AI DOCTOR ASSISTANT

Advanced Clinical Decision Support System

Patient Name: Test User1		MRN: MRN-1768626710457
Age: 22	**Gender: Male**	**Assessment Date: 2026-01-17 10:41**
Overall Risk: Critical		**Risk Score: 57.79/100**

Clinical Assessment (SOAP Notes)

CLINICAL DECISION SUPPORT REPORT

Patient: Test User1

Assessment Date: January 17, 2026

Report Type: AI-Assisted Risk Stratification

Clinical Summary

Overall Risk Stratification: Critical (57.8%)

High-Priority Concerns: Kidney Disease

Multi-System Risk Stratification

Critical Risk Conditions

Kidney Disease (Risk Score: 90.0%)

- Risk Factors:

  Hypertension is a major contributor to kidney damage.

High Risk Conditions

Heart Disease (Risk Score: 67.39%)

- Risk Factors:

  High cholesterol is associated with atherosclerosis.

Diabetes (Risk Score: 73.11%)

- Risk Factors:

  High blood glucose levels indicate hyperglycemia.

Low Risk Conditions

Stroke (Risk Score: 0.66%)

- Risk Factors:

  Hypertension significantly increases stroke risk.

Clinical Recommendations

Priority Actions:
 Comprehensive clinical evaluation recommended
 Consider specialist referral based on risk profile
 Initiate appropriate diagnostic workup
 Discuss risk modification strategies with patient

General Clinical Approach:
 Review patient's complete medical history
 Perform focused physical examination
 Order confirmatory laboratory/imaging studies as indicated
 Develop individualized care plan
 Schedule appropriate follow-up intervals
 Provide patient education on risk factors

Suggested Further Investigations

 Complete metabolic panel, urinalysis, eGFR, kidney ultrasound
 ECG, echocardiogram, stress test, cardiac biomarkers
 Fasting blood glucose, HbA1c, oral glucose tolerance test

AI Model Information

Models Used:
 Heart Disease: Machine Learning Risk Prediction Model
 Stroke: Machine Learning Risk Prediction Model
 Diabetes: Machine Learning Risk Prediction Model
 Kidney Disease: Machine Learning Risk Prediction Model

Confidence Level: Based on available clinical data and model training

Professional Disclaimer

Clinical Decision Support Tool - Professional Use Only

This report is generated by machine learning models trained on clinical datasets. The risk scores and assessments are intended to support, not replace, clinical judgment.

Limitations:
 Models may not capture all clinical nuances
 Risk scores are probabilistic, not deterministic
 Individual patient factors may not be fully represented
 Models require validation against clinical findings

Recommendations:
 Use this report as one component of comprehensive clinical assessment
 Correlate AI findings with clinical examination and patient history
 Order confirmatory tests as clinically indicated
 Apply professional judgment in all diagnostic and treatment decisions

Liability: This tool provides decision support only. Final diagnostic and treatment decisions remain the responsibility of the attending physician.

Patient Care Summary

HEALTH SCREENING REPORT
Patient: Test User1
Report Date: January 17, 2026

Executive Summary

This health screening has identified critical risk areas that require prompt medical attention. 3 condition(s) show elevated risk levels. We strongly recommend scheduling a consultation with your healthcare provider for comprehensive evaluation and personalized care planning.

Overall Health Risk Assessment

Risk Level: Critical
Risk Score: 57.8%
Primary Areas of Concern: Kidney Disease

Detailed Risk Analysis

Heart Disease
Risk Level: High (67.39%)

What This Means:

The screening shows an elevated risk for Heart Disease. Multiple risk factors have been identified that suggest you should consult with a healthcare provider for further evaluation.

Why This Risk Exists (Contributing Factors):

1. High cholesterol is associated with atherosclerosis.

Clinical Context:

Moderate likelihood of Heart Disease. Further clinical evaluation may be required.

Recommended Actions:

Blood pressure and lipid management

Guidelines suggest considering antiplatelet or statin therapy where appropriate

Stress testing or cardiology referral if clinically indicated

---

Stroke

Risk Level: Low (0.66%)

What This Means:

The screening shows a low risk for Stroke based on current indicators. Continue maintaining healthy habits and regular check-ups.

Why This Risk Exists (Contributing Factors):

1. Hypertension significantly increases stroke risk.

Clinical Context:

Low likelihood of Stroke at present.

Recommended Actions:

Risk factor control including hypertension and diabetes

Lifestyle modification

Neurology consultation for high-risk cases

Diabetes

Risk Level: High (73.11%)

What This Means:

The screening shows an elevated risk for Diabetes. Multiple risk factors have been identified that suggest you should consult with a healthcare provider for further evaluation.

Why This Risk Exists (Contributing Factors):

1. High blood glucose levels indicate hyperglycemia.

Clinical Context:

Moderate likelihood of Diabetes. Further clinical evaluation may be required.

Recommended Actions:

 Lifestyle modification including diet and regular physical activity

 Guidelines suggest considering Metformin as first-line therapy

 Regular monitoring of HbA1c and blood glucose levels

Kidney Disease

Risk Level: Critical (90.0%)

What This Means:

The screening indicates a significantly elevated risk for Kidney Disease. This means several risk factors are present that warrant immediate medical attention and further testing.

Why This Risk Exists (Contributing Factors):

1. Hypertension is a major contributor to kidney damage.

Clinical Context:

High likelihood of Kidney Disease based on current clinical indicators.

Recommended Actions:

 Monitoring serum creatinine and eGFR

 Blood pressure optimization

 Nephrology consultation recommended for progressive risk

General Health Recommendations

Lifestyle Modifications:
 Maintain a balanced diet rich in fruits, vegetables, whole grains, and lean proteins
 Engage in regular physical activity (at least 150 minutes of moderate exercise per week)
 Maintain a healthy weight (BMI 18.5-24.9)
 Limit alcohol consumption and avoid tobacco products
 Manage stress through relaxation techniques, adequate sleep, and social support

Monitoring:
 Schedule regular health check-ups with your healthcare provider
 Monitor your blood pressure, blood sugar, and cholesterol levels as recommended
 Keep track of any new or changing symptoms

Prevention:
 Stay up-to-date with recommended health screenings
 Take prescribed medications as directed
 Maintain good sleep hygiene (7-9 hours per night)
 Stay hydrated and limit processed foods

Next Steps

Immediate Actions Required:
1. Schedule an appointment with your healthcare provider within the next 1-2 weeks
2. Bring this report to your appointment for discussion
3. Be prepared to discuss your symptoms, medical history, and lifestyle
4. Your doctor may order additional tests or imaging studies
5. Do not make any medication changes without consulting your doctor

When to Seek Emergency Care:
 Severe chest pain or pressure
 Difficulty breathing or shortness of breath at rest
 Sudden severe headache or vision changes
 Loss of consciousness or severe confusion
 Any symptoms that feel life-threatening

Important Medical Disclaimer

This report is generated by an AI-powered health screening tool and is intended for informational and educational purposes only.

Important:

 This is NOT a medical diagnosis

 This tool does not replace professional medical advice

 All findings must be reviewed and interpreted by a licensed healthcare provider

 Do not make any treatment decisions based solely on this report

 Seek immediate medical attention for any emergency symptoms

Accuracy Note: AI models are trained on large datasets but may not account for all individual variations. Clinical judgment by a qualified healthcare professional is essential for accurate diagnosis and treatment planning.