

## REDUCED EF GOAL DIRECTED MEDICAL THERAPY FOR SURGEONS

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Heart failure continues to be a significant global health challenge, estimated to affect 60 million people worldwide<sup>1</sup>. Heart failure with reduced ejection fraction (HFrEF), defined as a left ventricular ejection fraction of < 40%, is predominantly managed pharmacologically with Guideline Directed Medical Therapy (GDMT) which consists of four

pivotal drug classes. These four classes, or pillars, comprise of (1)  $\beta$ -blockers; (2) renin-angiotensin system (RAS) inhibitors – including angiotensin converting enzyme inhibitors (ACEi), angiotensin receptor blockers (ARB), and angiotensin-neprilysin receptor inhibitors (ARNi); (3) mineralocorticoid receptor antagonists (MRA); and (4)

sodium-glucose cotransporter-2 inhibitors (SGLT2i). Each of these classes has demonstrated significant clinical benefit in patients with HFrEF, with evidence suggesting a synergistic effect that enhances patient outcomes as additional classes are implemented<sup>2</sup>. Yet despite this robust data, there remains a significant implementation

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### ERAS 2.0 RECOMMENDATIONS:

## POSTOPERATIVE DELIRIUM--A VEXING PROBLEM IN THE POSTOP PERIOD

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Postoperative delirium (POD) is a significant health concern linked to poor post-operative outcomes, including increased mortality, prolonged hospital stays, and higher healthcare costs. Its incidence ranges from 5% to 65%, especially in cardiac and hip surgeries.<sup>1</sup> POD manifests in both hyperactive (e.g., confusion, hallucinations) or hypoactive states, the latter being harder to diagnose. Risk factors include preoperative cognitive decline, frailty, and depression, as well as perioperative factors such as hypotension, poorly managed postoperative pain, and polypharmacy. Preventative strategies potentially can avert up to 40% of cases.<sup>1</sup>

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### TURNKEY ORDER SET:

## REAL-WORLD APPLICATION OF EVIDENCE BASED MULTIMODAL ANALGESIA

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Post-operative pain will occur in the majority of patients after surgery, with a high percentage reporting severe or extreme pain.<sup>1</sup> Pain impairs recovery through loss of appetite, reduced mobilization, delirium, and sleep deprivation (Figure 1).<sup>2</sup> Acute pain has also been identified as a risk factor for the development of chronic persistent post-surgical pain, which has reported rates as high as 30% following cardiac surgery.<sup>3,4</sup> Understandably, pain control is a reported concern for many patients and may

affect patient reported satisfaction even more than post-surgical complications.<sup>1,5</sup>

Traditionally, opiate-based analgesia has been the primary approach to treating pain after cardiac surgery. Opioids can cause several side effects and adverse events in the post-operative recovery period, including sedation, gastrointestinal dysfunction, increased pain sensitization, and immune suppression (Figure 1). These unwanted effects/events may occur in up to 40% of cardiac surgery patients.<sup>6</sup> There have also

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### TURNKEY ORDER SET:

## GLP-1 AND SGLT2I PREOPERATIVE CESSATION

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The management of preoperative medications is a critical element of perioperative care that significantly impacts outcomes for patients. Our aim was to create a document that addressed the need for a centralized, up-to-date reference guiding preoperative medication management for adult cardiac surgery patients. We utilized a variety of guidelines and expert consensus documents regarding preoperative medication management in order to create a practical, evidence-based reference for clinicians, as a part of the ERAS Cardiac Society's "turnkey order set" series, which was first presented

at the Annual Meeting of The American Association for Thoracic Surgery in 2023.

Standards for antiplatelet, anticoagulation and cardiac medications has been well established in the cardiac surgery space, but other medication classes have wide variations in practice that can contribute to complications and increased length of stay. This order set includes over 50 medication classes including cardiac, endocrine, rheumatoid, psychiatric, neurologic agents. For example, the increased use of GLP-1 and SGLT2 inhibitor medications has demonstrated the need to have standards in other

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### MORE INSIDE:

- **Turnkey Order Set: SSI Prevention**
- **ERAS 2.0 Recommendations: Patient Blood Management**
- **Multidisciplinary Rounding: Improving Patient Outcomes**
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gap, and a large proportion of patients are not being prescribed GDMT appropriately<sup>3</sup>. This remains an ongoing challenge in the medical and cardiology communities and has sparked conversation on how to best address this issue, including increased awareness of GDMT and improved implementation guidance in the hope of improving clinicians' pharmacologic experience and familiarity in prescribing these medications.

In certain patient populations, especially those with ischemic heart disease, cardiac surgeons play a critical role in providing evidence-based care, as surgical revascularization remains a class I recommendation in HFrEF patients, coronary anatomy permitting<sup>4</sup>. Although the cardiac surgery literature provides limited guidance on GDMT optimization due to the lack of randomized trials in the perioperative population, rapid GDMT implementation in the inpatient setting is now recommended as data suggest it is both safe and effective<sup>4</sup>. In the perioperative period, cardiac surgeons strive to enhance health care quality and surgical outcomes by following evidence-based standards, therefore, an argument can be made for further collaboration between cardiology and cardiac surgery, focusing on GDMT optimization in HFrEF patients undergoing cardiac surgery. By providing another setting to optimize GDMT, not only is there an opportunity to improve patients' long-term mortality, but also the potential for improvements in postoperative outcomes as well. This remains a nascent area of study, and the Enhanced Recovery after Cardiac Surgery (ERAS Cardiac Surgery) group intends to continue exploring this topic.

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2. Zannad F, Ferreira JP, Pocock SJ, et al. SGLT2 inhibitors in patients with heart failure with reduced ejection fraction: a meta-analysis of the EMPEROR-Reduced and DAPA-HF trials. *Lancet*. 2020;396(10254):819-829. doi:10.1016/S0140-6736(20)31824-9

3. Greene SJ, Butler J, Albert NM, et al. Medical Therapy for Heart Failure With Reduced Ejection Fraction: The CHAMP-HF Registry. *Journal of the American College of Cardiology*. 2018;72(4):351-366. doi:10.1016/j.jacc.2018.04.070

Class	Starting Dose	Target Dose	Adverse Effects
β-Blocker	<ul style="list-style-type: none"> <li>Bisoprolol 1.5mg daily</li> <li>Carvedilol 3.125mg BID</li> <li>Metoprolol succinate 25mg daily</li> <li>Metoprolol tartrate 25 mg BID*</li> </ul>	<ul style="list-style-type: none"> <li>Bisoprolol 10mg daily</li> <li>Carvedilol 25mg BID, if &lt;85kg</li> <li>Carvedilol 50mg BID, if &gt;85kg</li> <li>Metoprolol succinate 200mg daily</li> </ul>	<ul style="list-style-type: none"> <li>Bradycardia</li> <li>Dizziness</li> <li>Fatigue</li> <li>Hypotension</li> </ul>
ACEI	<ul style="list-style-type: none"> <li>Captopril 6.25mg TID</li> <li>Enalapril 2.5mg BID</li> <li>Lisinopril 2.5-5mg daily</li> <li>Ramipril 1.25-2.5mg daily</li> <li>Trandolapril 1mg daily</li> </ul>	<ul style="list-style-type: none"> <li>Captopril 50mg TID</li> <li>Enalapril 10-20mg BID</li> <li>Lisinopril 20-40mg daily</li> <li>Ramipril 10mg daily</li> <li>Trandolapril 4mg daily</li> </ul>	<ul style="list-style-type: none"> <li>Acute kidney injury</li> <li>Angioedema</li> <li>Cough</li> <li>Hyperkalemia</li> <li>Hypotension</li> </ul>
ARB	<ul style="list-style-type: none"> <li>Candesartan 4-8 mg daily</li> <li>Losartan 25-50mg daily</li> <li>Valsartan 20-40mg BID</li> </ul>	<ul style="list-style-type: none"> <li>Candesartan 32 mg daily</li> <li>Losartan 150 mg daily</li> <li>Valsartan 160 mg BID</li> </ul>	<ul style="list-style-type: none"> <li>Acute kidney injury</li> <li>Hyperkalemia</li> <li>Hypotension</li> </ul>
ARNI	<ul style="list-style-type: none"> <li>Sacubitril-valsartan 24-26mg BID</li> </ul>	<ul style="list-style-type: none"> <li>Sacubitril-valsartan 97-103 mg BID</li> </ul>	<ul style="list-style-type: none"> <li>Acute kidney injury</li> <li>Angioedema</li> <li>Cough</li> <li>Hyperkalemia</li> <li>Hypotension</li> </ul>
MRA	<ul style="list-style-type: none"> <li>Eplerenone 25mg daily</li> <li>Spironolactone 12.5mg daily</li> </ul>	<ul style="list-style-type: none"> <li>Eplerenone 50 mg daily</li> <li>Spironolactone 50 mg daily</li> </ul>	<ul style="list-style-type: none"> <li>Hyperkalemia</li> <li>Gynecomastia (S &gt;&gt; E)</li> </ul>
SGLT2i	<ul style="list-style-type: none"> <li>Dapagliflozin 10mg daily</li> <li>Empagliflozin 10mg daily</li> </ul>	<ul style="list-style-type: none"> <li>Dapagliflozin 10 mg daily</li> <li>Empagliflozin 10 mg daily</li> </ul>	<ul style="list-style-type: none"> <li>Acute kidney injury</li> <li>Dyslipidemia</li> <li>Genital mycotic infection</li> <li>Hypoglycemia</li> <li>Ketoacidosis</li> <li>Urinary tract infection</li> </ul>

Table 1. Initial and Target Doses of Guideline Directed Medical Therapy.

ACEi – angiotensin converting enzyme inhibitors; ARB – angiotensin receptor blockers; ARNI – angiotensin receptor neprilysin inhibitors; BID – twice daily; MRA – mineralocorticoid receptor antagonists; SGLT2i – sodium-glucose cotransporter-2 inhibitors.

4. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines | *Circulation*. Accessed January 15,

2023. <https://www.ahajournals.org/doi/10.1161/CIR.0000000000001063>

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**TURNKEY ORDER SET:****REAL-WORLD APPLICATION OF EVIDENCE BASED MULTIMODAL ANALGESIA**

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been concerns with new persistent opiate use (NPOU) after cardiac surgery, defined as previously opioid-naïve patients who continue taking opioids several weeks following discharge, with a reported incidence of up to 13%.<sup>7-9</sup> Therefore, more emphasis has been placed on providing multimodal opioid-sparing analgesia for cardiac patients, including being recommended by the ERAS Cardiac Society.<sup>10,11</sup>

Multimodal pain management aims to achieve acceptable patient comfort while minimizing side-effects. Several non-opioid medications may be considered but may themselves have unwanted/adverse side effects. In general, a comprehensive approach to analgesia should include assessing for pain, as well as side effects and adverse events related to current analgesic medications. Non-opioid options should be exhausted first, reserving opioids as a last line therapy for moderate or severe pain, in accordance with a strategy endorsed by the World Health Organization.<sup>12</sup> When opioids are required, practitioners should begin with very low doses and titrate upwards only in the event of moderate or severe pain.

To assist with implementation of multimodal analgesia, the ERAS Cardiac Society has recently published a turnkey order set (TKO).<sup>13</sup> The multimodal TKO was developed by subject matter experts using accumulated evidence, peer-reviewed literature, and current enhanced recovery practices.<sup>14-17</sup>

Orders were divided into 1) those receiving consistent Class I/IIA recommendations and 2) those that were inconsistently given Class I/IIA recommendations, Class IIB, or un-graded but supported by evidence published in peer-reviewed journals. Decisions regarding order inclusion were made based on estimated benefit, risk, cost, implementation complexity, and generalizability. Each of these orders should be considered based on local institutional priorities, resources, practices, and expertise.

Optimal post-operative analgesia following cardiac surgery can be a challenge. To succeed, a multidisciplinary approach is required, built on a foundation of non-opioid multimodal therapies, and including active patient and caregiver participation. The

final multimodal TKO has been published as open access and available without charge [<https://www.sciencedirect.com/science/article/pii/S2666273624002456?via%3Di-hub>]. An example of the pre-operative phase of the TKO is provided in Table 1. We encourage readers to download the complete publication as it has additional information and can be used to assist with implementation of multimodal analgesia at local institutions.

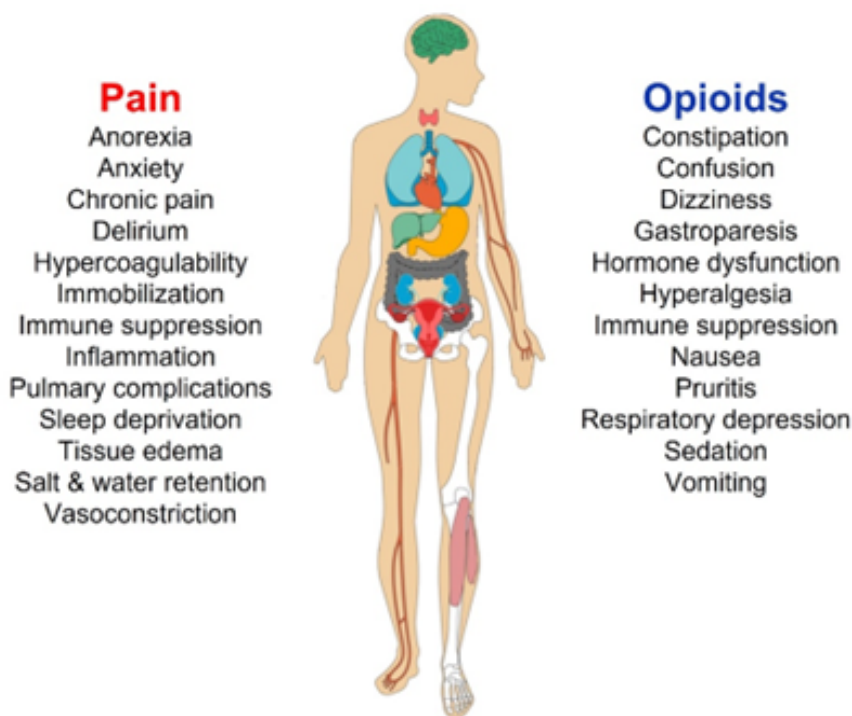


Figure 1. List of potential side effects and adverse events related to poorly controlled pain or the use of opioid medications.

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2. Paul AK, Smith CM, Rahmatullah M, et al. Opioid Analgesia and Opioid-Induced Adverse Effects: A Review. *Pharmaceuticals (Basel)*. 2021;14.

3. Guimarães-Pereira L, Farinha F, Azevedo L, Abelha F, Castro-Lopes J. Persistent Postoperative Pain after Cardiac Surgery: Incidence, Characterization, Associated Factors and its impact

in Quality of Life. *Eur J Pain*. 2016;20:1433-1442.

4. Rosenberger DC, Pogatzki-Zahn EM. Chronic post-surgical pain - update on incidence, risk factors and preventive treatment options. *BJA Educ*. 2022;22:190-196.

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**TURNKEY ORDER SET:****REAL-WORLD APPLICATION OF EVIDENCE BASED MULTIMODAL ANALGESIA**

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Preoperative			
Order	Route	Dose	Administration Instructions
Communication			Please review and record any analgesic medications (including OTC) that the patient has taken in the past 24-hours.
Communication			Please inform MRP if the patient has taken any analgesic medications in the past 24-hours.
Acetaminophen	PO	1000 mg Once	Confirm with MRP prior to administration with history of liver disease.
Communication			Please complete screening tools "Risk for Persistent Post-operative Opioid Use" and "Risk for Post-operative Chronic Pain".
Communication			Contact MRP and consider Pain Specialist consultation for patients with history of complex chronic pain or pre-operative opioid dependence.
CHOOSE ONE	Gabapentin	PO 300 mg Once	Withhold if age > 75 or GFR < 30
	Pre-gabalin	PO 150 mg Once	Withhold if age > 75 or GFR < 30
	Hydromorphone CR	PO 3 mg Once	If age > 75 or weight < 60 kg
	Hydromorphone CR	PO 6 mg Once	If age > 75 or weight < 60 kg

Table 1. Multimodal turnkey order set (pre-operative phase of care only).

**BOLD**; Class I/IIA (or equivalent) recommendations across all referenced guidelines and consensus manuscripts. **ITALICIZED**; Inconsistently Class I/IIA (or equivalent), Class IIB, or supported by evidence published in peer-reviewed journals.

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**ERAS 2.0 RECOMMENDATIONS:****POSTOPERATIVE DELIRIUM  
--A VEXING PROBLEM IN THE POSTOP PERIOD****Seenu Reddy, MD, MBA***TriStar Centennial Medical Center, Nashville, TN*

Screening tools like the Mini-Cog and Clinical Frailty Scale effectively identify high-risk individuals. Addressing modifiable risks, such as malnutrition and preoperative anxiety, is critical. Multimodal prehabilitation programs, including cognitive exercises and nutritional support, have shown some promise in reducing POD. One proven intervention is the Hospital Elder Life Program, which focuses on sleep, nutrition, hydration, and mobilization.<sup>1</sup>

Intraoperatively, POD prevention involves maintaining stable blood pressure, avoiding excessive anesthetic depth through age-adjusted titration, and implementing lung-protective strategies to minimize inflammation. Although regional and general anesthesia show similar POD incidence rates, dexmedetomidine—a sedative with anti-inflammatory properties—has demonstrated potential in reducing POD risk in older

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patients. However, more robust research is needed to confirm its efficacy and safety.<sup>1</sup>

Postoperatively, reorientation techniques and environmental modifications, such as access to natural light, reduction of ambient electronic noise (beeps and buzzes

common in the ICU) and assistive devices for vision and hearing, are vital. Non-pharmacologic measures, including promoting sleep and hydration, remain first-line strategies. Pharmacologic options like dexmedetomidine and melatonin receptor agonists may further reduce symptoms when needed, though antipsychotics are less favored due to adverse effects.<sup>1</sup>

Overall, a multidisciplinary approach spanning preoperative, intraoperative, and postoperative phases in an ERAS pathway is essential for managing POD. Future research should refine prediction models and evaluate novel biomarkers, such as plasma tau proteins, for early diagnosis and prevention.<sup>1</sup>

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**TURNKEY ORDER SET:****GLP-1 AND SGLT2I PREOPERATIVE CESSATION RECOMMENDATIONS****Amanda Rea DNP, CRNP***University of Maryland St. Joseph Medical Center, Towson, MD*

increased use of GLP-1 and SGLT2 inhibitor medications has demonstrated the need to have standards in other medication classes. GLP-1 medications carry an increased risk of aspiration due to delayed gastric emptying, key guidance for any perioperative specialty. GLP-1 medications have also been linked to gallbladder-related disorders, cardiovascular and psychiatric disorders, and malignant neoplasm.<sup>1</sup> GLP-1 medications are recommended to be held per their dosing schedule (1 day vs. 1 week)<sup>1,2</sup>. In 2020, the recommended preoperative holding period for SGLT2 inhibitors was updated from 24 hours to 3–4 days to reduce the risk of SGLT2 inhibitor-associated euglycemic ketoacidosis.<sup>1,3,4</sup> This is thought to occur through an increased glucagon/insulin ratio. SGLT2 inhibitors promote increased glucose excretion in urine by inhibiting glucose reabsorption in the proximal convoluted tubule. This results in reduced insulin requirements to maintain fasting glucose levels, potentially leading to ketosis. Additionally, there is an increase in glucagon lev-

els, hypovolemia due to glucosuria, and an elevation in counter-regulatory hormones, which stimulate lipolysis and ketosis, and the kidneys' ability to remove beta-hydroxybutyrate and acetoacetate is suppressed.<sup>3</sup>

Proper preoperative medication cessation should be evaluated and considered part of preoperative optimization in our non-emergent cardiac surgery patients. Failure to do this can cause complications including hypotension, arrhythmias, acute kidney injury, bleeding, and acidosis impacting our patient's recovery and outcomes. Cardiac surgery now possesses a comprehensive guide to preoperative medication management that combines current published guidelines, recommendations, consensus statements and peer reviewed literature in to one document for the convenience of the bedside clinician.

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*set for nonemergent adult cardiac surgery. JTCVS Open. 2024* [https://www.jtcvsopen.org/article/S2666-2736\(24\)00168-2/fulltext](https://www.jtcvsopen.org/article/S2666-2736(24)00168-2/fulltext)

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## TURNKEY ORDER SET:

## SSI PREVENTION

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Surgical site infections (SSIs) following cardiac surgery are a significant concern, impacting patient recovery, increasing morbidity, and imposing a substantial economic burden on healthcare systems. Up to half of SSIs are preventable<sup>1</sup>, which inspired The Enhanced Recovery After Surgery (ERAS) Cardiac Society to introduce a comprehensive turnkey order set for SSI prevention through standardized, evidence-based practices across the perioperative care continuum.<sup>2</sup>

Preoperatively, risk assessment is essential, using tools such as the COBRAS (Fig 1) checklist to identify modifiable factors like smoking, malnutrition, and diabetes. Patients should be screened for *Staphylococcus aureus* nasal carriage and treated with mupirocin nasal ointment applied twice daily for five days for positive cases. Alternatively, povidone-iodine is used on the day of surgery for rapid decolonization. Smoking cessation at least four weeks prior, combined with nutritional optimization, including high-protein diets or supplements—ensures patients are better prepared. Identifying opportunities for glucose control with HbA1c assessment and managing blood glucose levels to maintain levels below 180 mg/dL further reduces infection risk.

Intraoperative measures focus on maintaining a sterile field and minimizing infection risks. Skin antisepsis with chlorhexidine-alcohol solutions is critical. Antibiotic prophylaxis, tailored by weight, involves administering cefazolin within 60 minutes of incision and redosing every three to four hours during prolonged surgeries. Vancomycin is added to cefazolin antibiotic prophylaxis for MRSA carriers. Glucose control, maintaining normothermia post-cardiopulmonary bypass, and applying vancomycin paste to sternal edges before closure further protect against SSIs. Rigid sternal fixation and the use of negative pressure dressings are considerations for high-risk patients. Additionally, minimizing operating room

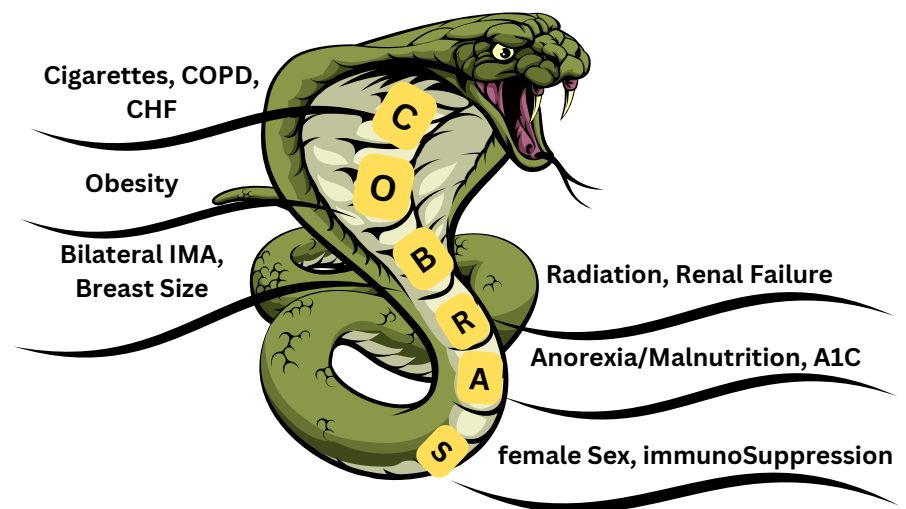


Figure 1: COBRAS High-Risk SSI Checklist

traffic reduces airborne contamination.<sup>3</sup>

Postoperatively, glucose management plays a critical role, with blood sugar levels kept below 180 mg/dL using intravenous insulin if necessary. Prophylactic antibiotics are continued for 24 to 48 hours. Monitoring for the early signs of infection, such as redness and drainage, is crucial. Patients must be educated on wound care, hygiene, and the importance of lifestyle modifications, including smoking cessation and glucose control, to promote healing and reduce infection risks.

This turnkey order set unifies recommendations from multiple international guidelines, offering a practical, multidisciplinary framework to enhance patient outcomes, reduce complications, and lower healthcare costs. For further details, refer to the full open access manuscript published in *The Journal of Thoracic and Cardiovascular Surgery*: [https://www.jtcvs.org/article/S0022-5223\(2024\)2900281-2/fulltext](https://www.jtcvs.org/article/S0022-5223(2024)2900281-2/fulltext)

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## ERAS 2.0 RECOMMENDATIONS:

## PATIENT BLOOD MANAGEMENT

Rawn Salenger, MD

University of Maryland School of Medicine, Baltimore, MD

The ERAS Cardiac Society updated consensus statement published in 2024 jointly with the Society of Thoracic Surgeons and ERAS International, recommend a comprehensive patient blood management (PBM) to optimize utilization and outcome metrics.<sup>1</sup> Patient blood management in cardiac surgery follows the 3 simple pillars of 1. Treat preoperative anemia, 2. Minimize blood loss, 3. Tolerate intraoperative and postoperative anemia. Additional components of PBM are shown in Figure 1. Observational studies have demonstrated multiple advantages of PBM including decreased transfusions, bleeding events, acute kidney injury, infections, and length of stay.<sup>2</sup> A recent meta-analysis also supported these findings, showing particular benefit in cardiac surgery compared to other surgical subspecialties.<sup>3</sup> Overall, the level of evidence for this recommendation was found to be moderate. For interested programs, a good place to start is screening for preoperative anemia and treating patients with IV iron and an erythrocyte stimulating agent before surgery. Another fundamental aspect of PBM would be to establish a standard programmatic threshold for considering packed red blood cell transfusion. For most programs, achieving compliance even with a conservative transfusion threshold will lead to additional blood conservation and might decrease associated complications.

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Essentials of Patient Blood Management	
Preoperative Anemia	Routine anemia screening
	Anemia treatment with IV iron, B12, folate, and erythrocyte stimulating agent
Minimize Blood Loss	Laboratory measurement of antiplatelet drug effect for patients on dual therapy to guide timing of surgery
	Routine use of antifibrinolytic agents
	Retrograde autologous priming of cardiopulmonary bypass circuit to minimize hemodilution
	Routine use of red blood cell salvage
	Sacubitril-valsartan 24-26mg BID
Permissive Anemia intra and postoperative	Standard program threshold for PRBC transfusion
	PRBC transfusion is unlikely to benefit non-bleeding patients with Hgb > 7.5 g/dL
	Standard program transfusion algorithm for blood component therapy

Figure 1. Essentials of Patient Blood Management for Cardiac Surgery.

## MULTIDISCIPLINARY ROUNDING: IMPROVING PATIENT OUTCOMES

Vicki Morton, DNP, AGNP-BC, Charlotte, NC

Multidisciplinary patient rounding in the cardiac surgery critical care environment is essential to overall patient care by early identification of issues and real time discussion amongst the team. While multidisciplinary rounding (MDR) is becoming more widely practiced in cardiac surgery, not all facilities have transitioned to this approach. Studies have shown that the implementation of MDRs are associated with decreased mortality, complications, and positively impacted resource utilization as collaborative decision-making often leads to more accurate diagnoses and timely interventions<sup>1</sup>.

MDRs encourage adherence to clinical protocols and best practices through shared expertise and accountability. Additionally, improved communication reduces the risk of errors related to medications, procedures, and other

aspects of patient care. MDRs also enhance multidisciplinary collaboration which fosters mutual respect among team members, leading to more cohesive and effective care delivery. Moreover, the team-based approach reduces burnout by promoting shared responsibility thus improving staff satisfaction<sup>2</sup>.

While MDRs offer numerous benefits, successful implementation is key. Coordinating schedules of multiple individuals can be challenging. Additional time and effort are needed to prepare for and conduct MDRs. Conducting MDRs isn't necessarily a simple task. Training in effective and concise communication, conflict-resolution, and collaborative decision-making may be necessary for some team members.

The implementation of multidisciplinary

rounds is strongly associated with improved clinical outcomes, better resource utilization, and enhanced satisfaction for both patients and healthcare providers. However, success depends on careful planning, effective leadership, and sustained commitment from all team members.

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May 2-6, 2025 - Seattle, WA



[Asian Society for Cardiovascular and Thoracic Surgery:](#)  
May 14-17, 2025 - Singapore



[American Association of Critical Care Nurses - NTL:](#)  
May 19-21, 2025 - New Orleans, LA



[International Symposium of Enhanced Recovery After Surgery:](#)  
September 18-21, 2025 - Istanbul, Turkey



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October 8-11, 2025 - Copenhagen, Denmark



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October 10-14, 2025 - San Antonio, TX



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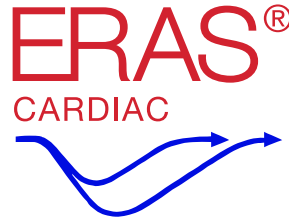


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*The mission of the ERAS® Cardiac Society is to optimize perioperative care of cardiac surgical patients through collaborative discovery, analysis, expert consensus, and dissemination of best practices worldwide.*

### WHO WE ARE

The ERAS® Cardiac Society is an international non-profit organization comprised of experts from around the world, including participation from all healthcare team members. Our members strive to implement enhanced recovery principles at their local institutions while advancing improved patient care internationally through collaboration, education, and dissemination of up-to-date knowledge regarding optimal perioperative care.

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