

ARIC MANUSCRIPT PROPOSAL # 655

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1. Title:

DINAMAP skip patterns

2. Proposed Writing Group

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3. Timeline:

A draft of this manuscript, which will be in the form of a brief report, should be completed during Spring, 1999.

4. Background and Rationale:

A review of frequency distributions of some blood pressure measurements from an ARIC-related project indicated that the DINAMAP might be prone to digit preference. We followed up by examining a more extensive array of DINAMAP BP measurements in ARIC and in HyperGEN. For all DINAMAP-derived blood pressure measurements, we observed a skip pattern consistent across studies where certain SBP values were omitted. A similar skip pattern was not found for DBP.

We would like to extend this work to include a complete review of all DINAMAP derived BP values in ARIC, HyperGEN, and FHS, controlling for DINAMAP model, body position, upper vs. lower extremity, among other factors. These results would be summarized into a tabular format and their potential implications (e.g., systematic bias) briefly discussed.

5. Hypotheses:

There are no study hypotheses.

6. Data, Design, and Analysis

DINAMAP-derived blood pressure data from the ARIC, HyperGEN, and FHS studies will be used. We will include both SBP and DBP measurements taken by different DINAMAP machine models, at different centers, and in various situations (body positions, resting vs. after the introduction of a stressor). Within studies we will stratify by center and include both baseline and follow-up DINAMAP measures when available.

Frequency distributions will be generated to identify skip patterns in BP values for each of the measurements. The overall results will be summarized in tables and/or figures.