Progress on the RooPfs study in The Gambia

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Aims

1. Determine whether modern housing provides incremental protection against clinical malaria over current best practice of long-lasting insecticidal nets (LLINs) and prompt treatment in The Gambia;

2. Measure the incremental cost-effectiveness of the interventions;

3. Analyze the housing market in The Gambia to develop systems for scale-up.
Methods

• A 2-armed household clustered-randomised controlled study

• 800 households will receive LLINs and 400 will receive improved housing before clinical follow-up.

• One child aged 6 months to 13 years will be enrolled from each household and followed for clinical malaria using active case detection to estimate malaria incidence for 2 malaria transmission seasons.

• Exposure to malaria parasites assessed using light traps followed by detection of *Anopheles gambiae* species and sporozoite infection.

• Ancillary economic and social science studies will undertake a cost-effectiveness analysis and use qualitative and participatory methods to explore the acceptability of the housing modifications and to design strategies for scaling-up housing interventions.
RooPf study design

800 houses traditional mud-walled thatched houses recruited

400 traditional mud-walled thatched houses

400 ventilated metal-roofed houses
RooPs house: Ventilated roof
Roo Pf's house: Ventilated front door
Roo’s house: Ventilated back door
Daily temperatures

![Graph showing average temperatures for metal and thatch roofs over a 24-hour period. The graph indicates that metal roofs maintain a lower average temperature compared to thatch roofs throughout the day.]
Study update

• 800 households enrolled
• 201/400 houses modified with metal roofs & screened doors
• Clinical & entomological measurements start June 2016
• Investigation of the supply chain in progress