**Attachment 1a**

**National Health Interview Survey (NHIS) Follow-up Health Study**

**Response to exams after surveys**

The National Health and Nutrition Examination Survey (NHANES) is conducted annually and includes a household interview and a physical exam and additional interviews completed in the NHANES Mobile Examination Center (MEC). NHANES has conducted methodological studies to investigate the feasibility of in-home health examinations in the past. In 2012, NHANES (OMB 0902-0237) conducted a small methodological project called the Health Measures at Home Study. This study repeated NHANES participants’ height, weight, and blood pressure measurements that had already been completed in the MEC, one to three weeks later in their homes. That study provided evidence that those measurements could be taken accurately in the home using portable equipment.1,2 Specifically, correlations between the MEC and in-home height and weight measurements were higher than 99%.[[1]](#footnote-1) Furthermore, the percent agreement for high blood pressure across settings was also relatively high (91%).[[2]](#footnote-2) However, that study did not attempt to collect urine or venous blood in the home. Instead, it collected dried blood spots (DBS). The correlation of HbA1c measured via venous blood draw in the MEC and DBS in the home was high (90%) though lower for HDL cholesterol (64%) and total cholesterol (65%) (Miller at al, 2015) .[[3]](#footnote-3) These results agreed with previous studies that had found that the quality of cholesterol measurement from venous blood is higher than the quality of that from DBS.[[4]](#footnote-4),[[5]](#footnote-5) Compared to dry blood spot and capillary blood collection, venous blood collection also provides the larger quantity of blood needed to support the variety of assays necessary to describe the nation’s health status. HMHS concluded that more research was needed to understand participant recruitment and response rates for home exams that are added to surveys.

Some insight into such response rates is available from other studies, but the results from those studies may not generalize to the full U.S. adult population. Previous research from the University of Michigan Health and Retirement Survey (HRS) [[6]](#footnote-6); the National Longitudinal Study of Adolescent to Adult Health (Add Health) [[7]](#footnote-7); the Population Assessment of Tobacco and Health (PATH) study[[8]](#footnote-8); and The National Social Life, Health, and Aging Project (NSHAP) [[9]](#footnote-9) show overall health exam cooperation rates after a survey interview ranging from 40% to 90% for in-home examinations with national samples. However, these studies are longitudinal in nature, with varying methodologies and study populations (in particular, the HRS and NSHAP only include older adults). It is not clear, therefore, what relationship these response rates would have to the health exam response rates among NHIS participants, who represent a cross-sectional sample of the civilian noninstitutionalized adult population of the United States.

In 2018, NHANES conducted a feasibility study to determine if previous NHANES participants were willing to participate in a follow-up in-home health examination including capillary blood and urine collections. This study was also different from the current study because it returned to NHANES participants years after their participation, rather than immediately afterward. Also, the NHANES participants have already completed a multi-hour exam in the MEC, which might affect their likelihood of agreeing to a follow-up exam. It also differed in the components of the home protocol. That protocol included a longer questionnaire than the one used in this project but did not include a venous blood draw or urine collection. NHANES-LS measured weight, waist circumference, and blood pressure. It also included a monofilament assessment for neuropathy and a capillary blood collection. The incentive provided with this protocol was $80. A separate $20 incentive was provided following the urine collection, which occurred after the health representative left the home.

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