AFRI-c Care Home Research Information Sheet

IRAS ID	298022
CPMS ID	TBC
Type of study	Cluster Randomised Control Trial
Study design and background	A study to see if Air Filtration prevents winter coughs, colds, flu and COVID-19 in care homes (AFRI-c study) Care homes that join the study will be put into one of two groups. We will provide one group with HEPA air filters to use as well as their usual infection control measures (air filter group). The other group will carry on using their usual infection control measures (usual care group). We will compare the amount of infections in each group to find out whether air filters prevent respiratory infections. The study will also explore staff, resident and residents' relatives/ friends' attitudes to and experiences of air filters and also whether using the air filters is cost effective. HEPA air filters can capture relevant airborne particles; have been shown to reduce infections in severely immunocompromised patients; but there is an absence of evidence as to whether portable filters can prevent infection acquisition in care homes and other indoor settings. Research is urgently needed to help health and social care providers know whether portable HEPA filters are clinically and cost-effective in reducing respiratory (and other) infections.
Study aim and objectives	Aim: To investigate the clinical and cost effectiveness of portable HEPA air filters in reducing symptomatic winter respiratory infections (including COVID-19) in residents of older people's care homes. Main objective: To investigate the effect of portable HEPA air filters in private residential, communal and staff only rooms on the "ten" residents' symptomatic winter respiratory infection episodes (including COVID-19) in care homes with air filters compared with residents in care homes without air filters.
Care Home target	To consent 10 residents and to collect anonymous data on all other residents.
Duration of study recruitment	Each care home will be involved for 1 winter period only (between September and April).

Payments	Intervention care homes • £1,000 set-up fee • £3,500 closedown fee Control care homes • £750 set-up fee • £2,250 closedown fee
Eligibility criteria	Eligibility will be assessed first by care home and then resident. <u>Care home eligibility criteria:</u> <u>Inclusion</u> **Care homes will be eligible if (all of):** ≥30 residents residing in single bedrooms; care homes which predominantly focuses on care for older people (residential/nursing home); willing to maintain register of all residents; willing to invite eligible residents to receive filters and/or accept medical notes review until 10 agree to take part; care home owner permission to take part; willing to commit to installing air filters in in care home if allocated to intervention group; willing to commit to not installing air filters if allocated to control group. <u>Exclusion</u> **Care homes will be ineligible if (any of):** CQC website rates as 'inadequate' or 'requiring improvements' in any area; ≥10% private room use of portable HEPA filtration devices; or participating in competing care home study. <u>Resident eligibility criteria</u> Residents will be eligible to have anonymous data collected on them for the winter period if they are: expected to reside in the care home for at least 2 months of the care home data collection period. **Residents will be eligible to be approached for consent if (all of):** in single occupancy bedroom; expected to reside in the care home for at least 2 months of the care home data collection period; able to give informed consent (or if lacks capacity, a consultee is willing to complete a consultee declaration form). **Residents will be excluded if they have a** terminal illness (death expected within seven days). **Residents will not be eligible to approached for consent if (any of):** participating in a competing study; terminal illness (death expected within seven days).

Study activities	
Care Home activities	This is an outline of the main activities expected and is not an exhaustive list. 1. Complete expression of interest to take part. 2. Talk to care home owner for their permission. 3. If selected, hold a meeting at the care home for residents, staff and family/friends of residents to discuss involvement and willingness to take part. 4. Nominate a study champion(s) at the care home as the lead point of contact for the trial. 5. Complete care home baseline data collection, including two optional staff questionnaires. 6. Be randomised by the study team to either the usual care arm or usual care plus arm filters 7. Obtain informed consent from 10 residents 8. Collect anonymous baseline data on all residents and additional data from “the 10” 9. If in the air filter arm – receive air filters and follow guidance to position them in private and communal rooms and agree a switch on date 10. Complete air filter checks (to confirm they are switched on and maintained) 11. Complete anonymous daily symptoms for all residents and additional data on “the 10” for 1 winter period. 12. Complete two short questionnaires with ‘’the ten’’ residents
Resident involvement	This is an outline of the activity expected and is not an exhaustive list. 1. If in “the 10”, consent to take part, which agrees for them to have an air filter in their private room (intervention care homes only) and to have personal data collected about them (all consented residents). 2. If in ‘’the ten’’ they will complete two short questionnaires. 3. For other residents – they will have the option to opt out of anonymous data being collected about them at any time during the study. 4. They may be asked if they would like to take part in a qualitative interview. 5. If in the air filter arm – they will be asked questions about the air filter in their room.

What are the likely benefits to the residents/care home?	Residents may benefit from participating in the trial knowing that their participation may improve the care of residents living in a care home. For those in the intervention arm, they will gain access to a potentially beneficial preventative intervention and be part of the evidence to inform future commissioning and care home owner decisions on reducing infections.
Research team contact details	Holly McKeon and Jess Frost afric-study@bristol.ac.uk
How to take part	If you would like to take part, please complete our expression of interest form: https://forms.office.com/r/nrf68rr7wb
For office use only	
LCRN contact	

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