

AI DOCTOR ASSISTANT

Advanced Clinical Decision Support System

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| Patient Name: History Test User 9b10 | | MRN: TEST-HIST-3ca991 |
| Age: 45 | Gender: Female | Assessment Date: 2026-01-17 10:24 |
| Overall Risk: Critical | | Risk Score: 59.61/100 |

Clinical Assessment (SOAP Notes)

CLINICAL DECISION SUPPORT REPORT

Patient: History Test User 9b10
Assessment Date: January 17, 2026
Report Type: AI-Assisted Risk Stratification

Clinical Summary

Overall Risk Stratification: Critical (59.6%)
High-Priority Concerns: Heart Disease, Kidney Disease

Multi-System Risk Stratification

Critical Risk Conditions

Heart Disease (Risk Score: 76.02%)
- Risk Factors:
Elevated blood pressure increases cardiovascular risk.
Kidney Disease (Risk Score: 85.0%)
- Risk Factors:
Elevated creatinine may indicate reduced kidney function.

Low Risk Conditions

Diabetes (Risk Score: 17.8%)
- Risk Factors:
Increased BMI is a known risk factor for insulin resistance.

Clinical Recommendations

Priority Actions:
Comprehensive clinical evaluation recommended
Consider specialist referral based on risk profile

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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

AI Model Information

Models Used:

Heart Disease: 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:

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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: History Test User 9b10

Report Date: January 17, 2026

Executive Summary

This health screening has identified critical risk areas that require prompt medical attention. 2 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: 59.6%

Primary Areas of Concern: Heart Disease, Kidney Disease

Detailed Risk Analysis

Heart Disease

Risk Level: Critical (76.02%)

What This Means:

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

Why This Risk Exists (Contributing Factors):

1. Elevated blood pressure increases cardiovascular risk.

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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

Diabetes

Risk Level: Low (17.8%)

What This Means:

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

Why This Risk Exists (Contributing Factors):

1. Increased BMI is a known risk factor for insulin resistance.

Clinical Context:

Low likelihood of Diabetes at present.

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 (85.0%)

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. Elevated creatinine may indicate reduced kidney function.

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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

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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.

DISCLAIMER: This report is generated by an artificial intelligence system for clinical decision support. All findings must be reviewed and validated by a licensed physician before clinical application.