## MEDICAL REPORT

Patient: Sarah M. Johnson

**Date of Examination:** June 15, 2025 **Physician:** Dr. Michael Chen, MD **Medical Record #:** MR-2025-0847

## **Clinical Assessment and Laboratory Results**

Ms. Johnson, a 34-year-old female, presented for routine health screening and follow-up examination. The patient has a history of 2 pregnancies and requested comprehensive metabolic and cardiovascular assessment.

Laboratory analysis revealed a glucose level of 142 mg/dL, which falls within the elevated range and requires monitoring. Her blood pressure reading was recorded at 128/84 mmHg, indicating mild hypertension that should be addressed through lifestyle modifications. The patient's BMI index calculated to 28.7, placing her in the overweight category.

Endocrine evaluation showed insulin levels at 79.6  $\mu$ U/mL, suggesting possible insulin resistance patterns. Physical examination measurements included skin thickness of 32 mm at the triceps fold. Family history analysis using the diabetes pedigree function yielded a score of 0.627, indicating moderate genetic predisposition to diabetes mellitus.

Advanced imaging studies were performed to assess tissue characteristics. The radius\_mean measurement was documented at 14.8 mm, with texture mean values of 18.2. Perimeter mean calculations showed 94.7 mm, while the area\_mean was measured at 684.5 mm². The smoothness\_mean parameter was recorded as 0.096, indicating normal tissue surface characteristics.

The patient's age of 34 years places her in a demographic requiring increased vigilance for metabolic syndrome development.

**Clinical Assessment:** Patient presents with prediabetic glucose levels, mild hypertension, and elevated BMI requiring immediate lifestyle intervention and close monitoring to prevent progression to Type 2 diabetes mellitus.