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Group model building to address dietary health inequalities in English Local Authorities

Submission date 25/02/2026	**Recruitment status** Recruiting	[X] Prospectively registered [X] Protocol
Registration date 25/03/2026	**Overall study status** Ongoing	[_] Statistical analysis plan [_] Results
Last Edited 16/04/2026	**Condition category** Other	[_] Individual participant data [X] Record updated in last year

Plain English summary of protocol

Background and study aims

People living in more deprived areas of the UK are more likely to have poorer diets and higher rates of diet-related illnesses such as type 2 diabetes. Around 15% of UK households have recently experienced food insecurity. Health inequalities linked to diet are influenced by food costs, availability of healthy options, and wider food system factors.

While national government policies (such as taxes or subsidies) could help, change at this level can be slow and there is limited evidence that current approaches are reducing inequalities. Local authorities (LAs) in England have more flexibility to act locally and work with community organisations to develop practical solutions.

This study will test whether a structured workshop approach called Group Model Building (GMB) can help local authorities better understand dietary health inequalities (DHI) and develop stronger, more effective local policies to reduce them.

The study will:

1. Test whether the intervention increases the number and strength of local policies aimed at reducing dietary health inequalities.
2. Explore how local stakeholders understand dietary health inequalities and how their understanding changes over time.
3. Calculate the costs of delivering the intervention.

The study will use a randomly allocated controlled (comparison) trial (RCT) design, meaning some local authorities will receive the intervention and others will act as a comparison group.

Who can participate?

One Key Informant (someone with responsibility for food or dietary inequalities) each from participating English local authorities (LAs), local stakeholders in each intervention LA, including local decision-makers from relevant sectors and representatives from community food organisations.

What does the study involve?

Recruitment will begin with those in the most deprived 40% of areas.

Local authorities will be randomly allocated to one of two groups:

Intervention group:

- One or more online preparatory meetings with the research team.

- Access to a website summarising local data on dietary health inequalities.
- A one-day, in-person facilitated workshop using Group Model Building methods. During the workshop, participants will map out local factors influencing dietary inequalities and identify possible solutions.
- Around three short follow-up online meetings over three months to refine and prioritise solutions.

Control group:
- Continue with usual practice during the study period.
- Take part in data collection only.
- Receive intervention materials after the study ends.
- Local authorities in the control group will receive the workshop materials at the end of the study.

Data collection:
All local authorities will take part in:
- An interview at the start of the study and again 12 months later to document policies aimed at reducing dietary health inequalities.

Workshop participants (intervention group only) will:
- Complete a short questionnaire before and after the workshop about their understanding of dietary inequalities, commitment to action, confidence, and collaboration.

In a smaller number of local authorities, researchers will also carry out a qualitative process evaluation. This may include:
- Observing workshops or relevant meetings.
- Conducting interviews shortly after and again 6–12 months later.

Participation is voluntary and informed consent will be obtained.

What are the possible benefits and risks of participating?
Possible benefits:
- Improved shared understanding of dietary health inequalities.
- Stronger collaboration between local partners.
- Development or strengthening of local policies.
- Access to structured tools and local data.
- Contribution to national evidence about what works to reduce health inequalities.

Possible risks:
Risks are considered low. The main burden is time commitment for meetings, workshops and interviews. Discussions may involve complex or sensitive topics, but researchers will facilitate respectfully. Participants may withdraw at any time.

Where is the study run from?
The study is Sponsored and led by the University of Cambridge (IMS Epidemiology) in collaboration with the University of Hertfordshire.

When is the study starting and how long is it expected to run for?
Recruitment is expected to begin in April 2026.
Data collection is expected to be completed by June 2028.

Who is funding the study?
UK Research and Innovation (UKRI).

Who is the main contact?
Emma Lachasseigne (Study coordinator), Emma.Lachasseigne@mrc-epid.cam.ac.uk.

Contact information

Type(s)
Public

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Additional identifiers

Study information

Scientific Title
Group model building to address dietary health inequalities in English Local Authorities: A randomised controlled trial with process evaluation

Acronym
GLADIOLI

Study objectives
Study research questions:
1) What is the impact of the intervention on the primary and secondary outcomes listed below?
2) How do local stakeholders understand DHI and their potential solutions, how does this evolve during the course of the intervention?
3) What are the costs of the intervention?

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 04/02/2026, Humanities and Social Sciences Research Ethics Committee (HSS REC) (Second Floor 17 Mill Lane, Cambridge, CB2 1RX, United Kingdom; +44 01223 766238; hssrec@admin.cam.ac.uk), ref: 26.434

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Open (masking not used)

Control
Active

Assignment
Parallel

Purpose
Health services research

Study type(s)

Health condition(s) or problem(s) studied
Workshop approach called Group Model Building (GMB) can help local authorities better understand dietary health inequalities

Interventions
All LAs in England will be eligible, although the study will begin with inviting LAs based in the most deprived 40% of England. If the recruitment target is not met with these invites, recruitment will then be extended to 50%, 60% and so on until the recruitment target of 60 LAs is met. LAs with existing food strategies (or similar) or who are members of e.g., Health Determinants Research Collaborations will be included as these may represent those with the greatest motivation to progress, as well as those who have already made good progress. Randomisation will help ensure these characteristics are evenly distributed. Randomisation will occur via a computer program.

The intervention was co-developed by members of the research team with Jersey's public health team, then refined and delivered in Guernsey. The Association of Directors of Public Health confirm dietary health inequalities (DHI) are a high priority, and the intervention would be attractive.

The intervention will be flexible to local context, is described using the Template for Intervention Description and Replication, is supported by a Theory of Change, will be delivered by the research team and comprise:
- 1 or more online 2-hour pre-meet with the key informant (defined below) and relevant team members ~3 months pre-workshop to review roles, agree upon a focus, and identify workshop participants. Workshop participants (n~15) will be local decision makers in any sector with the power to enact workshop insights and representatives of local community food organisations to bring the voice of those with experience of DHI. Conducting Group Model Building (GMB) in one day is ambitious but necessary to maintain engagement. Focusing on one locally-agreed population or outcome (e.g. children, vegetable intake) makes the intervention manageable in one day and flexible to the local context. Follow-up meetings will be conducted as required.
- An intelligence website circulated to workshop participants summarising local data on DHI to provide context. To be developed by the Food Foundation from routinely available data (https://fingertips.phe.org.uk/) and their regular food security surveys. Including e.g. local prevalence of children in poverty not eligible for free school meals, type 2 diabetes and food insecurity.
- One-day in-person GMB workshop, developing a CLD and using this to identify potential solutions. Guided by manuals and scripts. Facilitated by 2-3 researchers.
- Around three online 1-2 hour post-meets with key informants (and team) 1week, 1 month and 3 months post-workshop to refine the CLD, identify further solutions, and support solution prioritisation. Informed by our comprehensive database of Food System Transformation Solutions, enabling the sharing of best practices.

Intervention Type
Behavioural

Primary outcome(s)
1. Number of policies planned or implemented within the last 12 months that explicitly aim to reduce DHI measured using data collected using the intervention level framework at 12 months

Key secondary outcome(s)
1. Distribution of policies across a scale of potential to achieve system change (Potential of policies) measured using a 5-point Likert scale at 12 months

2. Perceptions of personal and shared local understanding of DHI (Understanding) measured using a 5-point Likert scale at 12 months

3. Perceptions of personal and shared commitment to address DHI locally (Commitment) measured using a 5-point Likert scale at 12 months

4. Perceptions of strength of local collaborations to address DHI (Collaboration) measured using a 5-point Likert scale at 12 months

5. Perceptions of confidence that additional solutions to address DHI locally will be implemented in the next 12 months (Confidence) measured using a 5-point Likert scale at 12 months

Completion date
30/06/2028

Eligibility

Key inclusion criteria
1. Local Authorities (LAs) in England
1.1. All LAs in England
1.2. Existing food strategies (or similar)
1.3. Members of e.g., Health Determinants Research Collaborations

2. Key informant per LA
2.1. Key informants if they:
2.1.1. Work at a participating LA
2.1.2. Have a core responsibility for food etc.

3. Workshop participants per intervention LA
3.1. Workshop participants will be:
3.1.1. Local decision makers in any sector with the power to enact workshop insights
3.1.2. Representatives of local community food organisations

Healthy volunteers allowed
Yes

Age group
Mixed

Lower age limit
18 Years

Upper age limit
99 Years

Sex
All

Total final enrolment
0

Key exclusion criteria

Non-English localities

Date of first enrolment
15/04/2026

Date of final enrolment
01/04/2027

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Oxfordshire County Council - County Hall
County Hall
New Road
Oxford
England
OX1 1ND

Sponsor information

Organisation
University of Cambridge

ROR
https://ror.org/013meh722

Funder(s)

Funder type

Funder Name
UK Research and Innovation

Alternative Name(s)
UKRI

Funding Body Type

Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file	version 1.0	02/02/2026	04/03/2026	No	No