Supplementary File 1

Adult Primary Care Anthropometric Study Questionnaire and Clinical Data Collection Form

Study: *Comparative Evaluation of Waist-to-Height Ratio, Body Mass Index, and Waist-to-Hip Ratio in an Adult Primary Care Population: A Cross-sectional Study*

Study setting: Family Medicine Clinics, St. John Hospital and Medical Center, Detroit, Michigan

Study period: October 1, 2004–March 31, 2005

Instructions: This form records the demographic, clinical, anthropometric, blood-pressure, and laboratory variables collected for the study. Questionnaire items are completed from participant interview and/or available clinical information. Anthropometric and clinical measurements are completed by trained study personnel.

Section 1. Participant Identification and Eligibility

1. Participant Study ID: _____

2. Date of Evaluation: ____ / ____ / _____

3. Age: _____ years

4. Age ≥20 years?

☐ Yes
☐ No

5. Sex:

☐ Male
☐ Female

6. Race/Ethnicity:

☐ White/Caucasian
☐ Black/African American
☐ Hispanic/Latino
☐ Asian/Pacific Islander
☐ Native American/Alaska Native
☐ Other/Multiracial: _____

7. Type of clinic visit:

☐ Routine primary care
☐ Preventive health visit

8. Written informed consent obtained?

☐ Yes
☐ No

Exclusion Criteria

Check **Yes** or **No** for each item.

9. Pregnancy:
☐ Yes ☐ No

10. Ascites or other condition likely to interfere with accurate waist measurement:
☐ Yes ☐ No

If yes, specify: _____

11. Inability to stand for height or weight measurement:
☐ Yes ☐ No

12. Dialysis-dependent kidney failure:
☐ Yes ☐ No

13. Inability to provide informed consent:
☐ Yes ☐ No

14. Incomplete anthropometric, clinical, or laboratory data:
☐ Yes ☐ No

Eligibility determination:
☐ Eligible
☐ Not eligible

Section 2. Medical and Cardiovascular History

15. Has the participant previously been diagnosed with hypertension?

☐ Yes
☐ No
☐ Unknown

16. Has the participant previously been diagnosed with diabetes mellitus?

☐ Yes
☐ No
☐ Unknown

17. Has the participant previously been diagnosed with dyslipidemia/high cholesterol?

☐ Yes
☐ No
☐ Unknown

18. Other relevant medical history/comorbidities:

☐ Cardiovascular disease
☐ Coronary artery disease
☐ Previous myocardial infarction
☐ Previous stroke/transient ischemic attack
☐ Other: _____
☐ None reported

19. Family history of cardiovascular disease:

☐ Yes
☐ No
☐ Unknown

If yes, specify relationship/condition if known:

_____

_____

Section 3. Medication History

20. Current medication use:

☐ Yes
☐ No

21. Currently receiving antihypertensive medication?

☐ Yes
☐ No
☐ Unknown

Medication(s), if recorded:

_____

22. Currently receiving lipid-lowering medication?

☐ Yes
☐ No
☐ Unknown

Medication(s), if recorded:

_____

23. Other relevant medications:

_____
_____
_____

Section 4. Smoking and Alcohol History

24. Smoking status:

☐ Never smoker
☐ Former smoker
☐ Current smoker
☐ Unknown

If current/former smoker and information available:

Amount: _____ cigarettes/day

Duration: _____ years

25. Alcohol use:

☐ None
☐ Current alcohol use
☐ Former alcohol use
☐ Unknown

If current use and amount available:

Approximate amount/frequency: _____

Section 5. Anthropometric Measurements

To be completed by trained study personnel using standardized measurement procedures.

Height

26. Height: _____ cm

Measured without shoes using a wall-mounted stadiometer.

Weight

27. Weight: _____ kg

Measured using a calibrated scale.

Waist Circumference

28. Waist circumference: _____ cm

Measured at the midpoint between the lower palpable rib and the iliac crest after normal expiration.

Hip Circumference

29. Hip circumference: _____ cm

Measured at the point of maximal gluteal protrusion.

Anthropometric measurements should be recorded to the nearest **0.1 cm or 0.1 kg**, as applicable.

Section 6. Calculated Anthropometric Indices

Body Mass Index

30. BMI:

BMI = Weight (kg) ÷ Height² (m²)

BMI = _____ kg/m²

WHO classification:

☐ Underweight: <18.5 kg/m²
☐ Normal weight: 18.5–24.9 kg/m²
☐ Overweight: 25.0–29.9 kg/m²
☐ Obesity: ≥30.0 kg/m²

Waist-to-Height Ratio

31. WHtR:

WHtR = Waist circumference (cm) ÷ Height (cm)

WHtR = _____

Classification:

☐ <0.50
☐ ≥0.50 — increased cardiometabolic-risk screening threshold

Waist-to-Hip Ratio

32. WHR:

WHR = Waist circumference (cm) ÷ Hip circumference (cm)

WHR = _____

Sex-specific classification:

Male:
☐ ≤0.90
☐ >0.90 — central obesity

Female:
☐ ≤0.85
☐ >0.85 — central obesity

Section 7. Blood Pressure Assessment

Participant should be seated and resting for at least 5 minutes. Blood pressure should be obtained using an appropriately sized cuff positioned at heart level.

33. Blood Pressure Measurement 1

Systolic BP: _____ mm Hg
Diastolic BP: _____ mm Hg

34. Blood Pressure Measurement 2

Systolic BP: _____ mm Hg
Diastolic BP: _____ mm Hg

35. Average Blood Pressure

Average systolic BP: _____ mm Hg
Average diastolic BP: _____ mm Hg

36. Current antihypertensive treatment:

☐ Yes
☐ No

Study hypertension variable:

☐ Yes
☐ No

For the finalized study analysis, hypertension status incorporated measured blood pressure and antihypertensive treatment according to the definition specified in the manuscript.

Section 8. Fasting Laboratory Evaluation

37. Fasting blood sample obtained?

☐ Yes
☐ No

38. Duration of fasting, if recorded: _____ hours

Lipid Profile

39. Total cholesterol: _____ mg/dL

40. LDL cholesterol (LDL-C): _____ mg/dL

41. HDL cholesterol (HDL-C): _____ mg/dL

42. Triglycerides: _____ mg/dL

Glucose

43. Fasting plasma glucose: _____ mg/dL

Section 9. Study Outcome Classification

Hypertension

44. Hypertension status:

☐ Yes
☐ No

For the finalized study dataset, hypertension was defined as one or more of the following:

☐ Systolic blood pressure ≥130 mm Hg
☐ Diastolic blood pressure ≥80 mm Hg
☐ Current antihypertensive treatment

Dyslipidemia

45. Dyslipidemia status:

☐ Yes
☐ No

For the finalized study dataset, dyslipidemia was defined by one or more of the following:

☐ Total cholesterol ≥200 mg/dL
☐ LDL-C above the applicable treatment threshold for the recorded cardiovascular-risk category
☐ HDL-C <40 mg/dL in men
☐ HDL-C <50 mg/dL in women
☐ Triglycerides ≥150 mg/dL
☐ Current lipid-lowering treatment

Section 10. Data Completeness

46. Anthropometric measurements complete?

☐ Yes
☐ No

47. Blood-pressure measurements complete?

☐ Yes
☐ No

48. Required fasting laboratory measurements complete?

☐ Yes
☐ No

49. Questionnaire/clinical-history information complete?

☐ Yes
☐ No

50. Participant included in complete-case analysis?

☐ Yes
☐ No

If no, reason:

_____

_____

Investigator/Research Staff Certification

Completed by: _____

Role: _____

Date: ____ / ____ / _____

Comments:

_____

_____