Supplemental File

1. Supplemental Table1: Quotes indicating Barriers and Facilitators to Participant Engagement in the Diet, CKD and ApolipoproteinL1 study from Qualitative Studies.

Quotes indicating Barriers and Facilitators to Participant Engagement and Retention in the Diet CKD and ApolipoproteinL1 study.

Barriers to Participant Engagement and Retention

1. Lack of understanding of research by the participants

"We as Africans, our attitude towards research in general is very poor...,1, people feel it's a waste of time, or 2, a different research group might have met them earlier and... they didn't get any information as to whether the research was successful or not... They tell you look you keep worrying us, cause yes I did some research some time back and I didn't see anything, so I don't see the need to participate in research."

2. The burden of research protocol-data collection

- a) "Follow-up studies are always a problem because it means you ask the patient to come back. Oftentimes they may not want to come back, here when they feel that they are fine, they don't come back to see the doctor, they literally disappear, so it's always a problem to call them and talk them into coming back."
- b) "Nigeria is big, Lagos... is equally big, relatively, in the sense that people live at different ends. Some places are not very motorable, may not have that street address, so locating where they live, getting to the end, it also brought to the realization what participants go through to access care."
- c) "Some of them tell you they don't have any free day within the week, they work from Monday to Sunday, Monday to Sunday every time... So they sometimes end up not collecting some urine in the 24 hours, I think they do it when they are home. And others will tell you they'll go to work with a smaller bottle and collect it in it and then when they go home, they'll transfer it into the bigger gallon. And I know sometimes when transferring it some may spill over... carrying it, transporting it from work and then back home, and all that, it disrupts the pH of the sample."

Facilitators of Participants Retention and Engagement in DCA

- 1. Reducing the burden of research visits by allowing convenient research visits:
 - a) "It seems patients have to come from outside of Ife, they have to travel down, having to come at different times for different studies was a bit challenging, it was eventually, it's been managed so that a simple visit could cover for everything and that makes it convenient on the part of the patients and encouraging for them to come, and also for us to operationally we are able to maximize the opportunity of patients coming in."
 - b) "The home visits actually helped us to improve our numbers, because there were some people who were still worried about COVID, and they didn't want to come to the hospital."
- 2. <u>Building rapport and increasing communication between the research team and participants:</u> "Of course calling them, which makes a lot more available to the teams, to the nurses and the coordinators to call them, even when you don't need them to come for appointment, just out of the blue, you can call them, oh how are you doing, just calling on checking on you see how you are doing, I hope you are taking your medication, that kind of stuff, you're not calling for any appointments, I'm just calling to see how you are, that's the end of the story, cause most of the time they would expect you to call them for appointment, but this time you're just calling to find out, I think that's what happened during the COVID, and that helped, so maybe we should incorporate that in what we are doing, calling patients not just because you want them to come

back for appointment, but just because you want to find out how they are, I think that will endear them."

3. <u>Cultural sensitivity – adapting research protocols for the populations involved:</u>

"You must be able to translate those messages in a language that they will understand. For example, if you are recalling them of foods, you must be able to explain to them what that food means, you must be able to understand the quantities they are telling you in that language and translate them very well... our research assistant who are applying the questionnaire are well-versed in that language."

CKD-chronic kidney disease