



Mountain-Pacific *Quality Health*

Heart Failure National Hospital Inpatient Quality Measures

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

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) - Version 4.3



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Acute Myocardial Infarction National Hospital Inpatient Quality Measures

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

- AMI-1 Aspirin at Arrival¹
- AMI-2 Aspirin Prescribed at Discharge¹
- AMI-3 ACEI or ARB for LVSD¹
- AMI-5 Beta-Blocker Prescribed at Discharge¹
- AMI-7 Median Time to Fibrinolysis¹
- AMI-7a Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival²
- AMI-8 Median Time to Primary PCI¹
- AMI-8a Primary PCI Received Within 90 Minutes of Hospital Arrival²
- AMI-10 Statin Prescribed at Discharge¹

¹TJC required / CMS voluntary

²TJC and CMS required

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Discharges 01-01-14 (1Q14) through 09-30-14 (3Q14) - Version 4.3

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Mountain-Pacific Quality Health

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 or Cefuroxime or Vancomycin ¹ If β-lactam allergy: Vancomycin ² or Clindamycin ²
Hip/Knee Arthroplasty	Cefazolin or Cefuroxime or Vancomycin ¹ If β-lactam allergy: Vancomycin ² or Clindamycin ²
Colon Surgery	Cefotetan or Cefoxitin or Ampicillin/Sulbactam or Ertapenem ³ or Metronidazole + Cefazolin or Metronidazole + Cefuroxime or Metronidazole ⁴ + Ceftriaxone If β-lactam allergy: Clindamycin + Aminoglycoside or Clindamycin + Quinolone or Clindamycin + Aztreonam or Metronidazole + Aminoglycoside or Metronidazole + Quinolone

Special Considerations

- ¹ Vancomycin is acceptable with a physician/APN/PA/pharmacist documented justification for its use (see data element *Vancomycin*).
- ² For cardiac, orthopedic, and vascular surgery, if the patient is allergic to beta-lactam antibiotics, Vancomycin or Clindamycin are acceptable substitutes.
- ³ A single dose of Ertapenem is recommended for colon procedures.
- ⁴ 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.



Mountain-Pacific Quality Health

Prophylactic Antibiotic Regimen Selection for Surgery

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

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)



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Mountain-Pacific *Quality Health*

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



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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">• Low molecular weight heparin (LMWH)• Factor Xa Inhibitor• Oral Factor Xa Inhibitor¹• Warfarin• Intermittent pneumatic compression devices (IPC)• Venous foot pump (VFP)• Low-dose unfractionated heparin (LDUH)• Aspirin
Hip Fracture Surgery	Any of the following: <ul style="list-style-type: none">• Low-dose unfractionated heparin (LDUH)• Low molecular weight heparin (LMWH)• Factor Xa Inhibitor• Warfarin• Intermittent pneumatic compression devices (IPC)• Aspirin

¹The 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 1.3 Beta-Blockers

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

Taken from Specifications Manual for National Hospital Inpatient Quality Measures Discharges 01-01-14 (1Q14) through 09-30-14 (3Q14). Appendix C-7/C-8. 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-MPQH-HI-14-



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Medication Table 1.2 ACEIs

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

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Medication Table 1.7 ARBs

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



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Taken from Specifications Manual for National Hospital Inpatient Quality Measures Discharges 01-01-14 (1Q14) through 09-30-14 (3Q14). Appendix C-11/C-12. 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-



Mountain-Pacific Quality Health

Community-Acquired Pneumonia Antibiotic Consensus Recommendations

Non-ICU Patient

β -lactam (IV or IM) + Macrolide (IV or PO)

- **OR • Antipneumococcal Quinolone monotherapy (IV or PO)**
- **OR • β -lactam (IV or IM) + Doxycycline (IV or PO)**
- **OR • Tigecycline monotherapy (IV)**

β -lactam = Ceftriaxone, Cefotaxime, Ampicillin/Sulbactam, Ertapenem, Ceftaroline

Macrolides = Erythromycin, Clarithromycin, Azithromycin

Antipneumococcal Quinolones = Levofloxacin¹, Moxifloxacin, Gemifloxacin
Doxycycline
Tigecycline

ICU Patient

**Macrolide (IV) + either β -lactam (IV)
or Antipneumococcal/Antipseudomonal β -lactam (IV)**

- **OR • Antipseudomonal Quinolone (IV) + either β -lactam (IV) or Antipneumococcal/Antipseudomonal β -lactam (IV)**
- **OR • Antipneumococcal Quinolone (IV) + either β -lactam (IV) or Antipneumococcal/Antipseudomonal β -lactam (IV)**
- **OR • Antipneumococcal/Antipseudomonal β -lactam (IV) + Aminoglycoside (IV) + either Antipneumococcal Quinolone (IV) or Macrolide (IV)**

If the patient has *Francisella tularensis* or *Yersinia pestis* risk as determined by *Another Source of Infection* (see data element), the following is another acceptable regimen:

Doxycycline (IV) + either β -lactam (IV) or Antipneumococcal/Antipseudomonal β -lactam (IV)

β -lactam = Ceftriaxone, Cefotaxime, Ampicillin/Sulbactam

Antipneumococcal/Antipseudomonal β -lactam = Cefepime, Imipenem, Meropenem, Piperacillin/Tazobactam, Doripenem

Macrolides = Erythromycin, Azithromycin

Antipneumococcal Quinolones = Levofloxacin¹, Moxifloxacin

Antipseudomonal Quinolones = Ciprofloxacin, Levofloxacin¹

Aminoglycosides = Gentamicin, Tobramycin, Amikacin



Non-ICU Patient with Pseudomonal Risk

These antibiotics are acceptable for Non-ICU patients with Pseudomonal Risk
ONLY:

**Antipneumococcal/Antipseudomonal β -lactam (IV) +
Antipseudomonal Quinolone (IV or PO)**

• OR •

**Antipneumococcal/Antipseudomonal β -lactam (IV) + Aminoglycoside (IV)
+ either Antipneumococcal Quinolone (IV or PO) or Macrolide (IV or PO)**

These antibiotics are acceptable for Non-ICU patients with β -lactam allergy
and Pseudomonal Risk **ONLY:**

**Aztreonam (IV or IM) + Antipneumococcal Quinolone (IV or PO) +
Aminoglycoside (IV)**

• OR •

Aztreonam² (IV or IM) + Levofloxacin¹ (IV or PO)

Antipseudomonal Quinolones = Ciprofloxacin, Levofloxacin¹

Antipneumococcal/Antipseudomonal β -lactam = Cefepime, Imipenem,
Meropenem, Piperacillin/Tazobactam, Doripenem

Aminoglycosides = Gentamicin, Tobramycin, Amikacin

Antipneumococcal Quinolones = Levofloxacin¹, Moxifloxacin, Gemifloxacin

Macrolides = Erythromycin, Clarithromycin, Azithromycin

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.

¹ **Levofloxacin should be used in 750mg dosage when used in the management of patients with pneumonia.**

² **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.

Recommendations as of 01-01-14 through 09-30-14

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

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Venous Thromboembolism

- VTE-1 Venous Thromboembolism Prophylaxis**
- VTE-2 Intensive Care Unit Venous Thromboembolism Prophylaxis**
- VTE-3 Venous Thromboembolism Patients with Anticoagulation Overlap Therapy**
- VTE-4 Venous Thromboembolism Patients Receiving Unfractionated Heparin with Dosages/Platelet Count Monitoring by Protocol or Nomogram**
- VTE-5 Venous Thromboembolism Warfarin Therapy Discharge Instructions**
- VTE-6 Hospital Acquired Potentially-Preventable Venous Thromboembolism**

VTE Parenteral Therapy Table

VTE Prophylaxis	Inclusion/Synonyms
Direct Thrombin Inhibitors	Argatroban (Acova)
- argatroban	Bivalirudin (Angiomax)
- bivalirudin	Lepirudin (recombinant hirudin)
- lepirudin	(Refludan)
Factor Xa Inhibitor	Arixtra
	Fondaparinux sodium
Unfractionated Heparin (UFH)	HEP
- intravenous (IV)	Heparin
- subcutaneous (fixed dose or monitored)	Heparin Na
	Heparin Sod
	Heparin Sodium
	Heparin Sodium Inj.
	Heparin Sodium Inj. Pork
	Heparin Subcu/SQ/SC
Low Molecular Weight Heparin (LMWH)	Dalteparin Enoxaparin
	Fragmin Innohep
	Lovenox Tinzaparin

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VTE Prophylaxis Inclusion Table

VTE Prophylaxis	Inclusion/Synonyms	
Coumadin/Warfarin	Coumadin Jantoven Warfarin Warfarin Sodium	
Graduated Compression Stockings (GCS) - Knee or thigh high	Anti-Embolism stockings Anti-thrombosis stockings Elastic support hose Graduated compression elastic stockings Surgical hose or White hose Thrombosis stockings	
Factor Xa Inhibitor	Arixtra	Fondaparinux sodium
Oral Factor Xa Inhibitor	Apixaban ¹ Rivaroxaban ²	Eliquis ¹ Xarelto ²
Low Dose Unfractionated Heparin (LDUH) - Include only Heparin given by the subcutaneous (SQ, Subcu, SC, SubQ) route	HEP Heparin Heparin Na Heparin Sodium Heparin Sodium Inj. Heparin Sodium Inj. Pork Heparin Subcu/SQ/SC/SubQ	
Low Molecular Weight Heparin (LMWH)	Dalteparin Fragmin Lovenox	Enoxaparin Innohep Tinzaparin
Intermittent Pneumatic Compression Device (IPC)	AE pumps (anti-embolic pumps) - calf/thigh DVT boots - calf/thigh EPC cuffs/stockings - External pneumatic compression - calf/thigh Intermittent pneumatic compression stockings Intermittent compression device (ICD) Leg pumpers Pneumatic intermittent impulse compression device Rapid inflation asymmetrical compression (RIAC) devices Sequential compression device Sequential pneumatic hose Thrombus pumps - calf/thigh	
Venous Foot Pump (VFP)	AE pumps - foot only Foot pump or Venous foot pump Plantar venous plexus pump - foot only SC boots or SCD boots - foot only	
Aspirin	Acetylsalicylic Acid (ASA) ³ Enteric coated aspirin (EC ASA) ³ Aspirin/caffeine ³ Coated aspirin ³	
		Buffered aspirin ³ Tri-buffered aspirin ³

¹ The U.S. Food and Drug Administration has approved Eliquis (apixaban) to reduce the risk of stroke and systemic embolism in patients with non-valvular atrial fibrillation.

² 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. It is additionally approved: to reduce the risk of stroke in patients with non-valvular atrial fibrillation; for treatment of DVT or PE; to reduce the risk of recurrent DVT and PE following initial treatment.

³ The American College of Chest Physicians (ACCP) Evidence-Based Clinical Practice Guidelines recommend aspirin (Grade 1b) to reduce the risk of venous thromboembolism in patients undergoing total hip or knee arthroplasty.