)</li><li>• Aspirin</li></ul>

<sup>1</sup>The U.S. Food and Drug Administration has approved Xarelto (rivaroxaban) to reduce the risk of blood clots, deep vein thrombosis (DVT) and pulmonary embolism (PE) following knee or hip replacement surgery ONLY.



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## Medication Table 1.2 ACEIs

Accupril	Moexipril
Accuretic	Moexipril Hydrochloride
Aceon	Moexipril Hydrochloride/ hydrochlorothiazide
Altace	Moexipril/hydrochlorothiazide
Benazepril	Monopril
Benazepril Hydrochloride	Perindopril
Benazepril/amlodipine	Perindopril Erbumine
Benazepril/hydrochlorothiazide	Prinivil
Capoten	Quinapril
Capozide	Quinapril HCL
Capozide 25/15	Quinapril HCL/HCT
Capozide 25/25	Quinapril Hydrochloride/ hydrochlorothiazide
Capozide 50/15	Quinapril/hydrochlorothiazide
Capozide 50/25	Quinaretic
Captopril	Ramipril
Captopril HCT	Tarka
Captopril/hydrochlorothiazide	Trandolapril
Enalapril	Trandolapril/verapamil
Enalapril Maleate/hydrochlorothiazide	Trandolapril/verapamil hydrochloride
Enalapril/hydrochlorothiazide	Uniretic
Enalaprilat	Univasc
Fosinopril	Vaseretic
Fosinopril Sodium/hydrochlorothiazide	Vasotec
Lisinopril	Zestoretic
Lisinopril/hydrochlorothiazide	Zestril
Lotensin	
Lotensin HCT	
Lotrel	
Mavik	

Taken from Specifications Manual for National Hospital Inpatient Quality Measures Discharges 01-01-14 (1Q14) through 09-30-14 (3Q14). Appendix C-6./C-7. This material was produced by Mountain-Pacific Quality Health, the Medicare Quality Improvement Organization for MT, WY, AK, HI and the Pacific Territories of Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Contents do not necessarily reflect CMS policy. 10thSOW-MPQHF-HI-14-



## Medication Table 1.7 ARBs

Atacand	Micardis
Atacand HCT	Micardis HCT
Avalide	
Avapro	Olmesartan
Azilsartan	Olmesartan/amlodipine
Azilsartan/chlorthalidone	Olmesartan/amlodipine/ hydrochlorothiazide
Azor	Olmesartan Medoxomil
Benicar	Olmesartan Medoxomil/amlodipine
Benicar HCT	Olmesartan/hydrochlorothiazide
Candesartan	
Candesartan/hydrochlorothiazide	Tasosartan
Cozaar	Telmisartan
Diovan	Telmisartan/amlodipine
Diovan HCT	Telmisartan/hydrochlorothiazide
Edarbi	Teveten
Edarbyclor	Teveten HCT
Eprosartan	Tribenzor
Eprosartan/hydrochlorothiazide	Twynsta
Exforge	
Exforge HCT	Valsartan
Hyzaar	Valsartan/aliskiren
Irbesartan	Valsartan/amlodipine
Irbesartan/hydrochlorothiazide	Valsartan/amlodipine/ hydrochlorothiazide
Losartan	Valsartan/hydrochlorothiazide
Losartan/hydrochlorothiazide	Valturna



## Medication Table 1.3 Beta-Blockers

Acebutolol	InnoPran XL	Propranolol
Atenolol		Propranolol HCL
Atenolol/chlorthalidone	Labetalol	Propranolol
	Levatol	Hydrochloride
Betapace	Lopressor	Propranolol/
Betapace AF	Lopressor HCT	hydrochlorothiazide
Betaxolol	Lopressor/	
Bisoprolol	hydrochlorothiazide	Sectral
Bisoprolol fumarate		Sorine
Bisoprolol/	Metoprolol	Sotalol
hydrochlorothiazide	Metoprolol/	Sotalol HCL
Brevibloc	hydrochlorothiazide	
Bystolic	Metoprolol Tartrate/	Tenoretic
	hydrochlorothiazide	Tenormin
Carvedilol		Tenormin I.V.
Coreg	Nadolol	Timolol
Corgard	Nadolol/	Toprol
Corzide 40/5	bendroflumethiazide	Toprol-XL
Corzide 80/5	Nebivolol	Trandate
	Nebivolol HCL	Trandate HCL
Esmolol	Nebivolol	
	Hydrochloride	Zebeta
Inderal		Ziac
Inderal LA	Penbutolol	
Inderide	Pindolol	

# Community-Acquired Pneumonia Antibiotic Consensus Recommendations

Non-ICU Patient	ICU Patient	Non-ICU Patient with Pseudomonal Risk
<p><b>β-lactam (IV or IM) + Macrolide (IV or PO)</b></p> <p>• OR •</p> <p><b>Antipneumococcal Quinolone monotherapy (IV or PO)</b></p> <p>• OR •</p> <p><b>β-lactam (IV or IM) + Doxycycline (IV or PO)</b></p> <p>• OR •</p> <p><b>Tigecycline monotherapy (IV)</b></p> <p>β-lactam = Ceftriaxone, Cefotaxime, Ampicillin/Sulbactam, Ertapenem, Ceftaroline</p> <p>Macrolides = Erythromycin, Clarithromycin, Azithromycin</p> <p>Antipneumococcal Quinolones = Levofloxacin<sup>1</sup>, Moxifloxacin, Gemifloxacin</p> <p>Doxycycline</p> <p>Tigecycline</p>	<p><b>Macrolide (IV) + either β-lactam (IV) or Antipneumococcal/Antipseudomonal β-lactam (IV)</b></p> <p>• OR •</p> <p><b>Antipseudomonal Quinolone (IV) + either β-lactam (IV) or Antipneumococcal/Antipseudomonal β-lactam (IV)</b></p> <p>• OR •</p> <p><b>Antipneumococcal Quinolone (IV) + either β-lactam (IV) or Antipneumococcal/Antipseudomonal β-lactam (IV)</b></p> <p>• OR •</p> <p><b>Antipneumococcal/Antipseudomonal β-lactam (IV) + Aminoglycoside (IV) + either Antipneumococcal Quinolone (IV) or Macrolide (IV)</b></p> <p>If the patient has <i>Francisella tularensis</i> or <i>Yersinia pestis</i> risk as determined by <i>Another Source of Infection</i> (see data element), the following is another acceptable regimen:</p> <p><b>Doxycycline (IV) + either β-lactam (IV) or Antipneumococcal/Antipseudomonal β-lactam (IV)</b></p> <p>β-lactam = Ceftriaxone, Cefotaxime, Ampicillin/Sulbactam</p> <p>Antipneumococcal/Antipseudomonal β-lactam = Cefepime, Imipenem, Meropenem, Piperacillin/Tazobactam, Doripenem</p> <p>Macrolides = Erythromycin, Azithromycin</p> <p>Antipneumococcal Quinolones = Levofloxacin<sup>1</sup>, Moxifloxacin</p> <p>Antipseudomonal Quinolones = Ciprofloxacin, Levofloxacin<sup>1</sup></p> <p>Aminoglycosides = Gentamicin, Tobramycin, Amikacin</p>	<p>These antibiotics are acceptable for Non-ICU patients with Pseudomonal Risk <b>ONLY:</b></p> <p><b>Antipneumococcal/Antipseudomonal β-lactam (IV) + Antipseudomonal Quinolone (IV or PO)</b></p> <p>• OR •</p> <p><b>Antipneumococcal/Antipseudomonal β-lactam (IV) + Aminoglycoside (IV) + either Antipneumococcal Quinolone (IV or PO) or Macrolide (IV or PO)</b></p> <p>These antibiotics are acceptable for Non-ICU patients with β-lactam allergy and Pseudomonal Risk <b>ONLY:</b></p> <p><b>Aztreonam (IV or IM) + Antipneumococcal Quinolone (IV or PO) + Aminoglycoside (IV)</b></p> <p>• OR •</p> <p><b>Aztreonam<sup>2</sup> (IV or IM) + Levofloxacin<sup>1</sup> (IV or PO)</b></p> <p>Antipseudomonal Quinolones = Ciprofloxacin, Levofloxacin<sup>1</sup></p> <p>Antipneumococcal/Antipseudomonal β-lactam = Cefepime, Imipenem, Meropenem, Piperacillin/Tazobactam, Doripenem</p> <p>Aminoglycosides = Gentamicin, Tobramycin, Amikacin</p> <p>Antipneumococcal Quinolones = Levofloxacin<sup>1</sup>, Moxifloxacin, Gemifloxacin</p> <p>Macrolides = Erythromycin, Clarithromycin, Azithromycin</p>



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Data collected by the CMS National Pneumonia Project indicate that 78% of Medicare pneumonia patients who were hospitalized during 1998-99 received antibiotics that were consistent with guidelines published at that time. Among the states and territories, this ranged from 55% to 87%. Compliance was lower among ICU patients, largely because atypical pathogen coverage was generally not common, but was only recommended for ICU patients. Subsequent revisions have made such coverage recommended for all inpatients.

<sup>1</sup> Levofloxacin should be used in 750mg dosage when used in the management of patients with pneumonia. <sup>2</sup> For patients with renal insufficiency.

**Note: The dosage listed is specified to reflect clinical expert recommendations. We do not collect dosage information for the purposes of the Pneumonia Project.**

Taken from Specifications Manual for National Hospital Inpatient Quality Measures Discharges 01-01-14 (1Q14) through 09-30-14 (3Q14). Recommendations as of 01-01-14 through 09-30-14.

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