

## Cardiac Surgery Pre-Op Outpatient (Ambulatory) [3683]

The Cardiac Surgery Pre-Op Outpatient (Ambulatory) order set is for outpatients: PAT and Day of Surgery orders. For patients currently admitted to the hospital, please use the Cardiac Surgery Pre-Op Inpatient order set.

### Pre Anesthesia Testing Orders

#### Pre Anesthesia Testing Orders

The orders in this section are for Pre Anesthesia Testing. For additional PAT orders, please use 'Future Status' and 'Pre-Admission Testing' for the Phase of Care

#### Type and Screen for PAT

Type and screen

Type and screen Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

ABO and Rh confirmation Once, Blood Bank Confirmation

#### Prepare Blood Products for PAT (Selection Required)

Prepare cryoprecipitate Routine, Status: Future, Expires: S+365, Clinic Collect  
Transfusion Indications:  
Transfusion date:  
Pre-Admission Testing

Prepare fresh frozen plasma Routine, Status: Future, Expires: S+365, Clinic Collect  
Transfusion Indications:  
Transfusion date:  
Pre-Admission Testing

Prepare platelet pheresis Routine, Status: Future, Expires: S+365, Clinic Collect  
Transfusion Indications:  
Transfusion date:  
Pre-Admission Testing

Prepare RBC Routine, Status: Future, Expires: S+365, Clinic Collect  
Transfusion Indications:  
Transfusion date:  
Pre-Admission Testing

#### Laboratory for PAT

COVID-19 qualitative RT-PCR - Nasal Swab Routine, Status: Future, Expires: S+365, Clinic Collect  
Specimen Source: Nasal Swab  
Is this for pre-procedure or non-PUI assessment? Yes  
Pre-Admission Testing

CBC with platelet and differential Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

Comprehensive metabolic panel Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

Prothrombin time with INR Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

Partial thromboplastin time Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

Hemoglobin A1c Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

Magnesium level Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

Lipid panel Routine, Status: Future, Expires: S+365, Clinic Collect  
Has the patient been fasting for 8 hours or more?  
Pre-Admission Testing

Hepatic function panel Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing

<input checked="" type="checkbox"/>	Urinalysis screen and microscopy, with reflex to culture	Routine, Status: Future, Expires: S+365, Clinic Collect Specimen Source: Urine Specimen Site: Pre-Admission Testing
<input type="checkbox"/>	CBC hemogram	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Electrolytes (Chem4)	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Basic metabolic panel	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Platelet function analysis	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Platelet function P2Y12	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Platelet mapping	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Thromboelastograph	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Thyroid stimulating hormone	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Iron level	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Ferritin level	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Ionized calcium	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	Vitamin B12 level	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	hCG qualitative, serum screen	Routine, Status: Future, Expires: S+365, Clinic Collect, Pre-Admission Testing
<input type="checkbox"/>	POC pregnancy, urine	Routine, Point Of Care, Pre-Admission Testing
<input type="checkbox"/>	MRSA screen culture	Routine, Status: Future, Expires: S+365, Clinic Collect, Nares Quest Specimen Source: Pre-Admission Testing
<input type="checkbox"/>	Arterial blood gas	Routine, Status: Future, Expires: S+365, Clinic Collect, Indicated for heavy smoker, COPD, Pre-Admission Testing
<input checked="" type="checkbox"/>	Diagnostic X-Ray / Respiratory for PAT	
<input checked="" type="checkbox"/>	XR Chest 2 Vw	Status: Future, Expires: S+365, Routine, Ancillary Performed, Pre-Admission Testing
<input type="checkbox"/>	XR Chest 1 Vw	Status: Future, Expires: S+365, Routine, Ancillary Performed, Pre-Admission Testing
<input type="checkbox"/>	Spirometry pre & post w/ bronchodilator, diffusion, lung volumes (Full PFT)	Routine, Status: Future, Expires: S+365, Pre-Admission Testing Location: Encounter type?
<input type="checkbox"/>	Spirometry pre & post w/ bronchodilator (FEV 1 Only)	Routine, Status: Future, Expires: S+365, Pre-Admission Testing Location: Encounter type?
<input type="checkbox"/>	Six minute walk w/ pulse oximetry	Routine, Status: Future, Expires: S+365, Pre-Admission Testing Location: Encounter type?
<input checked="" type="checkbox"/>	Other Diagnostic Studies	
<input checked="" type="checkbox"/>	ECG Pre/Post Op	Routine, Ancillary Performed, Status: Future, Expires: S+365, Pre-Admission Testing
<input type="checkbox"/>	Pv carotid duplex	Status: Future, Expires: S+365, Routine, Clinic Performed
<input type="checkbox"/>	Us vein mapping lower extremity	Status: Future, Expires: S+365, Routine, Clinic Performed

## General

### Case Request

Case request operating room

Scheduling/ADT, Scheduling/ADT

**Planned ICU Admission Post-Operatively (Admit to Inpatient Order) (Single Response)**

Patients who are having an Inpatient Only Procedure as determined by CMS and patients with prior authorization for Inpatient Care may have an Admit to Inpatient order written pre-operatively.

Admit to Inpatient

Admitting Physician:

Level of Care:

Patient Condition:

Bed request comments:

Certification: I certify that based on my best clinical judgment and the patient's condition as documented in the HP and progress notes, I expect that the patient will need hospital services for two or more midnights.

Pre-op

**Nursing**

**Vital Signs**

Vital signs - T/P/R/BP (per unit protocol)

Routine, Per unit protocol, Pre-op

**Nursing Care**

5M walk test/frailty test

Routine, Clinic Performed, Status: Future, Expires: S+181, Pre-Admission Testing, Complete 5 meter gait speed test

Incentive spirometry

Routine, Clinic Performed, Status: Future, Expires: S+184, Pre-Admission Testing, Establish baseline. Please supply and instruct how to use incentive spirometer and instruct to practice 10 times every hour while awake before surgery.

Height and weight

Routine, Once For 1 Occurrences, Pre-op

chlorhexidine (HIBICLENS) 4% liquid

Routine, Clinic Performed, Status: Future, Expires: S+184, Pre-Admission Testing, Please supply and instruct patient. Chlorhexidine bath/shower the night before surgery and the morning of surgery.

Oral Decolonization

Pre-op Prior to Surgery (AOD), Chlorhexidine (PERIDEX) 0.12 % oral solution

5 mL, Mouth/Throat, once, For 1 Doses, Pre-op Pre-op prior to surgery (AOD), Swish and Spit as directed.

Nasal Decolonization for MRSA -Select One Option: (Single Response) (Selection Required)

povidone-iodine (3M SKIN AND NASAL ANTISEPTIC) 0.5% NASAL swab

4 Swab, nasal, once, For 1 Doses Pre-op Prior to Surgery (AOD): Insert swab into one nostril for 30 seconds. Using a new swab, repeat with the other nostril. Repeat the application in both nostrils using new swabs. Patient instructed not to blow nose, may dab any drainage with tissue.

IODINE ALLERGY ONLY: mupirocin (BACTROBAN) 2 % ointment

1 application, nasal, once, For 1 Doses, Pre-op Pre-op Prior to Surgery (AOD): Apply to each nare. Patient instructed not to blow nose, may wipe any drainage with tissue.

Initiate and maintain IV

Insert peripheral IV

Routine, Once

sodium chloride 0.9 % flush

10 mL, intravenous, every 12 hours scheduled

sodium chloride 0.9 % flush

10 mL, intravenous, PRN, line care

Intake and output

Routine, Every shift, Pre-op

**Diet**

NPO

Diet effective now, Starting S

NPO:

Pre-Operative fasting options:

Pre-op

<input type="checkbox"/> NPO-except meds	Diet effective now, Starting S NPO: Except meds Pre-Operative fasting options: Pre-op
<input type="checkbox"/> NPO-after midnight	Diet effective midnight, Starting S+1 at 12:01 AM NPO: Pre-Operative fasting options: Pre-op

**Education**

<input checked="" type="checkbox"/> Patient education	<p>Routine, Clinic Performed, Normal, 1. No Smoking</p> <ol style="list-style-type: none"> <li>2. Before surgery, walk 15-20 minutes daily.</li> <li>3. Before surgery, you will learn how to perform coughing and deep breathing exercises using an incentive spirometer (IS), a tool used to help strengthen your breathing. These exercises lower the risk of lung complications after surgery. Repeat 10 times per hour while awake.</li> <li>4. Bathe or shower the night before your surgery using Hibiclens soap that was provided to you to help prevent surgical site infection. Bathe or shower the morning of your surgery using Hibiclens soap.</li> <li>5. After surgery, you will be moved to the intensive care unit (ICU) with a breathing tube, chest tubes and urine catheter. The breathing tube is safely removed as soon as possible.</li> <li>6. After surgery, your care team will determine when you are able to sit ("dangle") on the side of the bed. Once your blood pressure, heart rate and blood circulation are stable, you will progress to sitting in a chair. Later expectations are to sit in chair for all meals and walk 4 times daily as tolerated.</li> <li>7. After surgery, you will learn how to perform coughing and deep breathing exercises using an incentive spirometer (IS), a tool used to help strengthen your breathing. These exercises lower the risk of lung complications after surgery. Repeat 10 times per hour while awake.</li> <li>8. After surgery, you will start out by sucking on ice chips, then advanced to drinking limited fluids. You may begin a heart healthy/low sodium diet.</li> <li>9. After surgery, you will begin cardiac rehabilitation in the hospital. After you are discharge and when it is safe to participate, your physician will refer you to cardiac rehabilitation phase II. Cardiac rehab uses exercise training and lifestyle changes to optimize your physical, psychological and social functioning.</li> </ol>
<input checked="" type="checkbox"/> Tobacco cessation education	<p>Routine, Clinic Performed, Normal, Per STS Adult Cardiac Surgery - Tobacco cessation should be provided to tobacco users within a year of surgery (tobacco usage with 1 year of surgery). Tobacco cessation education documentation consist of the following: Brief counseling of 3 minutes or less (documentation of minimal and intensive advice/counseling interventions conducted both in person and over the phone), AND/OR pharmacotherapy (documentation of a prescription given to patient for tobacco cessation).</p>

**Consents**

<input type="checkbox"/> Complete consent for	Routine, Once Procedure: Pre-op diagnosis: Physician: Risks, benefits, and alternatives (as outlined by the Texas Medical Disclosure Panel, as appears on Houston Methodist Medical/Surgical Consent forms) were discussed with patient/surrogate? Pre-op
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## Perfusion

### Cell Saver Request

<input type="checkbox"/> Cell saver	Routine, Until discontinued, Starting S
<input type="checkbox"/> Platelet sequestration	Routine, Until discontinued, Starting S

### Cell Saver Medications

<input type="checkbox"/> sodium chloride 0.9 % bolus	1,000 mL, perfusion, for 15 Minutes, PRN, Cell Saver, Intra-op
<input type="checkbox"/> anticoagulant citrate dextrose (ACD) irrigation	1,000 mL, perfusion, PRN, Cell Saver, Intra-op
<input type="checkbox"/> sodium chloride 0.9 % 1,000 mL with HEParin (porcine) 5,000 Units cell saver perfusion	1,000 mL, perfusion, PRN, Heparinized saline for cell saver, Intra-op

## IV Fluids

### IV Fluids (Single Response)

<input type="checkbox"/> sodium chloride 0.9 % infusion	75 mL/hr, intravenous, continuous, Pre-op
<input type="checkbox"/> lactated Ringer's infusion	75 mL/hr, intravenous, continuous, Pre-op
<input type="checkbox"/> dextrose 5 % and sodium chloride 0.45 % with potassium chloride 20 mEq/L infusion	75 mL/hr, intravenous, continuous, Pre-op
<input type="checkbox"/> sodium chloride 0.45 % infusion	75 mL/hr, intravenous, continuous, Pre-op
<input type="checkbox"/> sodium chloride 0.45 % 1,000 mL with sodium bicarbonate 75 mEq/L infusion	75 mL/hr, intravenous, continuous, Pre-op

## Medications

### chlorhexidine (PERIDEX) 0.12 % oral solution

<input type="checkbox"/> Medication Office Prescription: Night Prior to and Morning of Surgery - chlorhexidine (PERIDEX) 0.12 % oral solution	Normal
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### metoprolol tartrate (LOPRESSOR)

<input type="checkbox"/> Medication Office Prescription - metoprolol tartrate (LOPRESSOR) tablet	Normal
<input type="checkbox"/> Day of Surgery - metoprolol tartrate (LOPRESSOR) tablet	12.5 mg, oral, once, For 1 Doses, Pre-op BP & HR HOLD parameters for this order: Hold Parameters requested BP & HR HOLD for: HOLD for Heart Rate LESS than: 50 bpm Contact Physician if:

### PreOp Antibiotics: For Patients GREATER than 120 kg (Single Response)

Administer within 1 hour of surgical incision

<input checked="" type="checkbox"/> ceFAZolin (ANCEF) IV - For Patients GREATER than 120 kg	3 g, intravenous, once, For 1 Doses, Pre-op On call to operating room. Administer within 1 hour of surgical incision Reason for Therapy: Surgical Prophylaxis
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<b>( ) If Beta-Lactam Allergic: vancomycin + levofloxacin (LEVAQUIN) IV</b>		<b>"And" Linked Panel</b>
<input type="checkbox"/> vancomycin (VANCOCIN) IV	15 mg/kg, intravenous, once, For 1 Doses, Pre-op On call to operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	
<input type="checkbox"/> levofloxacin (LEVAQUIN) IV solution	500 mg, intravenous, once, For 1 Doses, Pre-op On call to operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	

<b>( ) If MRSA Suspected - ceFAZolin (ANCEF) and vancomycin IV - For Patients GREATER than 120 kg</b>		<b>"And" Linked Panel</b>
<input type="checkbox"/> ceFAZolin (ANCEF) IV	3 g, intravenous, once, For 1 Doses, Pre-op On call to the operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	
<input type="checkbox"/> vancomycin (VANCOCIN) IV	15 mg/kg, intravenous, once, For 1 Doses, Pre-op On call to the operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	

**PreOp Antibiotics: For Patients LESS than or EQUAL to 120 kg (Single Response)**  
Administer within 1 hour of surgical incision

<input checked="" type="checkbox"/> ceFAZolin (ANCEF) IV - For Patients LESS than or EQUAL to 120 kg	2 g, intravenous, once, For 1 Doses, Pre-op On call to operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis
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<b>( ) If Beta-Lactam Allergic: vancomycin + levofloxacin (LEVAQUIN) IV</b>		<b>"And" Linked Panel</b>
<input type="checkbox"/> vancomycin (VANCOCIN) IV	15 mg/kg, intravenous, once, For 1 Doses, Pre-op On call to operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	
<input type="checkbox"/> levofloxacin (LEVAQUIN) IV solution	500 mg, intravenous, once, For 1 Doses, Pre-op On call to operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	

<b>( ) If MRSA Suspected - ceFAZolin (ANCEF) and vancomycin IV - For Patients LESS than or EQUAL to 120 kg</b>		<b>"And" Linked Panel</b>
<input type="checkbox"/> ceFAZolin (ANCEF) IV	2 g, intravenous, once, For 1 Doses, Pre-op On call to the operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	
<input type="checkbox"/> vancomycin (VANCOCIN) IV	15 mg/kg, intravenous, once, For 1 Doses, Pre-op On call to the operating room. Administer within 1 hour of surgical incision. Reason for Therapy: Surgical Prophylaxis	

**IntraOp Antibiotics: For Patients GREATER than 120 kg (Single Response)**  
Order from this section if case exceeds 4 hours then give intraoperative dose.

<input type="checkbox"/> ceFAZolin (ANCEF) IV - For Patients GREATER than 120 kg	3 g, intravenous, every 4 hours, Intra-op Reason for Therapy: Surgical Prophylaxis
<input type="checkbox"/> If MRSA Suspected - vancomycin (VANCOCIN) IV	15 mg/kg, intravenous, once, For 1 Doses, Intra-op Reason for Therapy: Surgical Prophylaxis

**IntraOp Antibiotics: For Patients LESS than or EQUAL to 120 kg (Single Response)**  
Order from this section if case exceeds 4 hours then give intraoperative dose.

<input type="checkbox"/> ceFAZolin (ANCEF) IV - For Patients LESS than or EQUAL to 120 kg	2 g, intravenous, every 4 hours, Intra-op Reason for Therapy: Surgical Prophylaxis
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( ) If MRSA Suspected - vancomycin (VANCOGIN) IV

15 mg/kg, intravenous, once, For 1 Doses, Intra-op  
Reason for Therapy: Surgical Prophylaxis

## IntraOp Labs

### IntraOp Labs

[X] Acute kidney injury risk assessment, Nephrocheck

Once

Intraoperative collection only, collect minimum of 10 mL fresh urine. Collect when applying the surgical dressing. Send to lab (Dunn 2) within 30 minutes of collection time.

Exception: Do not collect on patient with preoperative dialysis, ESRD or when methylene blue is used (interferes with test results)., Intra-op

## Consults

### CV Coordinator Consult

[X] Consult to CV Coordinator

Reason for consult: CABG/VALVE Surgery  
Pre-op

## Additional Orders