City General Hospital

30-Day Readmission Risk Assessment

Patient ID:	20251030-Chronic-4eb8f8	**Generated:**	October 30, 2025 21:39
Patient Name:	N/A	**Age:**	N/A
Sex:	N/A	**Disease:**	Chronic Kidney Disease

30-Day Readmission Risk: **49.4%** | Classification: **HIGH RISK** (Threshold: 48%)

Index Admission Summary

Length of Stay:	N/A	**Discharge Destination:**	N/A
Prior Admissions (90d):	N/A	**Comorbidities Count:**	N/A
Follow-up Scheduled:	N/A	**Admission Type:**	N/A

Top Contributing Risk Factors (SHAP Analysis)

Feature	Value	Contribution	Impact	Interpretation
Creatinine	0.00	**-1.034**	↓ Lower Risk	Creatinine influences readmission risk. (0.00mg/dL — below ref 0.6-1.3mg/dL). This feature has a major effect and reduces the readmission risk. Adj...
Hemoglobin	0.00	**+0.973**	↑ Higher Risk	Hemoglobin influences readmission risk.. This feature has a moderate effect and increases the readmission risk.
Dialysis_access_type	nan	**+0.363**	↑ Higher Risk	Dialysis_access_type influences readmission risk.. This feature has a minor effect and increases the readmission risk.
followup_scheduled	0.00	**-0.353**	↓ Lower Risk	followup_scheduled influences readmission risk.. This feature has a minor effect and reduces the readmission risk.
comorbidities_count	0.00	**-0.286**	↓ Lower Risk	comorbidities_count influences readmission risk.. This feature has a minor effect and reduces the readmission risk.
age	0.00	**+0.251**	↑ Higher Risk	age influences readmission risk.. This feature has a minor effect and increases the readmission risk.
BUN	0.00	**-0.218**	↓ Lower Risk	BUN influences readmission risk. (0.00mg/dL — below ref 7-25mg/dL). This feature has a minor effect and reduces the readmission risk. Assess hydrat...
Albumin	0.00	**-0.155**	↓ Lower Risk	Albumin influences readmission risk. (0.00g/dL — below ref 3.5-5.0g/dL). This feature has a minimal effect and reduces the readmission risk. Assess...

Clinical Summary

This N/A n/a patient presents with a **high risk 30-day readmission risk (49.4%)** following discharge for Chronic Kidney Disease management. The risk assessment threshold for this condition is 48%, placing this patient significantly above the high-risk threshold.

Primary Risk Drivers: Creatinine, Hemoglobin, Dialysis_access_type are identified as major contributing factors.

Recommendation: Close follow-up and aggressive management of identified risk factors is recommended to prevent readmission.

Clinical Management Recommendations

• **Primary Disease Management:** Review and optimize current treatment plan for Chronic Kidney Disease. Consider consultation with appropriate specialists.

• **Medication Reconciliation:** Complete medication review at discharge. Ensure patient understands all medications, dosing, and timing.

• **Care Coordination:** Schedule follow-up appointment within 7 days of discharge. Consider home health services for high-risk patients.

• **Patient Education:** Reinforce medication adherence, warning signs requiring immediate attention, and lifestyle modifications.

• **Laboratory Monitoring:** Schedule appropriate lab work based on disease-specific guidelines and medication monitoring requirements.

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Medication Recommendations

Patient ID:	20251030-Chronic-4eb8f8	**Patient Name:**	N/A
Age / Sex:	N/A / N/A	**Disease:**	Chronic Kidney Disease

Important: The following medication recommendations are based on current clinical guidelines and the patient's risk profile. All medications must be reviewed, prescribed, and adjusted by the attending physician based on individual patient factors, allergies, drug interactions, and institutional protocols.

Recommended Medication Protocol:

Nephroprotection:

• ACE inhibitors (e.g., Enalapril 5-20mg daily) to slow progression

• ARBs (e.g., Irbesartan 150-300mg daily) if ACE-I not tolerated

• SGLT2 inhibitors (e.g., Dapagliflozin 10mg) if diabetic

Complications:

• Phosphate binders (e.g., Calcium acetate) with meals if hyperphosphatemia

• Erythropoietin if hemoglobin <10 g/dL

• Vitamin D supplementation (Calcitriol) for bone health

• Sodium bicarbonate if metabolic acidosis

Avoid:

• NSAIDs (kidney toxicity)

• Metformin if eGFR <30 mL/min

• Adjust doses for renally cleared drugs

Monitoring:

• eGFR and creatinine every 3 months, nephrology referral if Stage 4+

Note: These are general guidelines. All medications should be prescribed and adjusted by the attending physician based on individual patient factors.

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Potential Disease Progression & Related Conditions

Patient ID:	20251030-Chronic-4eb8f8	**Patient Name:**	N/A
Age / Sex:	N/A / N/A	**Disease:**	Chronic Kidney Disease

Potential Disease Progression & Related Conditions:

[HIGH RISK] High-Risk Conditions (Requires Active Prevention):

1. **End-Stage Renal Disease**

- *Risk Factors:* eGFR <30, uncontrolled diabetes/HTN, proteinuria

- *Typical Time Frame:* 2-5 years (Stage 4), 1-2 years (Stage 5)

- *Prevention Strategy:* Nephrology care, dialysis planning, transplant evaluation

2. **Cardiovascular Disease**

- *Risk Factors:* CKD Stage 3+, hypertension, anemia

- *Typical Time Frame:* 5-10 years

- *Prevention Strategy:* BP control, statin therapy, anemia management

3. **Anemia of CKD**

- *Risk Factors:* eGFR <45, low EPO production

- *Typical Time Frame:* 2-4 years

- *Prevention Strategy:* Iron supplementation, EPO therapy if Hgb <10

[MODERATE RISK] Moderate-Risk Conditions (Monitor Closely):

1. **Secondary Hyperparathyroidism**

- *Risk Factors:* hyperphosphatemia, low calcium, CKD Stage 3+

- *Prevention:* Phosphate binders, vitamin D, calcium supplementation

Personalized Risk Assessment:

- Current markers within acceptable ranges. Continue monitoring.